

Growth Centres Biodiversity Certification

Assessment of Consistency between the Relevant Biodiversity Measures of the Biodiversity Certification Order and Austral and Leppington North Precincts

March 2013

1. Introduction

In July 2008 an amendment was made under Schedule 7 Part 7 to the *Threatened Species Conservation Act 1995* (TSC Act) to confer biodiversity certification on the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP). Compliance with the relevant biodiversity measures (RBMs) in the biodiversity certification order (dated 14 December 2007) is required to maintain the certification. The RBMs require (among other things) the retention of 2000 hectares of existing native vegetation within the Growth Centres and additional offsetting outside the Growth Centre boundaries.

This report has been prepared to fulfil the requirement of RBM 35 for an assessment of the consistency of proposed precinct plans with the biodiversity certification and the RBMs.

This report has been prepared in a table format and addresses all RBMs that are relevant to precinct planning. It is noted that many of the RBMs are not specific to precinct planning and have therefore not been included in the report.

A complete copy of the biodiversity certification order (including all relevant biodiversity measures) can be found on the Office of Environmental and Heritage website at http://www.environment.nsw.gov.au/biocertification/notcert.htm

Where the report indicates that precinct planning is inconsistent with the biodiversity certification, full justification for the inconsistency is provided as part of the ecological assessment for the precinct.

Definitions

Terms defined below appear in **bold** in the table. Where the terms are also defined in the Biodiversity Certification Order, the definitions provided are consistent with those in the Order.

- Biodiversity Certification Maps means the maps marked "North West Growth Centre Biodiversity Certification" and "South West Growth Centre – Biodiversity Certification" dated November 2007 and included in Schedule 2 of the Biodiversity Certification Order.
- Certified Area means an area marked as a certified area on a biodiversity certification map.
- Clearing of existing native vegetation means any one or more of the following:
- a) cutting down, felling, thinning, logging or removing existing native vegetation in whole or in part,
- b) killing, destroying, poisoning, ringbarking, uprooting or burning existing native vegetation in whole or in part.
- Existing Native Vegetation (ENV) means areas of indigenous trees (including any sapling) that:
- a) had 10% or greater over storey canopy cover present,
- b) were equal to or greater than 0.5 ha in area, and
- c) were identified as "vegetation" on maps 4 and 5 of the draft Growth Centres Conservation Plan.
- *DECCW* means the Department of Environment, Climate Change and Water (which was the former Department of Environment and Climate Change, DECC, and is now the Office of Environment and Heritage (OEH)).
- DoPI means the Department of Planning and Infrastructure (which was the former Growth Centres Commission, GCC).
- *Minister* means the Minister administering the TSC Act.
- Non-certified Area means an area marked as a non-certified area on a biodiversity certification map.
- *Protection/Protected* in relation to land means land that is protected by a land use zoning under an environmental planning instrument or public ownership arrangements that provide for the protection of biodiversity values as a priority, or another arrangement that provides in perpetuity security for biodiversity on the subject land.
- Relevant Biodiversity Measures means the conditions in Schedule 1 of the Biodiversity Certification Order.
- TSC Act means the Threatened Species Conservation Act 1995.

2. Assessment

	Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
Gene	ral			
4	Copies of all final reports, maps, reviews, plans and monitoring data referred to in the conditions of biodiversity certification must be held by the DoPI and made publicly available, either on request and/or by a mechanism that is broadly publicly accessible. This does not apply to material that is commercially sensitive or contains sensitive information regarding the location of threatened species, populations or ecological communities or their habitat.	All information required by the RBMs for the Austral and Leppington North Precincts will be publicly exhibited at a date yet to be determined, and an assessment of consistency (this report) will be updated where necessary after exhibition.	Yes	 The following information will be publicly exhibited and available following gazettal: This report in accordance with RBM 35; Information required by RBM 8, as contained in this report; Information as required by RBM 13 (Figures 1-2 of Annex A);
Nativ	e vegetation to be retained within the Growth Centres			
6	A minimum of 2,000 hectares of existing native vegetation must be retained and protected within the Growth Centres, either within the certified areas and/or the non-certified areas , subject to conditions 7 to 13 below.	 The draft Conservation Plan identifies: 48 ha of ENV to be protected in the Austral Precinct (prior to the impact from the SWRL and excluding ENV in the Kemps Ck Nature Reserve); 52 ha of ENV to be protected in the Leppington North 	Yes	The Biodiversity Certification Map (Figure 1 of Annex A) identifies ENV within the Precincts which is required to be retained. The draft precinct plan (based on the final ILP, at Figure 1 of Annex B) protects 116.62ha of ENV within the Precincts through appropriate zoning of land, mapping of Existing Native Vegetation Areas on the Native Vegetation Protection Map and provisions that prohibit clearing of

Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
	 Precinct (prior to the impact from the SWRL); 7.14ha of ENV in the Investigation Areas is to be protected. This is a total area of 107.14 ha of ENV that is required to be protected across the Precincts to maintain parity with the draft Conservation Plan. 0.61 ha of ENV in the Investigation areas will be impacted by the South West Rail Link. Of this 0.61 ha, 0.52ha is on land which is currently non-certified and will be separately offset by TfNSW When the non-certified ENV to be impacted (and offset) by the SWRL is taken into account, the target for protection of ENV to maintain the 2,000 hectares of ENV across the Growth Centres is 106.62 hectares. The total area of ENV protected in the Precincts and investigation areas is 116.62ha 		ENV as mapped. Changes to the non-certified land boundaries (Annex E) are also proposed, to be consistent with the ENV to be protected under the Precinct Plan.

	Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
Rete	ntion of existing native vegetation during precinct planning			
7	During the precinct planning process, the DoPI may determine to make areas of existing native vegetation within the non-certified areas available for development if the clearance of such vegetation is considered necessary for either the provision of essential infrastructure and/or to meet the required Development Parameters specified in the Growth Centres Development Code.	4.03ha of ENV on non- certified land will be removed as per the draft Precinct Plan (Figure 1 and Figure 2 of Annex D) to enable development parameters to be met and to allow for essential infrastructure.	Yes	The area of non-certified ENV to be removed will be more than offset by the protection of a total of 116.62ha of ENV across the Precincts, 10.00ha more than is required by the biodiversity certification order The total area of currently non- certified ENV proposed to be certified is 4.03ha. The total area of currently certified ENV proposed to be non- certified is 22.48ha. The calculations of protected ENV are based on ground-truthed ENV (see RBM 13) and this explains differences in totals when compared to the amount of ENV required to be protected.
8	 In making a determination under condition 7, the DoPI must demonstrate by way of information provided during the public exhibition of the precinct plan (where that exhibition occurs after this order takes effect) that the clearing of any existing native vegetation in the non-certified areas will be offset by: (a) the protection of an equal or greater area of existing native vegetation elsewhere in the Growth Centres; and/or (b) the revegetation and/or restoration of an area of land elsewhere in the Growth Centres, subject to satisfying the following, (i) that the clearance of existing native vegetation in the non-certified areas will not affect the capacity to achieve overall improvement or maintenance of biodiversity values for threatened species, populations and ecological communities and their habitats, (ii) the revegetated and/or restored areas will be protected, 	Offsetting of the impacts described for condition 7 will be achieved by the protection of an equal or greater area of ENV in accordance with condition 8(a) (as shown on Figure 1 and Figure 2 of Annex D).	Yes	The offsetting of impacts on non- certified ENV is required to enable the efficient development of the Precincts, including the provision of essential infrastructure. The 4.03ha of non-certified ENV to be cleared throughout the Precinct will be offset by the protection of an additional 10ha of ENV, above what is required under the draft Conservation Plan. The proposed offsets are in most cases connected with or adjacent to existing non-certified areas along the major creeks to form part of continuous vegetation and habitat

		Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
	(iii)	the extent of revegetation and/or restoration compared to clearing of existing native vegetation must be undertaken at a ratio of at least 3:1 (to reflect the greater ecological risks relative to retaining existing native vegetation),			links through the Precincts. The offset areas of ENV are to be protected through zoning controls, native vegetation protection
	(iv)	areas subject to revegetation and/or restoration must be of a suitable boundary configuration and design to support long-term management,			provisions and changes to the boundaries of certified and non- certified land as described for RBM 6 above.
	(v)	revegetation and/or restoration of the proposed areas would not be undertaken under another scheme or regulatory requirement already in operation at the time that the clearing is approved (this includes but is not limited to any approvals, and associated conditions of such approvals, that may be required under the <i>Rivers and Foreshores Improvement Act</i> <i>1948</i> and <i>Water Management Act 2000</i>),			
	(vi)	revegetation and/or restoration will be undertaken by suitably qualified and experienced persons using indigenous plant stock, and			
	(vii)	sufficient resources will be made available to undertake the revegetation and/or restoration and any necessary follow-up maintenance and monitoring for a minimum period of 5 years following the commencement of the revegetation and/or restoration.			
9	meeting vegetat shall be	etation and/or restoration may be partly counted towards g the overall requirement to protect 2,000 hectares of existing ion required in condition 6. The amount that may be counted a calculated by dividing the total area of revegetation and/or tion required under condition 8b (iii) by 3.	N/A	N/A	N/A
		or example, if 9 hectares of revegetation is undertaken then 3 is may be counted.			

Retention of existing native vegetation shown in areas marked with red hatching				
12	Notwithstanding any other conditions of biodiversity certification, in the lands marked by a red hatching on the biodiversity certification maps existing native vegetation must not be cleared unless it is in accordance with a plan of management or unless such clearance has been agreed to by the DECC .	Part of the Kemps Creek Nature Reserve (covered by Condition 12) is within the Precinct boundary however the Precinct Plan does not apply to this land (as shown on the ILP at Annex B). An area that is subject to Condition 12 (but is not part of the Kemps Creek Nature Reserve), is within the Austral Precinct boundary and within the boundary of the draft Precinct Plan (see Annex A, Figure 1). No clearing of Existing Native Vegetation is proposed on this land as part of the Precinct Plan. These lands are proposed to be protected by maintaining the status of the land as non-certified, zoning areas that contain ENV as Environmental Conservation, and by applying the provision in the draft SEPP that prohibits clearing of vegetation on areas of ENV mapped under the SEPP.	Yes	Areas subject to condition 12 that are within the boundary of the draft Precinct Plan will be protected by the provisions of the draft SEPP.

	Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
Grou	ind-truthing of existing native vegetation			
13	If new information becomes available after the biodiversity certification order took effect that demonstrates that the vegetation within an area does not otherwise meet the definition of existing native vegetation , then for the purposes of conditions 7 to 8 and condition 11 to 12 only the area of confirmed existing native vegetation shall be considered.	The mapping of ENV (identified on maps 4 and 5 of the draft <i>Growth Centres</i> <i>Conservation Plan</i>) generally corresponds with the findings of additional ground truthing investigations completed in 2010 and 2012 to inform the precinct planning process and only minor changes are recommended. Figure 2 of Annex A provides the results of ground truthing of ENV conducted as part of Precinct Planning. The ground truthing has identified 14.81ha of ENV (in both certified and non-certified lands) that is no longer considered to meet the definition of ENV.	Yes	Mapping resulting from ground truthing is provided in Figure 2 of Annex A . The draft conservation plan maps 107.14 ha of ENV within non-certified areas in the Precincts. Field surveys 101.58 Ha of ENV in non-certified areas. 43.6 Ha of additional high conservation value vegetation. (AHCVV) was identified in the Precincts as part of the Precinct Planning investigations. 17.4 Ha of this is in non-certified lands. For the purposes of conditions 7, 8, 11 and 12, only the area of confirmed ENV has been taken into account (as shown at Annex C). A total of 3.37ha of ENV is in Kemps Creek Nature Reserve (see Condition 12). Because the Precinct Plan does not apply to this land and no impacts on this vegetation has been excluded from calculations of protected ENV in this report (as shown on Figure 1 of Annex C).

	Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
	ional conservation actions within the Growth Centres – native tation			
14	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code, a further detailed assessment must be undertaken of the areas adjoining or proximate to the Shanes Park Air Services Australia site marked in blue hatching on the biodiversity certification maps .	The study area does not adjoin the Shanes Park Air Services Australia site.	N/A	NA
15	The assessment referred to in condition 14 must examine whether the areas meet the criteria specified in Schedule 3.	The study area does not adjoin the Shanes Park Air Services Australia site.	NA	NA
16	Based on the outcomes of the assessment the OEH shall provide advice to the Minister on whether the areas should be included within the certified areas or the non-certified areas shown on the biodiversity certification maps .	The study area does not adjoin the Shanes Park Air Services Australia site.	NA	NA
Addit	ional conservation actions within the Growth Centres – plants			
17	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code relating to the areas referred to in the table below, the following actions must be undertaken:	NA (the land that is subject to condition 17 is outside the Austral and Leppington	Yes	NA

Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
Species	North Precinct boundaries).		
Acacia pubescens			
Required action			
Potential populations at Cross Street, Kemps Creek and Thirty- second Avenue, Austral – as shown in black hatching on the biodiversity certification maps :			
 survey to confirm the presence of the species, and 			
• if the species is present, provide for the protection of the area of suitable habitat for the species to the satisfaction of the OEH .			

	Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
litional conservation	actions within the Growth Centres – animals			
the Growth Centres	e preparation of the relevant precinct plan(s) under s Development Code relating to the area referred to the following actions must be undertaken:	N/A	N/A	N/A
	 Required action Potential population at Riverstone – as shown in black hatching on the biodiversity certification maps: Option 1 survey to confirm the presence of the species, and if the species is present, provide protection of the area of suitable habitat for the species to the satisfaction of the OEH. Option 2 if the species is present at Riverstone but cannot be adequately protected to the satisfaction of the OEH, then: a) undertake targeted survey to confirm the presence of the species elsewhere in the Growth Centres, and b) if the species is present elsewhere in the Growth Centres, provide for the protection of an area(s) of suitable habitat for the species to the satisfaction of the OEH. 			

	Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
	tional conservation actions within the Growth Centres – lopment sites			
19	Within twelve months of the biodiversity certification order taking effect, the DoPI (in consultation with the OEH) must put in place procedures so that all future precinct plans (excluding any plans that were publicly exhibited before the biodiversity certification order took effect), where practicable, provide for the appropriate re-use of:	These provisions are incorporated into the Development Control Plans (DCP) for the Precincts.	Yes	N/A
	 (a) native plants (including but not limited to seed collection) and the re-location of native animals from development sites, prior to development commencing; and 			
	(b) top soil from development sites that contain known or potential native seed bank.			
	For the purposes of condition 19a and 19b appropriate uses may include, but are not limited to, application in revegetation or restoration works and landscaping in the Growth Centres.			
Futu	re precinct plans			
35	During the preparation of future precinct plans (excluding any precinct plans already publicly exhibited before this order took effect) the DoPI must undertake and make publicly available an assessment of the consistency of the proposed precinct plan with the conditions of biodiversity certification. This may occur during or before any public exhibition of future draft precinct plans.	This assessment of consistency has been prepared to satisfy this RBM. This report will be publicly exhibited with the full precinct planning package.	Yes	This assessment addresses all RBMs applicable to the planning of the Austral and Leppington North Precincts.
Futu	re threatened species listings or discoveries			
36	Where a preliminary determination is made under the Act to list a species, population or ecological community, and that species, population or ecological community may or is known to occur within the Growth Centres, then the Growth Centres Commission must	The DoPI is not aware of any subsequent Preliminary determinations that would apply to the Austral and	Yes	N/A

	Relevant Biodiversity Measure	Austral and Leppington North Precincts - Comment	Consistent with RBMs and Schedule 7 Part 7 of TSC Act	Justification
	(as soon as practicable) provide advice to the OEH on whether:	Leppington North Precincts.		
	 (a) the species, population or ecological community is known or likely to be present in the Growth Centres; 			
	(b) it was considered during the preparation of the draft Growth Centres Conservation Plan by the DoPI ; and			
	(c) whether the SEPP, and related measures, provides adequate protection for the species, population or ecological community.			
37	Based on the information provided in accordance with condition 36, and any other relevant matters, the OEH shall advise the Minister on whether to formally review, maintain, modify, suspend or revoke the biodiversity certification of the SEPP if the species, population or ecological community is listed under the Act.	N/A	N/A	N/A

3. Conclusion

This report has undertaken an assessment of the consistency of the Austral and Leppington North Precincts planning with the biodiversity certification and the applicable relevant biodiversity measures.

It is concluded that the Austral and Leppington North Precincts planning is consistent with the biodiversity certification of the Growth Centres SEPP, as follows:

- Under the final Precinct Plan 116.62ha of ENV will be protected within the Austral and Leppington North Precincts and the investigation areas. This is approximately 10.00ha more than required under the Biodiversity Certification Order to contribute to the 2,000ha of ENV to be protected across the Growth Centres.
- ENV will be protected through a number of different zones under the draft Precinct Plan (refer to Figure 2 in **Annex C**), including Environmental Conservation, Public Recreation, and Infrastructure. The reasons for applying the proposed zones are discussed further below.
- Development controls are proposed in the draft SEPP to prohibit the clearing of protected ENV as shown on the Native Vegetation Protection Map.
- The 2010 and 2012 (post-exhibition) ground truthing surveys recorded 101.58 Ha of validated ENV in non-certified areas in the Precincts. Only ground-truthed ENV has been included in the calculation of the total area of ENV to be protected. Figure 2 of **Annex B** shows the results of the ground-truthing.

Amendments to the boundaries of certified and non-certified land are proposed as shown at **Annex E**. The boundary amendments are proposed to reflect the outcomes of Precinct Planning, and to ensure the protection of ENV to maintain consistency with the Certification.

Land use zones have been selected based on advice from the OEH in relation to appropriate zoning of land containing ENV, and with consideration of other land use planning factors, including the future ownership, acquisition and use of land in accordance with the draft Precinct Plan and the EP&A Act. While the use of Environment Protection zones is preferred by OEH, in many cases it is not possible to apply this zoning to land containing ENV because of restrictions on the ability of Council to acquire the land under section 94 of the EP&A Act. In accordance with the hierarchy of land use zones preferred by OEH, land use zones have been applied to ENV that is proposed to be protected as follows:

- Where ENV to be protected is on land that is currently in Council or State Government ownership, the E2 Environmental Conservation zone has been used. The exception to this is Craik Park, in the centre of the Precincts, which is an existing Council reserve that contains a sports field and remnant ENV. The RE1 Public Recreation zone has been applied to this land to enable continued use of the sports fields.
- Where ENV to be protected is within large land holdings (and the area of ENV comprises only small part of the total area of land in the one ownership) the E2 zone has been applied. This land is not proposed to be acquired by a public authority, but the

land owner may seek to dedicate the land to Council subject to Council agreement, and if this did occur, the ENV would be protected by the combination of zoning and public ownership. Regardless, the application of the E2 zone to land that is to remain in private ownership is consistent with OEH requirements for protection of ENV.

- Within flood affected land along Kemps Creek and Bonds Creek, and adjacent to a number of other unnamed watercourses, existing rural properties that partly contain ENV are proposed to have a "split" zoning, with the land containing ENV zoned E2 Environmental Conservation and the remainder of the property zoned for a purpose that enables some commercial return either through limited subdivision or construction of a dwelling, or continued agricultural production. Generally, where the existing rural lot is partly within and partly outside the 100 year ARI flood extent, the combination of E4 Environmental Living and E2 (for the land that contains ENV) has been used. This approach also applies to a property on the eastern side of the Precincts at Eighth Avenue, which contains patches of ENV that are linked to a large remnant to the north and east in land owned by the Sydney Catchment Authority. This enables limited subdivision and construction of dwellings on relatively large lots consistent with the flooding and vegetation constraints on the land. Where the existing rural lot is entirely affected by flooding (such as along the northern parts of the Kemps Creek floodplain) the RU6 Rural Transition zone and E2 zone (for the land that contains ENV) has been used. The Rural Transition zone will enable agricultural uses that do not cause significant amenity impacts for nearby residential areas. The ability to further subdivide this land is limited, with minimum lot size controls established to limit further subdivision of land that contains ENV. In both these situations, the land that contains ENV is anticipated to remain in private ownership.
- Where land that contains ENV is to be acquired as part of a larger acquisition for a public purpose (usually for public recreation or drainage) the RE1 Public Recreation and SP2 Infrastructure (drainage zones) have been used. These approaches have generally been applied along the larger watercourses (eg. Bonds Creek and Scalabrini Creek) where the creek channel and margins are to be acquired by Council as part of the drainage network or where ENV is located on land that is to be acquired for public parks and sporting fields (these are often located within floodprone land near the major creeks). Land in these zones will be acquired by the relevant Council

These zones, in combination with the existing native vegetation provisions (refer to Figure 3 in **Annex C**) and the proposed certification boundaries (refer to **Annex E**), will protect the ENV.

Annex A

Biodiversity Certification Map for Austral and Leppington North Precincts

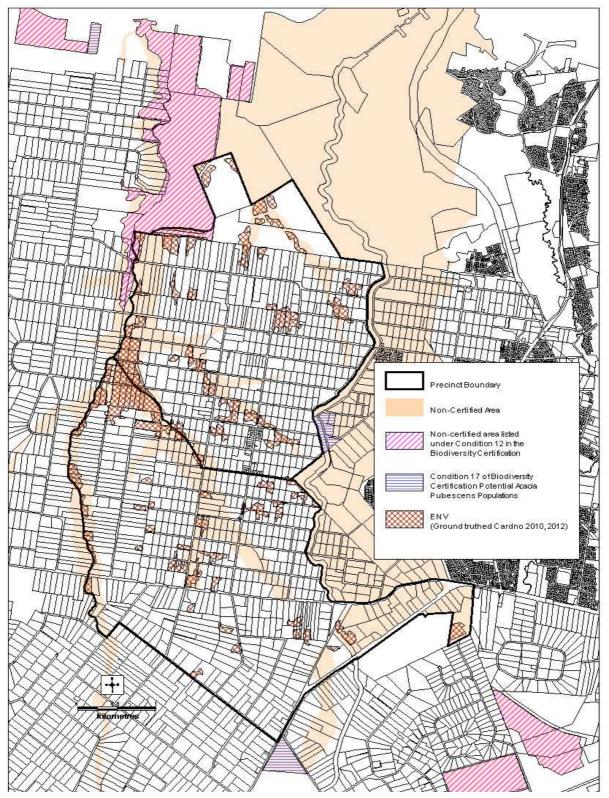


Figure 1: Austral and Leppington North Precincts – Biodiversity Certification Map showing Existing Native Vegetation (as confirmed by 2010 and 2012 ground truthing) and areas listed under Condition 12 and Condition 17 of the Biodiversity Certification.

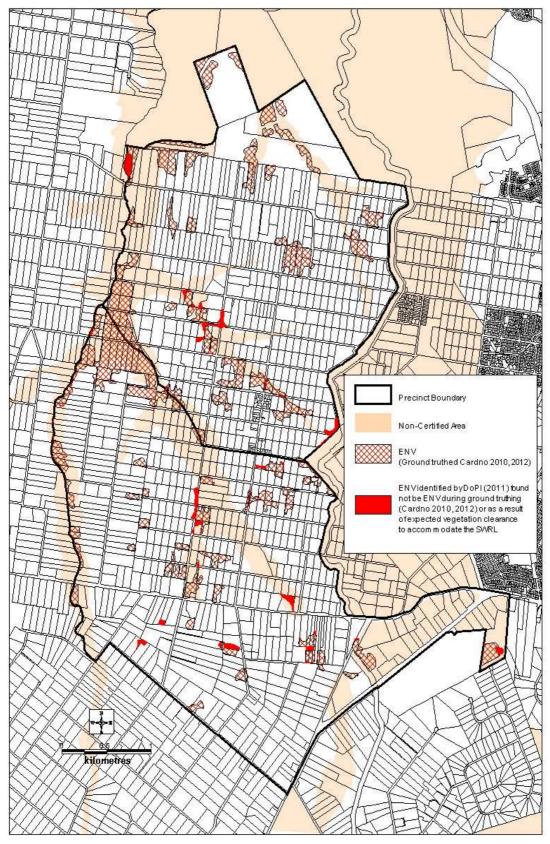


Figure 2 Existing Native Vegetation and vegetation areas found not to meet the criteria of ENV during ground truthing in 2010, 2012.

Annex B

Proposed Indicative Layout Plan for Austral and Leppington North Precincts

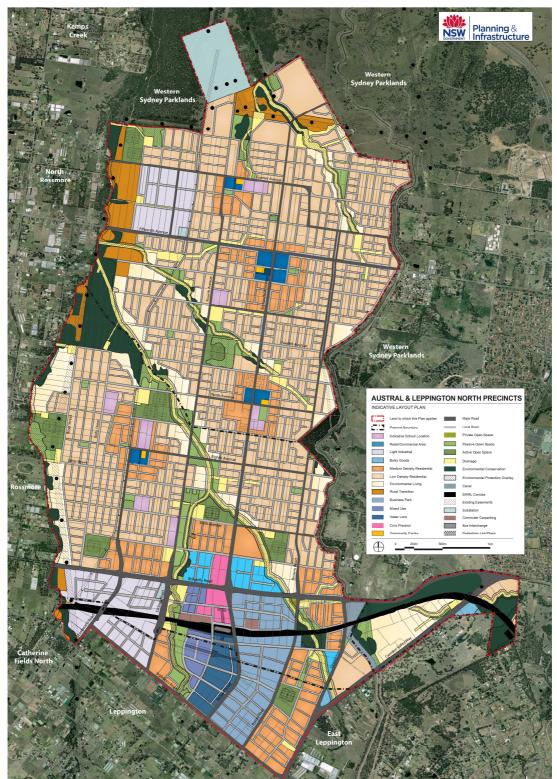


Figure 1 Final Indicative Layout Plan for Austral and Leppington North Precincts (June 2012).

Annex C

Proposed Protection Measures Plan for Austral and Leppington North Precincts

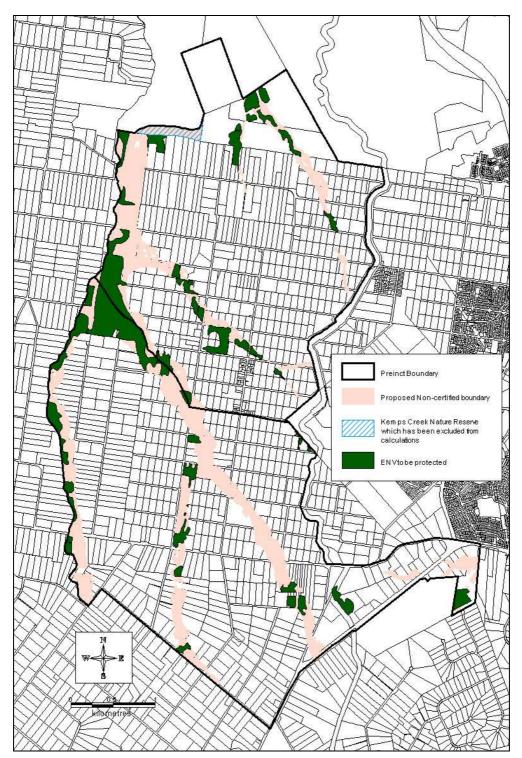


Figure 1 ENV to be protected

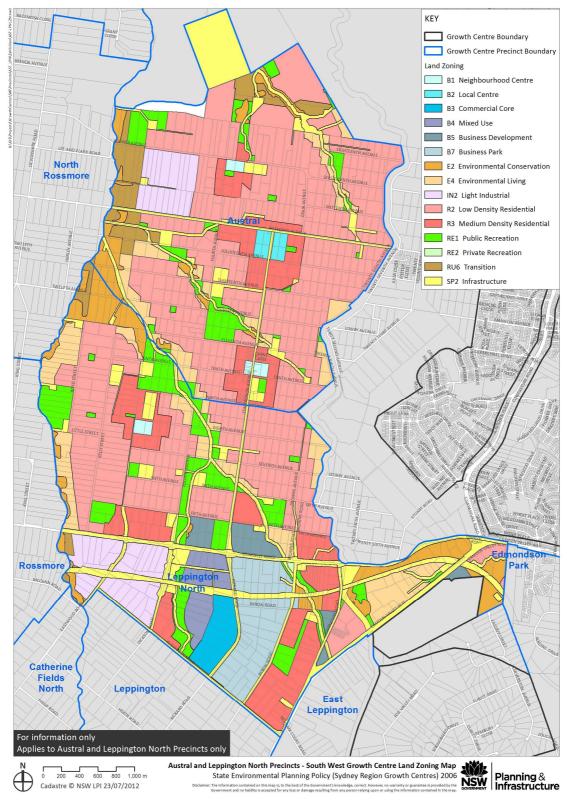


Figure 2 Land Zoning Map

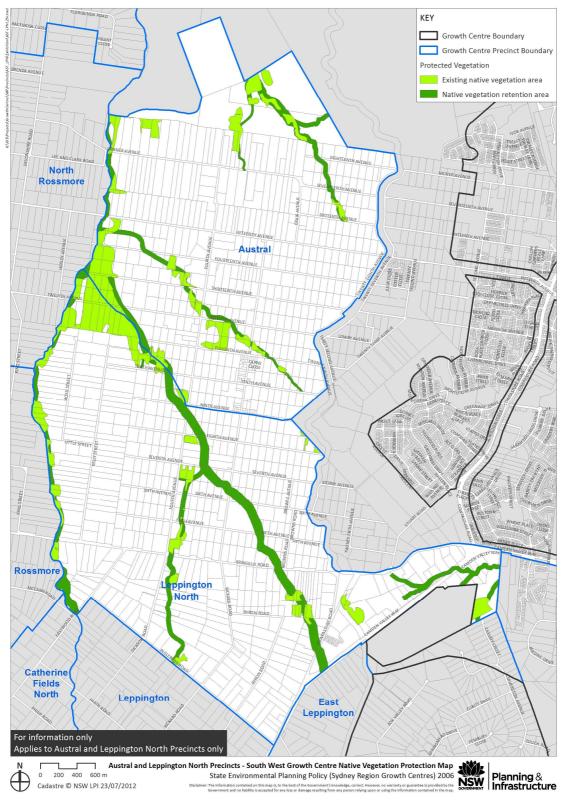


Figure 3 Native Vegetation Protection Areas Map

Annex D

Proposed Offsets Areas Precinct

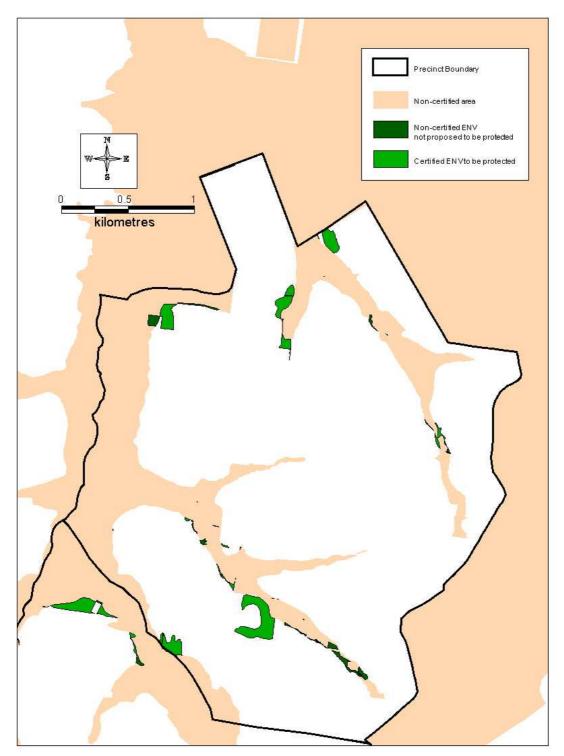


Figure 1: Certified ENV to be protected and Non-certified ENV not proposed to be protected in Austral

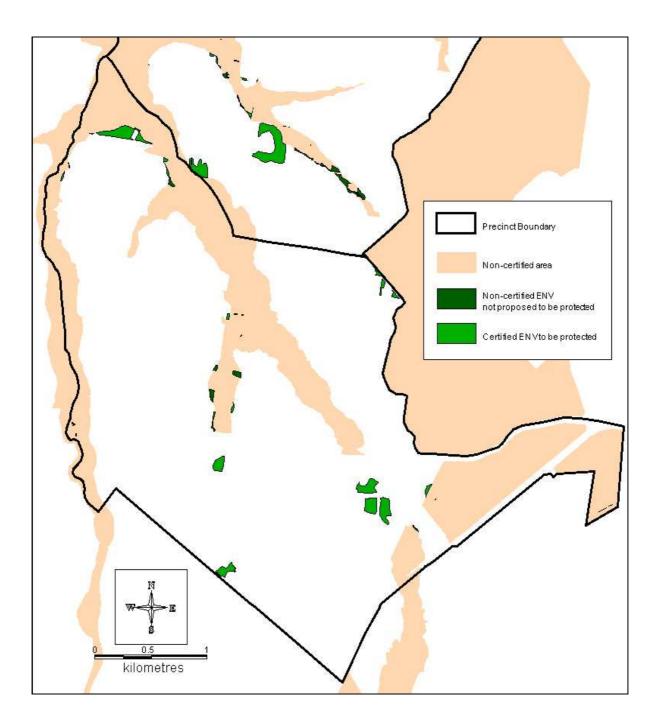


Figure 2: Certified ENV to be protected and Non-certified ENV not proposed to be protected in Leppington

Annex E

Proposed Amendments to Biodiversity Certification Map

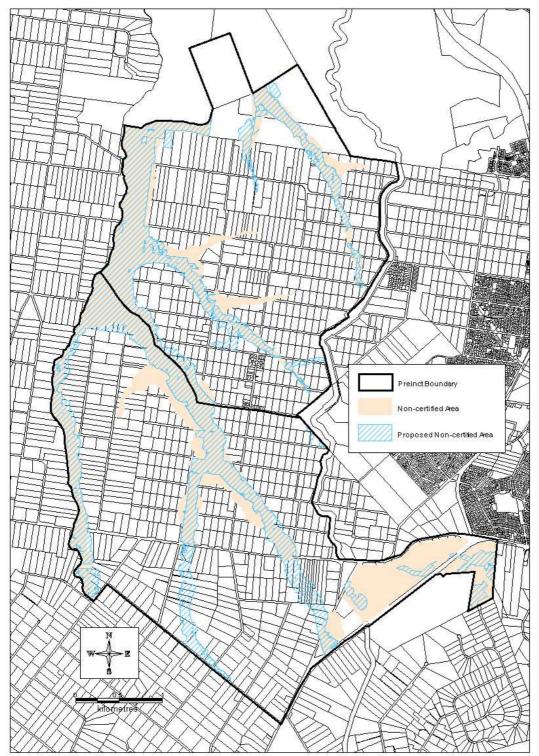


Figure 1: Proposed new boundaries of non-certified area and current non-certified area within the Austral and Leppington North precincts