

Growth Centres Biodiversity Certification

Assessment of Consistency between the Relevant Biodiversity Measures of the Biodiversity Certification Order and Catherine Fields (Part) Precinct

November 2013

1. Introduction

In December 2007 an order conferring biodiversity certification on State Environmental Planning Policy (Sydney Region Growth Centres) 2006 was made by the Minister for the Environment under section 126G of the Threatened Species Conservation Act 1995 (TSC Act).

In July 2008, the Minister's certification was validated by the *Threatened Species Conservation Amendment (Special Provisions) Act 2008* which was subsequently incorporated into Part 7 of Schedule 7 of the TSC Act. The amendment gives the Minister for the Environment the power to suspend or revoke the certification if any of its conditions, termed Relevant Biodiversity Measures (RBMs), are not complied with.

The RBMs applying to the certification have remained unaltered since gazettal of the original order and require (among other things) the permanent protection of 2000 hectares of high quality vegetation within the Growth Centres.

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 relevant biodiversity measures can be found on the Office of Environment and Heritage's 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.

- Additional High Conservation Value Vegetation (AHCVV) means areas of vegetation which were found during groundtruthing which would
 otherwise meet the definition of Existing Native Vegetation but was not originally identified as "vegetation" on maps 4 and 5 of the draft
 Growth Centres Conservation Plan.
- 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.
- DECC means the Department of Environment and Climate Change (which is now the Office of Environment and Heritage).
- GCC means the Growth Centres Commission constituted under the Growth Centres (Development Corporations) Act 1974 (which is now the Department of Planning and Infrastructure).
- 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 or 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

Table 1: Assessment of consistency between the relevant biodiversity measures of the Biodiversity Certification Order and the Catherine Fields (Part) Precinct.

	Relevant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
Gene	eral			
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 GCC 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 Catherine Fields Part Precinct will be publicly exhibited.	Yes	The following information will be publicly exhibited: this report in accordance with RBM 35; information required by RBM 8 information required by RBM 13
Nativ	re 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 12.17 Ha of ENV to be retained within the Precinct to maintain parity with the 2000 Ha requirement.	Yes	A total of 14.10 Ha of validated ENV as defined under the order is to be protected and retained under the Catherine Fields (Part) Precinct Plan (Annex B and C). This includes 10.98 Ha of field validated ENV in noncertified lands and 3.12 Ha of field validated ENV in currently certified lands. The protection of ENV in the Precinct Plan will be achieved using zoning (i.e. E2 Environmental Conservation) and the following clauses in the SEPP:
				- Development Controls – Existing Native

	Relevant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
				Vegetation – this clause will prohibit the clearing of ENV as mapped on the Native Vegetation Protection map (Annex C) Land zoned E2 Environmental Conservation is to remain in private ownership. The opportunity exists for the two affected landowners to enter into an agreement with Council to dedicate the revegetated corridors in the future, thereby bringing the E2 zoned land into public ownership and management in the long term. (Refer to Annex D which highlights areas of ENV in noncertified areas which will not be retained and location of proposed offsets, including ENV in certified areas)
Reter	ntion of existing native vegetation during precinct planning			
7	During the precinct planning process, the GCC 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.	From field validation, a total of 0.68 Ha of mapped non-certified ENV was found to be not there or fragmented to below 0.5Ha and no longer meet the definition of ENV. In addition, 0.51Ha of ENV will be lost for essential infrastructure.	Yes	The 0.51 Ha of validated non-certified ENV to be lost for essential infrastructure will be offset through protection of 3.12 Ha of field validated certified ENV within the Precinct. The clearance of this vegetation is considered necessary to meet the required Development Parameters specified in the

		Relevant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
					Growth Centres Development Code.
8	demons exhibiti order ta	ing a determination under condition 7, the GCC must strate by way of information provided during the public on of the precinct plan (where that exhibition occurs after this akes effect) that the clearing of any existing native tion in the non-certified areas will be offset by:	As 0.51 Ha of mapped non-certified ENV has the potential to be lost or fragmented below 0.5 Ha, this must be offset.	Yes	As identified in item 6 above. 14.10 Ha of field validated ENV will be retained across the site, exceeding the minimum amount required.
	veg (b) the	protection of an equal or greater area of existing native etation elsewhere in the Growth Centres; and/or revegetation and/or restoration of an area of land elsewhere in Growth Centres, subject to satisfying the following,	Measures consistent with RBM 8(a)/(b) have been implemented to offset impacts of clearing of ENV		A total of 0.68 Ha of mapped non-certified ENV was found to be not there or fragmented to below 0.5Ha and no longer
	(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,	as described in relation to RBM 7.		meets the definition of ENV. In addition, 0.51Ha of ENV will be lost for essential infrastructure. The 0.51 Ha of validated ENV to be lost will be directly offset by
	(ii) (iii)	the revegetated and/or restored areas will be protected , 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),			the protection of 3.12 Ha of field validated certified ENV within the E2 Environmental Conservation zones and inclusion on the Native Vegetation Protection Map.
	(iv)	areas subject to revegetation and/or restoration must be of a suitable boundary configuration and design to support long-term management,			Refer Annex D.
	(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> 1948 and <i>Water Management Act</i> 2000),			
	(vi)	revegetation and/or restoration will be undertaken by suitably qualified and experienced persons using indigenous plant			

	Relevant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	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	Revegetation and/or restoration may be partly counted towards meeting the overall requirement to protect 2,000 hectares of existing vegetation required in condition 6. The amount that may be counted shall be calculated by dividing the total area of revegetation and/or restoration required under condition 8b (iii) by 3. Note: for example, if 9 hectares of revegetation is undertaken then 3 hectares may be counted.		Not Applicable	
Reter	ntion of existing native vegetation shown in areas marked with red ning			
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 .		Not Applicable	
Grou	nd-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.	Eco Logical Australia conducted ground truthing of ENV within the Precinct. The calculations of loss is based on the originally mapped ENV (to maintain comparison with the Precinct target) whilst protection is calculated on field validated ENV (for conditions 7 to 8 and 11 to 12) reflect the updated	Yes	Further detailed assessment is contained within the Catherine Fields Part Precinct Planning Study – Biodiversity Assessment (Eco Logical Australia 2012). Annex A shows the results of groundtruthing. The draft conservation plan maps 22.34 Ha of ENV within the Catherine Fields (Part) Precinct, 12.17 Ha of which falls

	Re	levant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
			vegetation mapping.		within non certified land areas.
					Field Survey validated 21.57 Ha of ENV currently existing throughout the Precinct of which 11.49 Ha is located in noncertified areas.
					Field survey did not record any additional areas of high conservation value vegetation.
	tional conservation actation	tions within the Growth Centres – native			
14	the Growth Centres D assessment must be to the Shanes Park A	preparation of the relevant precinct plan(s) under bevelopment Code, a further detailed undertaken of the areas adjoining or proximate ir Services Australia site marked in blue versity certification maps.		Not Applicable	
15		rred to in condition 14 must examine whether iteria specified in Schedule 3.		Not Applicable	
16	advice to the Minister	es of the assessment the DECC shall provide r on whether the areas should be included within the non-certified areas shown on the ation maps .		Not Applicable	
Addit	tional conservation ac	tions within the Growth Centres – plants			
17	the Growth Centres D	preparation of the relevant precinct plan(s) under levelopment Code relating to the areas referred the following actions must be undertaken:		Not Applicable	_
	Species	Required action			
	Acacia pubescens	Potential populations at Cross Street, Kemps Creek and Thirty-second Avenue, Austral – as shown in black hatching on the			

Rele	evant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	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 DECC. 			
Pimelea spicata	Potential populations at Denham Court Road - as shown in black hatching on the biodiversity certification maps:			
	 survey to confirm the presence of 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 DECC. 			
Persoonia hirsuta	Potential populations at North Kellyville – 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 DECC. 			
Leucopogon fletcheri	Known population at North Kellyville - as shown in black hatching on the biodiversity certification maps:			
	 survey to confirm the extent of the population, and 			
	 provide for the protection of the population to the satisfaction of the DECC. 			

	Rele	vant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	that it is appropriate to	Known populations at North Kellyville - as shown in black hatching on the biodiversity certification maps: • survey to confirm the extent of the populations, and • provide for the protection of the population to the satisfaction of the DECC. If the above actions the Minister may decide amend the boundaries of the area subject to in accordance with condition 3.			
Addit	ional conservation action	ons within the Growth Centres – animals			
18	the Growth Centres De	eparation of the relevant precinct plan(s) under velopment Code relating to the area referred e following actions must be undertaken:		Not Applicable	

	F	Relevant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	Species	Required action			
	Green and Golden Bell Frog	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 DECC.			
		Option 2			
		 if the species is present at Riverstone but cannot be adequately protected to the satisfaction of the DECC, 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 DECC. 			
	that it is appropriate	n of the above actions the Minister may decide to amend the boundaries of the area subject to attion, in accordance with condition 3.			
	ional conservation a opment sites	actions within the Growth Centres –			
19	effect, the DoP (in or procedures so that were publicly exhibit	ns of the biodiversity certification order taking consultation with the DECCW) must put in place all future precinct plans (excluding any plans that ted before the biodiversity certification order took icable, provide for the appropriate re-use of:	These provisions will be incorporated into the DCP for the Camden Growth Centre precincts.	Yes	Refer to clause 2.3.5 of the Camden Growth Centre Precincts DCP.
	(a) native plants (including but not limited to seed collection) and the			

	Relevant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
	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.			
Futui	re precinct plans			
35	During the preparation of future precinct plans (excluding any precinct plans already publicly exhibited before this order took effect) the GCC 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 for Catherine Fields (Part) Precinct.
Futui	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 (as soon as practicable) provide advice to the DECC on whether: (a) the species, population or ecological community is known or likely to be present in the Growth Centres;		Not Applicable	
	(b) it was considered during the preparation of the draft Growth Centres Conservation Plan by the GCC ; 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 DECC 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		Yes	

Relevant Biodiversity Measure	Catherine Fields Part Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Justification
ecological community is listed under the Act.			

3. Conclusion

This report has undertaken an assessment of the consistency of the Catherine Fields Part precinct planning with the biodiversity certification and the applicable relevant biodiversity measures.

It is concluded that the Catherine Fields Part precinct planning is consistent with the biodiversity certification of the Growth Centres SEPP, as follows:

- The Precinct Plan will protect 14.10 Ha of field validated ENV and will count towards the 2000 Ha target, in accordance with RBM6. This is 1.93 Ha more than the 12.17 Ha target identified for the Precinct in the Draft Conservation Plan.
- The loss and fragmentation of 0.51 Ha of validated non-certified ENV is due to the future need to provide road crossings over South Creek
 and minor incursions on the perimeter of the riparian corridors. This loss has been offset by the retention of an additional 3.12 Ha of field
 validated certified ENV within the Environmental Conservation zone.
- The 14.10 Ha of ENV will be protected via the E2 Environmental Conservation zone as described below (Annex B and C).
- The SEPP amendment will provide a clause that prevents the **clearing** of ENV (and areas of AHCVV) in certain areas (principally in the non-certified land) as shown on the Native Vegetation Protection Map (**Annex C**).

Land use zones have been selected based on advice from 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 Precinct Plan and 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:

• All ENV to be protected is located on land within existing large land holdings zoned E2 Environmental Conservation. This land is not proposed to be acquired by a public authority. Notwithstanding, the opportunity exists for the two affected landowners to enter into an agreement with Council to dedicate the revegetated corridors in the future. The application of the E2 Environmental Conservation zone to land that is to remain in private ownership is consistent with OEH requirements for the protection of ENV.

Proposed biodiversity certification map

To reflect the outcomes of the Precinct Plan and ensure the protection of ENV, amendments are proposed to the boundaries of certified and non-certified land as shown on the biodiversity certification map (referred to as the subject lands map) (see Annex D). The new boundaries of the non-certified lands are proposed to reflect the boundaries of the:

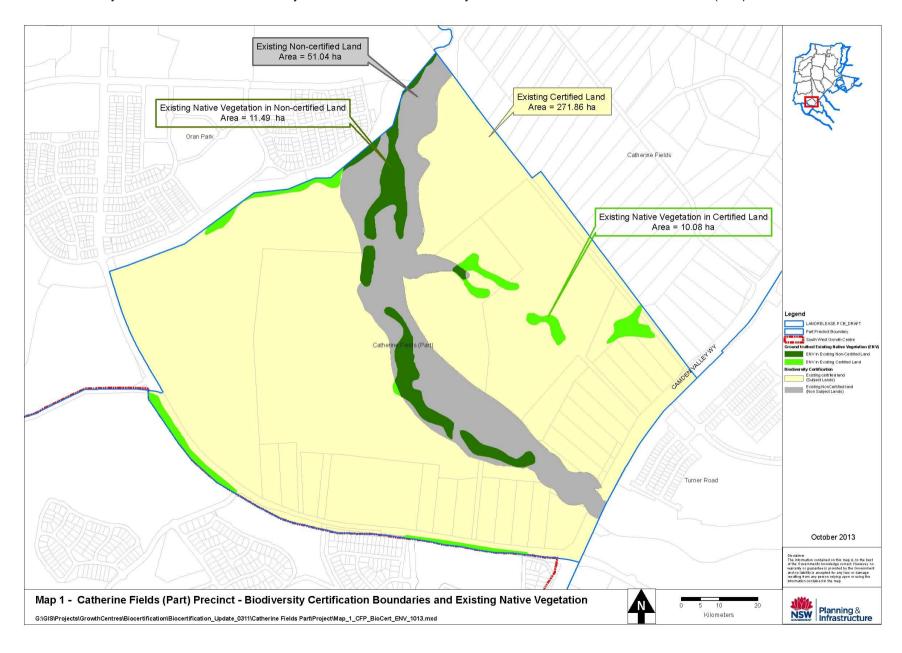
- protected ENV (as mapped as 'Existing Native Vegetation' on the Native Vegetation Protection Map see Annex C) and Native Vegetation Retention areas on the NVP Map;
- E2 zoned land; and
- potential road crossing points for South Creek in the southern portion of the Precinct.

Assessment of consistency be	etween Relevant Biodiversity	Measures of the Biodiversity	/ Certification Or	rder and Catherine Fie	ds (Par	t) Precinct
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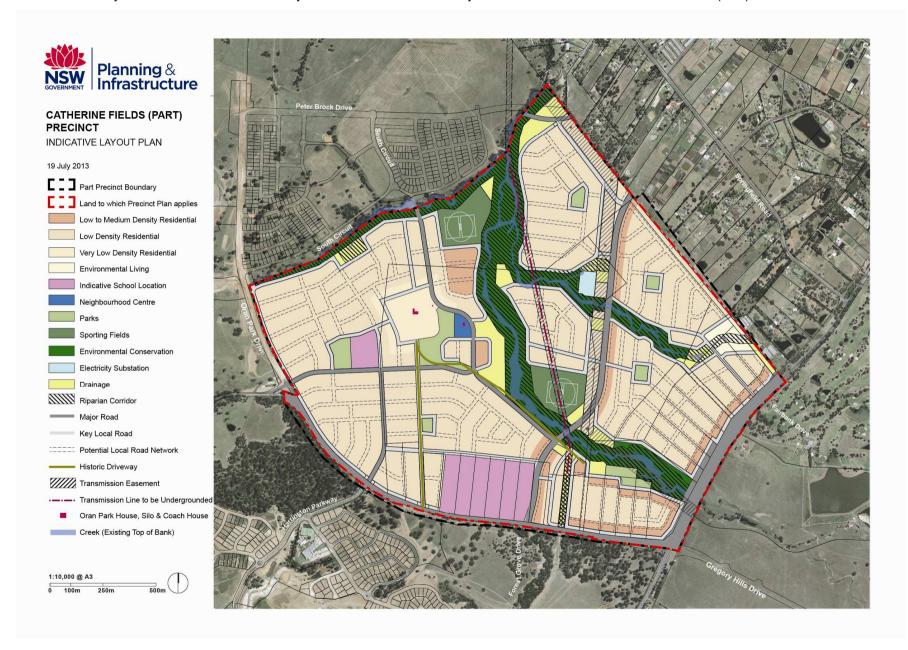
Annex A

Biodiversity Certification Map for Catherine Fields (Part) Precinct (including field validation results)





Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Catherine Fields (Part) Precinct
Annex B
Proposed Indicative Layout Plan for Catherine Fields (Part) Precinct
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Proposed indicative Layout Fiant for Catherine Fields (Fart) Frecinct
Froposed indicative Layout Flair for Catherine Fields (Fait) Frecinct
Proposed indicative Layout Plan for Catherine Pielus (Part) Precinct
Proposed indicative Layout Plain for Catherine Pielus (Part) Precinct



Assessment of consistency be	between Relevant Biodiversity	Measures of the Biodiversity	/ Certification Or	der and Catherine Field	s (Part	t) Precinct
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Annex C

Proposed Protection Measures for Catherine Fields Part Precinct (including Native Vegetation Protection Map and Zoning Plan)

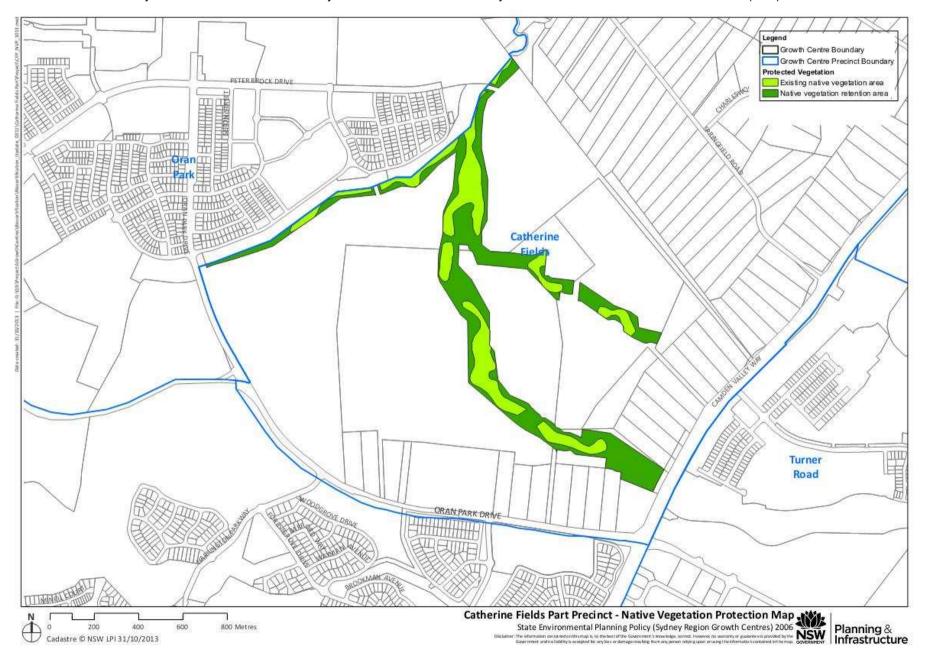
Calculations of ENV within the Catherine Fields (Part) Precinct

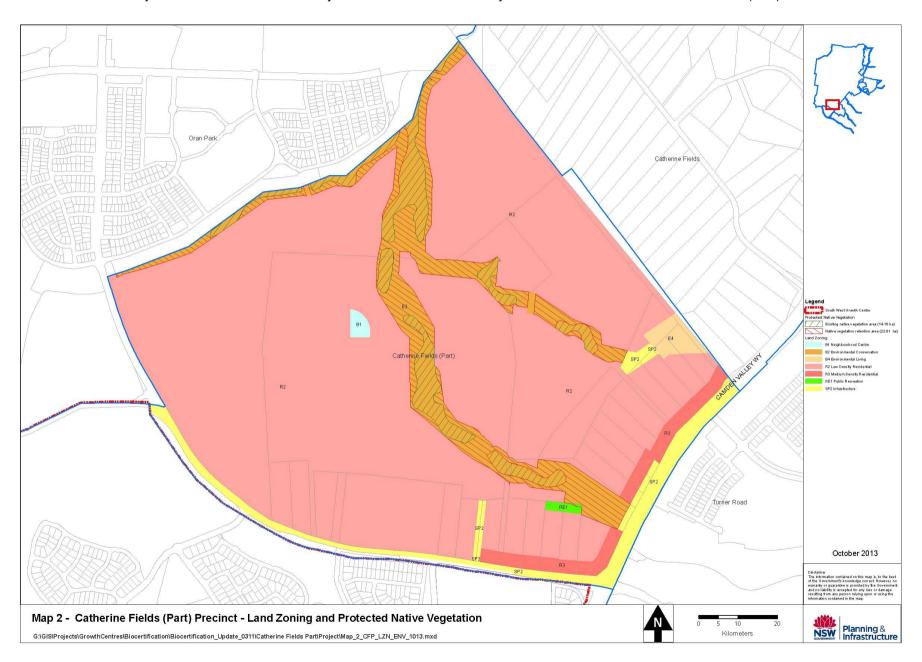
Results of field validation for Existing Native Vegetation & AHCVV

Reference	Item	Area (ha)
А	Area of mapped ENV in non-certified areas (as per Conservation Plan)	12.17
В	Area of validated ENV in non-certified areas	11.49
С	Area of validated ENV in certified areas	10.08
D	Total area of validated ENV in the precinct	21.57
E	Total area of validated AHCVV in precinct	0

Summary of impacts, offsets and areas of ENV to be protected

Reference	Item	Area (ha)
А	Area of mapped ENV in non-certified areas (as per Conservation Plan)	12.17
В	Area of validated ENV in non-certified areas	11.49
С	Impacts: Validated non-certified ENV to be cleared (area to become certified)	0.51
D	Offsets: Validated certified ENV to be used as offset (area to become non-certified)	3.12
E	Total area of ENV to be protected in non-certified areas (E = B-C+D)	14.10
F	Area of additional high conservation value vegetation (AHCVV) to be protected	0
Н	Total area of ENV/AHCVV to be protected (H = F+G)	14.10





Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Catherine Fields (Part) Precinct
August D
Annex D
Proposed Amendments to Biodiversity Certification Map

Comparison of existing and proposed certified/non-certified land

The following table outlines the current and proposed certified and non-certified areas.

Land Type	Current Area (ha)	Proposed Area (ha)
Certified Land	271.86	287.12
Non Certified Land	51.04	36.15

