Biodiversity Development Assessment Report

West Wyalong Motorsport Park development

Bland Shire LGA, NSW

Prepared by Addy Watson BAM Accredited Assessor (BAAS19066)

Final Report – March 2025

Report template prepared by Department of Planning and Environment

Document control

Version	Date	Author	Details
1	01/12/2023	Addy Watson	Final issued with development application
2	27/03/2025	Addy Watson	Updated avoid section following department comments.

Summary

Bland Shire Council proposes to develop a West Wyalong Motorsport Park which will incorporate a purpose built, one-eighth of a mile straight line drag strip and associated facilities capable of staging local, regional and state significant motorsport events.

This BDAR is required as the proposal would require clearing of native vegetation which exceeds the area threshold as provided by section 7.2 of the Biodiversity Conservation Regulation 2017. There is no minimum lot size designated under the LEP for the subject land. Therefore, the smaller of the two lots upon which this proposal would occur has been used as the surrogate for the minimum lot size.

This proposal would be considered for approval under Part 4 of the NSW *Environment Assessment and Planning Act 1979*.

Assessment under the Biodiversity Offset Scheme is required for this proposal.

The subject land has been selected to be adjacent to the West Wyalong airport. The subject land and wildlife within it are therefore already subject to noise and vehicle movements, and other edge effects.

Native vegetation in the subject land may have been historically cleared noting the generally young age of trees, very low tree hollow presence, and areas of prolific White Cypress Pine regrowth.

Two plant community types were identified in the subject land:

- PCT70 – White Cypress Pine woodland on sandy loams in central NSW wheatbelt
- PCT176 – Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion

PCT70 occurs in two condition states – good, where tree cover is reasonably high and

Moderate, where tree cover is lower and shrubby regrowth dominates.

This proposal would result in the removal of 7.95 hectares native vegetation within the subject land.

No threatened ecological communities (TECs) listed under the NSW *Biodiversity Conservation Act 2016* or ecological communities (ECs) listed under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) were recorded in the subject land.

No threatened species were recorded in the subject land during the assessment for this proposal. However, Major Mitchell's Cockatoo was noted in the adjacent land. This species is a species credit species where breeding habitat exists. No suitable breeding hollows were recorded on the subject land, and therefore this species was excluded and does not require offset as a result of this proposal.

Seven species were identified as requiring offset; however, all of these species are assumed to be present. Additional field survey may confirm these species are not present in the subject land and in this case, offsetting of those species would not be required.

No candidate serious and irreversible impacts (SAII) were identified by this assessment.

Table E1 identifies impacts that require an offset – ecosystem credits. Table E2 identifies impacts that require an offset – species credits.

Table E1 Impacts that require an offset – ecosystem credits

Vegetation zone	PCT	TEC/EC	Impact area (ha)	Number of ecosystem credits required
1	70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Nil	2.98	73
2	70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Nil	1.85	31
3	176 - Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion	Nil	3.12	63

Table E2 Impacts that require an offset – species credits

Common name	Scientific name	Loss of habitat (ha) or individuals	Number of species credits required
A Spear-grass	*Austrostipa metatoris*	7.95	201
A Spear-grass	*Austrostipa wakoolica*	7.95	201
Eastern Pygmy-possum	*Cercartetus nanus*	3.12	84
Pine Donkey Orchid	*Diuris tricolor*	7.95	150
Square-tailed Kite	*Lophoictinia isura*	4.35	81
Silky Swainson-pea	*Swainsona sericea*	7.95	201
Tylophora linearis	*Tylophora linearis*	7.95	201

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Shortened forms

APZ	asset protection zone
BAM	Biodiversity Assessment Method
BAM-C	Biodiversity Assessment Method Calculator
BC Act	*Biodiversity Conservation Act 2016* (NSW)
BC Regulation	Biodiversity Conservation Regulation 2017 (NSW)
BDAR	Biodiversity Development Assessment Report
BOAMS	Biodiversity Offsets and Agreement Management System
BOS	Biodiversity Offsets Scheme
CEEC	critically endangered ecological community
DBH	diameter at breast height over bark
EC	ecological community listed under the EPBC Act
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)
EP&A Act	*Environmental Planning and Assessment Act 1979* (NSW)
EEC	endangered ecological community
HTW	high threat weed
IBRA	Interim Biogeographic Regionalisation for Australia
LLS Act	*Local Land Services Act 2013* (NSW)
MNES	matters of national environmental significance
NPW Act	*National Parks and Wildlife Act 1974* (NSW)
NSW	New South Wales
PCT	plant community type
SAII	serious and irreversible impact
SEARs	Secretary's Environmental Assessment Requirements

TBDC	Threatened Biodiversity Data Collection
TEC	threatened ecological community
VEC	vulnerable ecological community
Vegetation SEPP	*State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* (NSW)

Declarations

i. Certification under clause 6.15 *Biodiversity Conservation Act 2016*

I certify that this report has been prepared based on the requirements of, and information provided under, the Biodiversity Assessment Method and clause 6.15 of the *Biodiversity Conservation Act 2016* (BC Act).

Signature: 

Date: 16 November 2023

BAM Assessor Accreditation no: BAAS 22015

This BDAR has been prepared to meet the requirements of BAM 2020. Appendix A provides an assessment of compliance with the minimum information requirements outlined in BAM Appendix K.

The lead or responsible assessor for the project must certify in the BDAR that the report has been prepared on the basis of the requirements of, and information provided under the BAM as at a specified date, and that date is within 14 days of the date the report is submitted to the decision-maker.

The BAM Calculator (BAM-C) must also be finalised and submitted within the Biodiversity Offsets and Agreement Management System (BOAMS). The date the assessor certifies (signs) the BDAR does not need to match the date on the finalised credit report; however, to be considered valid, the BDAR must be submitted to the decision-maker within 14 days of the finalisation of the BAM-C.

ii. Details and experience of author/s and contributors

The table below provides details of the person/s responsible for preparing the BDAR plus any surveys and/or investigations on which the BDAR relies.

Authors and contributors

Name	BAM Assessor Accreditation no. (if relevant)	Position/Role	Tasks performed	Relevant qualifications
Addy Watson	BAAS19066	Manager	Report preparation BAM C data entry and analysis	Grad. Dip. Captive Vertebrate Management, Charles Sturt University Grad. Cert. Social Impact, University of NSW B. Env. Sc. University of New England. NSW Biodiversity Assessment Method Accredited Assessor (BAAS19066) Diploma Project Management
Dave Sturman	BAAS22015	Manager	BAM plot surveys Targeted threatened flora surveys Targeted threatened fauna surveys BAM C data entry and analysis Document review	B. Env. Sc. Land and Water Specialisation Charles Sturt University Cert III (Horticulture) AHCPM201-Recognising grasses NSW Biodiversity Assessment Method Accredited Assessor (BAAS22015)
Gabrielle Green	N/A	Environmental Consultant	BAM plot surveys Targeted threatened flora surveys Targeted threatened fauna surveys	B. Env. Sc. University of New England AHCPCM201 – Recognising grasses

iii. Conflict of interest

I declare that I have considered the circumstances and there is no actual, perceived or potential conflict of interest OR I wish to openly declare the following actual, perceived or potential conflict of interest and the management strategies employed:

This declaration has been made in the interests of full disclosure to the decision-maker. Full disclosure has also been provided to the client.

Signature: 

Date: 16 November 2023

BAM Assessor Accreditation no: BAAS 22015

Stage 1: Biodiversity assessment

1. Introduction

1.1 Proposed development

1.1.1 Development overview

The West Wyalong Motorsport Park will incorporate a purpose built, one-eighth of a mile straight line drag strip and associated facilities capable of staging local, regional and state significant motorsport events.

Bland Shire Council is the proponent for this proposal.

The proposal would be considered as a development that requires consent under Part 4 of the EP&A Act

1.1.2 Location

This proposed development would be located in Lot 10 DP1141509 and Lot 11 DP1141509, 13510 Newell Highway, West Wyalong, NSW.

Refer to Figure 1 Site Map and Figure 2 Location Map.

1.1.3 Proposed development and the subject land

The West Wyalong Motorsport Park will incorporate a purpose built, one eighth of a mile straight line drag strip and associated facilities capable of staging local, regional, and state significant motorsport events.

Native vegetation would be removed from within the subject land boundary.

Native vegetation within the subject land is in moderate to good condition, however some areas suggest historic disturbance with generally young trees present, as well as patchy abundant shrubby regrowth.

Habitat value is low, with only one small hollow recorded during the field assessment, and a very low course woody debris count recorded.

The site is adjacent to the West Wyalong airport and some existing areas of clearing and scraping exist within the subject land. The cleared and scraped area has been mapped as not native vegetation.

The land rises gently to the north, from approximately 262 metres AHD to 266 metres AHD.

Refer to Figure 3 Development layout.

The subject land boundary includes the operational and the construction footprints. ‘

The subject land is a total of 9.60 hectares. 7.95 hectares of which is currently occupied by native vegetation, with the remaining 1.65 hectares being bare earth as a result of other recent works.

Refer to Figure 1 Site Map.

1.1.4 Other documentation

No other documentation is relevant to this report.

1.2 Biodiversity Offsets Scheme entry

The Biodiversity Offset Scheme applies to this proposal as the area of impact to native vegetation would exceed the area threshold identified in section 7.3 of the Biodiversity Conservation Regulation 2017.

There is no minimum lot size allocated to the two lots which contribute to the subject land, likely as the land is associated with the West Wyalong Airport. The total area of the smaller of the two lots is approximately 81 hectares.

This proposal would result in impact to 8.21 which exceeds the area threshold of one hectare or more.

1.3 Excluded impacts

No land categorised as Category 1 Land under the *Local Land Services Act 2013* was identified.

Where large areas of bare earth occurred within the subject land, this was mapped zone 4 – not native vegetation. Bare earth exists where recent clearing and scraping has occurred associated with other works.

1.4 Matters of national environmental significance

This proposal is not deemed a controlled action, and referral under the EPBC Act is not required.

1.5 Information sources

Information sources used to inform this BDAR have been provided in the following sections.

1.5.1 Spatial data

GIS layer name	Reference
IBRA bioregions and subregion	NSW data portal
NSW landscape regions	Mitchell Landscapes V3
Rivers and streams	Six Viewer / SEED WMS topographic layer
Wetlands	Directory of Important Wetlands
Waterways	Waterway NSW Final
Key Fish Habitat	DPI Key Fish Habitat GIS layer
Native vegetation extent	State Vegetation Type Map (VIS 4468) and ESRI Satellite
Soil profiles	eSpade / SEED Map
Elevation contours	SIX Maps / Clip and Ship

1.5.2 Web sites (and links to documents)

Title	Web address
Legislation	
Biodiversity Conservation Act 2016	https://legislation.nsw.gov.au/view/html/inforce/current/act-2016-063
Commonwealth Environment Protection & Biodiversity Conservation Act 1999	Environment Protection and Biodiversity Conservation Act 1999 (legislation.gov.au)
Environmental Planning and Assessment Act 1979	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1979-203
Fisheries Management Act 1994	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1994-038

National Parks and Wildlife Act 1974	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1974-080
Threatened Species Conservation Act 1995	https://legislation.nsw.gov.au/view/whole/html/inforce/2016-11-25/act-1995-101
Water Management Act 2000	https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2000-092
Biodiversity	
BAM 2020	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/accredited-assessors/biodiversity-assessment-method-2020
BioNet TBDC	https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet
Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna –Amphibians (DECCW, 2009)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Threatened-species/amphibians-field-survey-methods-090213.pdf
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DEC 2004)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Threatened-species/draft-threatened-biodiversity-survey-guide.pdf
Survey requirements (birds, bats, reptiles, frogs, fish and mammals) for species listed under the EPBC Act	https://www.environment.gov.au/system/files/resources/b1c6b237-12d9-4071-a26e-ee816caa2b39/files/survey-guidelines-mammals.pdf
Guide to Surveying Threatened Plants (DPIE, 2020)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/surveying-threatened-plants-and-habitats-nsw-survey-guide-biodiversity-assessment-method-200146.pdf
DPIE Threatened Species website	https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species
Atlas of NSW Wildlife	http://www.environment.nsw.gov.au/wildlifeatlas/about.htm
PlantNET	http://plantnet.rbgsyd.nsw.gov.au/
Threatened Species Assessment Guideline – The Assessment of Significance (DPI, 2008)	Threatened Species Assessment Guidelines (nsw.gov.au)
Significant Impact Guidelines 1.1 – Matters of National Environmental Significance	https://www.environment.gov.au/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance
Principles for the use of biodiversity offsets in NSW	https://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm
NSW Native Vegetation Regulatory Map	https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=NVRMap
NSW Biodiversity Values Map	https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BOSETMap
Groundwater Dependent Ecosystems	http://www.bom.gov.au/water/groundwater/gde/
Soil Landscapes of Central and Eastern NSW	https://datasets.seed.nsw.gov.au/dataset/published-soil-landscapes-of-central-and-eastern-nsw37d37

2. Methods

2.1 Site context methods

2.1.1 Landscape features

Landscape features were initially identified using aerial imagery and GIS spatial data including contours, vegetation maps, hydrology, during desktop planning. The site visit in August 2023 was used to confirm the extent and condition of landscape features in and around the development footprint.

2.1.2 Native vegetation cover

Native vegetation cover was initially identified using current and historical aerial imagery and GIS spatial data such as existing vegetation mapping, during desktop planning.

Field assessment in 2023 was used to confirm the extent and condition of native vegetation cover in and around the subject land.

2.2 Native vegetation, threatened ecological communities and vegetation integrity methods

2.2.1 Existing information

Desktop review of potential Plant Community Types (PCTs) within the development site was undertaken prior to field assessment using State Vegetation Type Map (SVTM) *Central West Lachlan Region* VIS_4468.

SVTM mapping was groundtruthed during field assessment by broadly considering the surrounding landscape, followed by assessing the subject land to determine possible vegetation zones and then conducting BAM vegetation integrity plots within representative zones.

Flora species, formation, class and type were recorded with BAM plots and this data was entered into the BioNet Vegetation Classification Community Identification Tool to determine which PCT best matched the native vegetation. After consideration of the upper, mid and ground-stratum species recorded in the development footprint and the regional context, PCT's were groundtruthed and mapped.

EPBC Act and BC Act definitions of any associated Threatened Ecological Communities were considered against data collected during field assessment.

2.2.2 Mapping native vegetation extent

Native vegetation within the subject area was classified using the NSW vegetation classification framework.

The 'State Vegetation Type Map: Central West Lachlan SVM v1p4_PCT_E_4468 spatial layer provided a baseline for determining Plant Community Types (PCT) with potential to occur within the development site. The BioNet Vegetation Classification application was used to understand community composition and any Threatened Ecological Communities (TEC) associated with PCT.

Satellite imagery and field assessment data were used to determine native vegetation extent of the subject land.

Desktop results were ground-truthed by field assessment including plot-based vegetation surveys in accordance with Biodiversity Assessment Method (BAM) 2020 (Section 2.2.3). Areas of PCT identified within the development site were zoned according to vegetation condition where applicable.

Assessment identified the Plant Community Types and confirmed the presence/ absence of any Threatened Ecological Communities. Biodiversity Assessment Method 2020 (BAM) vegetation plots were completed.

Where the current condition of the land occupied by a single Plant Community Type varied within the subject land, more than one vegetation zone was mapped.

2.2.3 Plot-based vegetation survey

Seven vegetation integrity plots were conducted in August 2023 as part of the field assessment. These plots were used when determining the PCT in the subject land, and as a basis for further field assessments. See section 2.2.4 below.

Refer to Appendix F Vegetation survey data for survey locations, and Figure 5 Field survey locations.

2.2.4 Vegetation integrity survey

BAM (2020) is approved by the NSW government as it is scientifically robust, transparent and repeatable, providing a consistent approach for assessing impacts on biodiversity values.

Supported by desktop results, the development site was first assessed to broadly indicate what Plant Community Types (PCT) and zones were likely present and where to apply BAM plots. Plots were placed in representative native vegetation zones likely to be impacted by the proposal.

Species composition (Native, Exotic, High Threat Weeds (HTW), vegetation integrity, function, PCT and TEC presence were assessed using seven 20 by 20 metre and 20 by 50 metre vegetation plots, in accordance with BAM 2020. The attributes measured provided an indication of the biodiversity presence and quality of habitat. Transects were also used to determine the presence of any threatened flora species (Appendix B). If the presence of a listed threatened species was detected in a plot, relevant NSW or Commonwealth guidelines were employed to find others in or next to the plot to indicate the extent of the local viable population.

Areas of non-native vegetation were also identified using the processes outlined above including areas comprising exotic species or grazed paddocks.

Effort was made to place all vegetation plots within the development site, however, some plots extended beyond the footprint to ensure vegetation representative of the same vegetation type and condition as the vegetation within the development site was captured.

Plot data collected was entered into the BAM-C and credit reports provided in Appendix C.

2.3 Threatened flora survey methods

2.3.1 Review of existing information

A list of threatened flora and associated habitat and microhabitat constraints, predicted to occur in the subject area, was automatically generated using BAM-C based on site context including IBRA region and sub region, predicted PCTs and NSW (Mitchell) Landscape.

Aerial imagery, contour maps and vegetation maps were also reviewed to identify habitat constraints and microhabitats for threatened species. The following additional resources were used to inform field and threatened species:

Databases used to identify potentially occurring threatened species and habitat constraints

Database / resource	Search area	Date accessed
NSW DPIE BioNet Atlas	Approximately 1.5-kilometre radius around the subject land	August 2023

Habitat constraints and microhabitat were further identified and considered during the field assessment.

2.3.2 Habitat constraints assessment

Using the existing information (Section 2.3.1), a field assessment was undertaken to confirm presence of associated habitat and microhabitat constraints. Hollow bearing trees were recorded, and any other potential habitat such as stick nests, rocks and coarse woody debris, noted and used to inform targeted threatened species surveys as required. Transects were walked across the subject land, including excluded land, to ensure any habitat constraints were identified.

2.3.3 Field surveys

The field survey was conducted over three days in August 2023. This survey effort included collection of BAM vegetation plot data, habitat assessment and targeted threatened species searches as applicable at the time of the assessment.

The targeted threatened species assessment focused on listed species highlighted by the BAM-C and the EPBC Act Protected Matters Report following survey requirements identified on the BAM-C and BioNet data collection. Flora surveys were conducted in accordance with Department of Planning Industry and Environment's *Surveying threatened plants and their habitats – NSW survey guide for the Biodiversity Assessment Method 2020* and *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft November 2005.* Search effort was reduced in areas very strongly dominated by exotic weed species which would preclude the presence of the target species.

AREA ecologists conducted walking transects across the subject land to search for the species listed in Section 5.3 or suitable habitat for these species.

No threatened flora species listed under the BC Act or EPBC Act were detected in the subject land. Initial field assessment determined that vegetation was typically too degraded to support listed threatened flora species, with few of these species being removed from BAM-C calculations on this basis. However, searches for threatened flora species were still conducted during field assessments.

Refer to Figure 5 Field survey locations.

2.4 Threatened fauna survey methods

2.4.1 Review of existing information

A review of relevant ecological databases and literature (section 1.5) was undertaken to characterise the development site and likelihood of occurrence of, and potential impacts to biodiversity values.

Databases used to identify potentially occurring threatened species and habitat constraints

Database / resource	Search area	Date accessed
NSW DPIE BioNet Atlas	Approximately 1.5-kilometre radius around the development site	August 2023

Habitat constraints and microhabitat were further identified and considered during the field assessment.

2.4.2 Habitat constraints assessment

The likelihood of threatened species occurrence in the subject land was informed by field surveys and the presence suitable habitat including any habitat constraints. Habitat constraints and microhabitat were identified during the field assessment. Where threatened species were considered likely to occur, the potential impact of the proposal on these species was determined.

Field survey and flora search transects enabled further identification of habitat constraints and microhabitats.

2.4.3 Field surveys

Field surveys included walked transect to search for listed species, or habitat values or constraints associated with each species, as applicable at the time of the assessment.

Refer to Figure 5 Field survey locations.

All surveys followed BAM (2020) guidance materials listed in Section 1.5 of this BDAR. Threatened species searches were undertaken as per the threatened species survey guidelines.

Survey focused on targeted assessment which could occur at the time, but additional consideration was given to threatened species which may be present in other more suitable seasons for their detection.

The targeted threatened fauna species assessment focused on listed fauna species highlighted by the BAM-C and the EPBC Act Protected Matters Report following all survey requirement identified on the BAM-C and BioNet data collection.

The following survey effort was completed to inform this BDAR:

Species Search transects

Walked parallel transects were conducted across the subject land. Visibility on site was good with threatened flora and fauna searches efficiently conducted simultaneously. Microhabitat searches were conducted during transects with particular attention given to habitat constraints or microhabitats on which predicted listed species are dependant.

Call Playback and Spotlighting

Call playback was conducted on two nights (1 and 2 August 2023) targeting Bush Stone-curlew *Burhinus grallarius,* and Barking Owl *Ninox connivens* following the guidelines provided in *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities- Working Draft November 2005.*

Spotlighting was conducted in conjunction with the call playback and targeted the above species as well as Koala, Eastern Pygmy-possum, Black-breasted Buzzard, Masked Owl and Squirrel Glider.

Refer to Figure 5 Field survey locations.

2.5 Weather conditions

Table 1 documents weather conditions on the days of the surveys, as provided for the West Wyalong Airport weather station[1].

Rainfall during June 2023 at West Wyalong was above average at 57.0 millimetres, however during July it dropped to below average at 26.8 millimetres. Approximately 2.4 millimetres of rain fell over two days in the week prior to the field assessment.

Table 1 Environmental conditions during threatened species surveys

Survey undertaken (e.g. method / targeted species)	**Date**	**Time**	**Temperature** (min. & max.)	**Wind** (light, mod…)	**Rainfall** (mm)	**Other conditions relevant to the species**
BAM plots, species/ habitat transects, spotlighting, call playback	8 August 2023	All day	19.1 – 0	Data not available	0	No heavy rain in the preceding month (Koala scat search)
BAM plots, species/ habitat transects, spotlighting, call playback	9 August 2023	All day	20.0 - -0.2	Data not available	0	No heavy rain in the preceding month (Koala scat search)
BAM plots, species/ habitat transects	9 August 2023	All day	17.0 – 2.3	Data not available	0.2	No heavy rain in the preceding month (Koala scat search)

2.6 Limitations

No limitations to conducting surveys occurred. However, it may be noted the field assessment was conducted during one site visit of three days.

Searches for several matters were conducted concurrently, however the risk associated with this was mitigated by the presence of two people during the field assessment, no time limitations meaning the survey was not rushed, and much of the ground was covered more than once during the assessment.

Locations and orientation of plots was determined using a handheld GPS which carries an element of inaccuracy. Devices were allowed to calibrate prior to use to minimise this discrepancy.

[1] http://www.bom.gov.au/climate/data/index.shtml?bookmark=136&zoom=3&lat=-32.5355&lon=147.74&layers=B00000TFFFFFFFTFFFFFFFFFFFFFFFFFFFTTT&dp=IDC10002-d

3. Site context

3.1 Assessment area

The assessment area for this BDAR includes the development footprint and area 1500 metre buffer.

Refer to Figure 2 Location Map.

3.2 Landscape features

Landscape features identified within the subject land and assessment area are shown on Figure 1 Site Map and Figure 2 Location Map, respectively. A discussion of relevant landscape features is provided below.

3.2.1 IBRA bioregions and IBRA subregions

The subject land and assessment area occur entirely within the NSW South Western Slopes Interim Biogeographic Regionalisation for Australia (IBRA) bioregion and the Lower Slopes IBRA subregion.

3.2.2 Rivers, streams, estuaries and wetlands

No rivers, streams, estuaries, wetlands or other mapped hydrolines occur on the subject land.

Yiddah Creek, a third Strahler Order hydroline crosses to the southeast of the subject land, within the assessment area.

Unnamed first and second Strahler Order hydrolines are mapped within the subject land.

Various farm dams, and water features associated with the golf course occur within the assessment area.

3.2.3 Habitat connectivity

South and east of the subject land is largely cleared agricultural land, with the West Wyalong Airport runway adjacent to the subject land to the south.

Vegetation to the north of the subject land provides connectivity to larger patches of remnant woody vegetation to the west of the subject land.

The town of West Wyalong lies to the northeast of the subject land within, with the closest urban development within the assessment area.

3.2.4 Karst, caves, crevices, cliffs, rocks or other geological features of significance

No karst, caves, crevices, cliffs, rocks or other geological features of significance occur within the subject land or assessment area.

3.2.5 Areas of outstanding biodiversity value

No areas of outstanding biodiversity value occur within the subject land or assessment area.

3.2.6 NSW (Mitchell) landscape

The subject land is entirely with the Ardlethan Hills NSW Landscape. The assessment area also intersects with the Bimbi Plains NSW Landscape.

3.2.7 Additional landscape features identified in SEARs

No SEARs are applicable to this proposal.

3.2.8 Soil hazard features

No soil hazard features were identified within the subject land or assessment area.

This subsection only applies to vegetation clearing proposals (i.e. development that requires approval from the Native Vegetation Panel under Part 5A of the LLS Act, or the Vegetation SEPP), which is not applicable to this proposal.

3.3 Native vegetation cover

Native vegetation cover within the assessment area was estimated to be 39.58 percent (rounded to 40 percent in the BAMC).

Native vegetation cover was largely determined using satellite imagery and observations about condition of vegetation during field assessment. Based on the condition of vegetation observed within the development site, vegetation was assumed to be similar throughout the assessment area, which is largely cleared agricultural land with scattered paddock trees.

Given the historical and current agricultural land uses within the assessment area, treeless areas were assumed to be dominated by exotic vegetation and treed areas were mapped as native vegetation. Polygons were drawn around driplines of paddock trees and where clusters of trees occurred groundcover between trees were mapped as native vegetation.

Trees within the West Wyalong golf course were mapped as native vegetation where the canopy colour was more olive – grey. Bright green vegetation was considered as not native.

Trees within the urban area of West Wyalong were assumed to be not native.

Given the percent cover threshold for the next highest class of native vegetation cover is approximately 30 percent more than the area mapped for the purposes of this calculation, is unlikely these assumptions have influenced the native vegetation class.

Table 2 summarises the extent of native vegetation cover within the assessment area. Figure 2 Location Map shows native vegetation cover within the assessment area.

Table 2 Native vegetation cover in the assessment area

Assessment area (ha)	1101.27ha
Total area of native vegetation cover (ha)	400.29ha
Percentage of native vegetation cover (%)	39.58% (rounded to 40% in the BAMC)
Class (0-10, >10-30, >30-70 or >70%)	>30-70%

4. Native vegetation, threatened ecological communities and vegetation integrity

4.1 Native vegetation extent

Native vegetation extent within the subject land is presented in Figure 6 Native vegetation extent.

4.1.1 Changes to the mapped native vegetation extent

There are no significant differences between the actual native vegetation extent and that shown on the aerial imagery used in the figures.

Refer to Figure 6 Native vegetation extent.

4.1.2 Areas that are not native vegetation

Areas of not native vegetation include a large section where clearing and earth work had already at the time of the field assessment.

Land associated with a recently constructed exclusion fence around the airport and a large track through the subject land area do not support native vegetation. These have not been included in the BAM assessment and have been mapped as a separate zone (not included in the BAMC calculation) for the purposes of this assessment.

Refer to Figure 7 Native vegetation extent.

4.2 Plant community types

4.2.1 Overview

Vegetation within the subject land has been assessed as aligning with the BioNet Vegetation Classification PCTs identified within Table 3 and their extent is shown in Figure 7 Plant community types. Detailed descriptions of each PCT are provided in the following subsections. Not native vegetation / areas of no vegetation occupy 1.65 hectares.

Table 3 PCTs identified within the subject land

PCT ID	PCT name	Subject land area (ha)
0	Not native vegetation	1.65
70	White Cypress Pine woodland on sandy loams in central NSW wheatbelt (good condition)	2.98
70	White Cypress Pine woodland on sandy loams in central NSW wheatbelt (moderate condition)	1.85
176	Green Mallee – White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion (good condition)	3.12
	Total area	**9.60**

4.2.2 PCT70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt

4.2.2.1 PCT overview

Table 4 presents data contained within the BioNet Vegetation Classification for PCT70, and data obtained for the subject land.

Table 4 PCT70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt

PCT ID	70
PCT name	White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Vegetation formation	Grassy Woodlands
Vegetation class	Floodplain Transition Woodlands
Per cent cleared value (%)	65
Extent within subject land (ha)	4.83

Photo 1 PCT70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt

4.2.2.2 Condition states

Two condition states exist for this PCT – good, where established tree cover is reasonably high, and moderate, where tree cover is less, and shrubby/ White Cypress pine regrowth dominates. The vegetation integrity (VI) score for the good condition (zone 1) is 55.9 while the VI for the moderate condition (zone 2) is 38.1.

Zone 1:

Zone 2:

4.2.2.3 Justification of PCT selection

PCT justification:

The NSW BioNet Vegetation Classification tool was used to complete the initial PCT filter. The IBRA subregion (Lower Slopes) and the following upper and mid stratum species were entered into the filtering tool: White Cypress Pine (*Callitris glaucophylla*), Wilga (*Geijera parviflora*), Hop Bush (*Dodonaea viscosa*), Western Boobialla (*Myoporum montanum*).

The filter tool identified eight PCTs which were consistent with all five features.

Of this short list, six were ruled out as the dominant species of the PCT was not present in the local landscape. These were:

- PCT82 -Western Grey Box - Poplar Box - White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Peneplain Bioregion
- PCT174 - Mallee - Gum Coolabah woodland on red earth flats of the eastern Cobar Peneplain Bioregion
- PCT175 - Ridge mallee woodland on hills of meta-sediments and volcanics, eastern Cobar Peneplain Bioregion
- PCT176 - Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
- PCT201 - Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion
- PCT267 - White Box - White Cypress Pine - Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion

Two PCTs remained on the resulting list:

PCT70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt

PCT72 - White Cypress Pine - Poplar Box woodland on footslopes and peneplains mainly in the Cobar Peneplain Bioregion

PCT70 was selected as the most likely PCT. While these two a reasonably similar, the BioNet Vegetation Classification describes PCT72 occurring to the west of PCT70, mostly on the Cobar Peneplain, and know to grade into PCT70 to the east.

The soil description of PCT70 is consistent with the soils identified within the subject area, where this PCT occurred.

PCT70 is mapped on the Central West Lachlan - State Vegetation Map – 4468 occurring within the assessment area.

4.2.2.4 Alignment with TECs

PCT70 is not associated with any TEC.

4.2.2.5 Alignment with EPBC Act listed ECs

PCT70 is not associated with any EC listed under the EPBC Act.

4.2.3 PCT176 - Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion

4.2.3.1 PCT overview

Table 4 presents data contained within the BioNet Vegetation Classification for PCT176, and data obtained for the subject land.

Table 5 PCT176 - Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion

PCT ID	176
PCT name	Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Vegetation formation	Semi-arid Woodlands (Shrubby sub-formation)
Vegetation class	Inland Rocky Hill Woodlands
Per cent cleared value (%)	20
Extent within subject land (ha)	3.12

Photo 2 PCT176 - Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion

4.2.3.2 Condition states

This PCT occurs in one condition state – Good, with a VI score of 54. See photo above.

4.2.3.3 Justification of PCT selection

The NSW BioNet Vegetation Classification tool was used to complete the initial PCT filter. The IBRA subregion (Lower Slopes) and the following upper and mid stratum species were entered into the filtering tool: Green Mallee (*Eucalyptus viridis*), White Cypress Pine (*Callitris glaucophylla*), Drooping Wattle (*Acacia difformis*), Hop Bush (*Dodonaea viscosa*) and Sifton Bush (*Cassinia arcuata*).

The filter tool identified no PCTs consistent with all six criteria, however three PCTs were consistent with all five features.

Of this short list, two were ruled out as the dominant species of the PCT was not present in the local landscape. These were:

- PCT110 - Western Grey Box - Cypress Pine shrubby woodland on stony footslopes in the NSW South Western Slopes Bioregion and Riverina Bioregion
- PCT217 - Mugga Ironbark - Western Grey Box - cypress pine tall woodland on footslopes of low hills in the NSW South Western Slopes Bioregion.

PCT176 was selected as the most likely PCT. While this PCT is described as mostly occurring in the Cobar Peneplain, it is listed to occur in the Lower Slopes IBRA subregion (NSW South Western Slopes IBRA bioregion), and the Central West Lachlan - State Vegetation Map – 4468 maps very small patches of this PCT to the north and south of the

subject land as well as numerous small patches extensively between the subject land and the Cobar Peneplain IBRA bioregion, the boundary of which lies approximately 50 kilometres to the west.

The soil description of PCT176 is consistent with the soils identified within the subject area, where this PCT occurred.

4.2.3.4 Alignment with TECs

This PCT is not associated with a TECs listed under the BC Act.

4.2.3.5 Alignment with EPBC Act listed ECs

This PCT is not associated with an EC listed under the EPBC Act.

4.2.4 Not native vegetation

Zone 4 consists of not native vegetation. Photos below show examples of the disturbed, vegetation free areas mapped as zone 4 – not native vegetation.

Photo 3 – PCT0 – Not naïve vegetation

4.3 Threatened ecological communities

No TECs area associated with the PCTs in the subject land.

No other TECs were recorded during the field assessment.

4.4 Vegetation zones

Three vegetation zones were mapped in the subject land:

- Zone 1 – PCT70 – determined based on the presence of an established tree canopy which differentiated this zone from zone 2.
- Zone 2 – PCT70 – determined based on the relative lack of an established tree canopy, and a stronger presence of shrubby regrowth which differentiated this zone from zone 1.
- Zone 3 – PCT176 – This zone is described in one condition state, and was determined to be a different zone based on PCT, and associated floristics at the time of the field assessment.

Patch size used for this assessment was 1000 hectares. The subject land is connected to reasonably large areas of treed vegetation, mostly to the west. These areas equate to much more than 1000 hectares, confirming the patch size for all zones in this assessment is in the highest category (greater than 100 hectares).

Refer to Table 6 Vegetation zones and patch sizes. Refer to Figure 8 Vegetation zones>

Table 6 Vegetation zones and patch sizes

Vegetation zone ID	PCT ID number and name	Condition / other defining feature	Area (ha)	Patch size class (select multiple if areas of native vegetation are discontinuous)	No. vegetation integrity plots required	No. vegetation integrity plots completed	No. vegetation integrity plots used in assessment	Plot IDs of vegetation integrity plots used in assessment
1	70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Established tree canopy: Good	2.98	☐ <5 ha ☐ 5–24 ha ☐ 25–100 ha ☒ >100 ha	2	3	3	Plot 1 Plot 3 Plot 5
2	70 - White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Generally lacking established tree canopy, and higher levels of shrubby regrowth: Moderate	1.85	☐ <5 ha ☐ 5–24 ha ☐ 25–100 ha ☒ >100 ha	1	1 another partially overlapped with zone 3 (plot 6)	1	Plot 2
3	176 - Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion	Good	3.12	☐ <5 ha ☐ 5–24 ha ☐ 25–100 ha ☒ >100 ha	2	2 another partially overlapped with zone 2 (plot 6)	2	Plot 4 Plot 7

4.5 Vegetation integrity (vegetation condition)

4.5.1 Vegetation integrity survey plots

The minimum number of plots required were completed as part of this assessment.

Plot 6 was not included as it overlapped to vegetation zones, and two PCTs and was therefore considered not to be representative of either vegetation zone.

Three plots were used to assess zone 1 to ensure variation across the zone was captured.

4.5.2 Scores

Table 7 provides scores for each vegetation zone. Appendix C provides full vegetation survey data.

Table 7 Vegetation integrity scores

Vegetation zone ID	Composition condition score	Structure condition score	Function condition score (where relevant)	Vegetation integrity score	Hollow bearing trees present?
1	70.6	92.5	26.7	55.9	Yes
2	56.1	41.1	23.9	38.1	No
3	78.3	64	31.4	54	No
4	N/A	N/A	N/A	N/A	N/A

4.5.3 Use of benchmark data

Community Condition Benchmarks as per the BAM calculator (in line with the BioNet Vegetation Classification) was used to assess vegetation integrity attributes in each zone.

5. Habitat suitability for threatened species

5.1 Identification of threatened species for assessment

5.1.1 Ecosystem credit species

Table 8 lists ecosystem credit species likely to occur on or use the subject land and the source of information (e.g. automatically populated in BAM-C, recently listed under the BC Act and not yet added to the TBDC, previous ecological reports (environmental impact statements, scientific literature, Council reports, site survey, etc.)).

Table 8 Predicted ecosystem credit species

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
Dusky Woodswallow	*Artamus cyanopterus cyanopterus*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Glossy Black-Cockatoo (Foraging)	*Calyptorhynchus lathami*	Vulnerable	Vulnerable	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 1 and 2 per BAMC	High
Pied Honeyeater	*Certhionyx variegatus*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	All zones	Moderate

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
Little Pied Bat	*Chalinolobus picatus*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	High
Speckled Warbler	*Chthonicola sagittata*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	High
Chestnut Quail-thrush	*Cinclosoma castanotum*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 3 per BAMC	High
Spotted Harrier	*Circus assimilis*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	Zone 1 and 2 per BAMC	Moderate

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
Brown Treecreeper (eastern subspecies)	*Climacteris picumnus victoriae*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 1 and 2 per BAMC	High
Varied Sittella	*Daphoenositta chrysoptera*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Grey Falcon	*Falco hypoleucos*	Vulnerable	Vulnerable	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Black Falcon	*Falco subniger*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	Zone 1 and 2 per BAMC	Moderate

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
Painted Honeyeater	*Grantiella picta*	Vulnerable	Vulnerable	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. Mistletoes present at a density of greater than five mistletoes per hectare	Nil	Moderate
White-bellied Sea Eagle (foraging)	*Haliaeetus leucogaster*	Vulnerable	Not listed	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. Subject land is not within 1km of a river, lake, large dam or creek, wetland or coastline.	Nil	High
Little Eagle (foraging)	*Hieraaetus morphnoides*	Vulnerable	Not listed	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	All zones	Moderate

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
White-throated Needletail	*Hirundapus caudacutus*	Not listed	Vulnerable	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	High
Shy Heathwren	*Hylacola cautus*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 3 per BAMC	High
Swift Parrot (foraging)	*Lathamus discolor*	Endangered	Critically Endangered	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Malleefowl	*Leipoa ocellata*	Endangered	Vulnerable	No	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	Zone 3 per BAMC	High

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
Major Mitchell's Cockatoo (foraging)	*Lophochroa leadbeateri*	Vulnerable	Not listed	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Square-tailed Kite	*Lophoictinia isura*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 1 and 2 per BAMC	Moderate
Hooded Robin (south-eastern form)	*Melanodryas cucullata cucullata*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Black-chinned Honeyeater (eastern subspecies)	*Melithreptus gularis gularis*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	Zone 1 and 2 per BAMC	Moderate

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
Turquoise Parrot	*Neophema pulchella*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	High
Barking Owl (foraging)	*Ninox connivens*	Vulnerable	Not listed	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 1 and 2 per BAMC	High
Corben's Long-eared Bat	*Nyctophilus corbeni*	Vulnerable	Vulnerable	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	High
Gilbert's Whistler	*Pachycephala inornata*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	Zone 3 per BAMC	Moderate

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
Scarlet Robin	*Petroica boodang*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 1 and 2 per BAMC	Moderate
Superb Parrot (foraging)	*Polytelis swainsonii*	Vulnerable	Vulnerable	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 1 and 2 per BAMC	Moderate
Grey-crowned Babbler (eastern subspecies)	*Pomatostomus temporalis temporalis*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Grey-headed Flying-fox (foraging)	*Pteropus poliocephalus*	Vulnerable	Vulnerable	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	Zone 1 and 2 per BAMC	High

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				
Yellow-bellied Sheathtail-bat	*Saccolaimus flaviventris*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	High
Stripe-faced Dunnart	*Sminthopsis macroura*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 3 per BAMC	High
Diamond Firetail	*Stagonopleura guttata*	Vulnerable	Not listed	No	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones	Moderate
Masked Owl (foraging)	*Tyto novaehollandiae*	Vulnerable	Not listed	Yes	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	Zone 1 and 2 per BAMC	High

Common name	Scientific name	Listing status		Dual credit species	Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID	Sensitivity to gain class
		BC Act	EPBC Act						
					☐ Current survey				

5.1.2 Species credit species

Table 9 (flora) and Table 10 (fauna) list all predicted species credit species (e.g. automatically populated in BAM-C, recently listed under the BC Act and not yet added to the TBDC) and the relevant source of information (e.g. previous ecological reports, environmental impact statements, scientific literature, Council reports, site survey etc.).

Table 9 Candidate flora species credit species

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
A spear-grass	*Austrostipa metatoris*	Vulnerable	Vulnerable	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176
A spear-grass	*Austrostipa wakoolica*	Endangered	Endangered	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
Pine Donkey Orchid	*Diuris tricolor*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176
Holly-leaf Grevillea	*Grevillea ilicifolia*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176
Silky Swainson-pea	*Swainsona sericea*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176
Tylophora linearis	*Tylophora linearis*	Vulnerable	Endangered	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176

Table 10 Candidate fauna species credit species

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
Bush-stone Curlew	*Burhinus grallarius*	Endangered	Endangered	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176
Glossy Black-Cockatoo (breeding)	*Calyptorhynchus lathami*	Vulnerable	Vulnerable	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. There are no living or dead trees with hollows greater than 15cm diameter and greater than 8m above the ground.	Nil
Eastern Pygmy-possum	*Cercartetus nanus*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	Zone 3 PCT176. Only zone which provides *eucalyptus* or other food species.

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
Large-eared Pied Bat	*Chalinolobus dwyeri*	Vulnerable	Vulnerable	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. The subject land is not within 2km of rocky areas containing caves, overhangs, escarpments, outcrops, or crevices, or within 2km of old mines or tunnels.	Nil
White-bellied Sea Eagle (breeding)	*Haliaeetus leucogaster*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. There are not living or dead mature trees within suitable vegetation within 1km of rivers, lakes, large dams or creeks, wetlands, or coastlines.	Nil

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
Little Eagle (breeding)	*Hieraaetus morphnoides*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	Yes	N/A	All zones PCT70 PCT176
Swift Parrot (breeding)	*Lathamus discolor*	Endangered	Critically Endangered	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. The subject land is not mapped important habitat.	Nil
Major Mitchell's Cockatoo (breeding)	*Lophochroa leadbeateri*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. The are not living or dead trees with hollows greater than 10cm diameter.	Nil
Square-tailed Kite	*Lophoictinia isura*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	All zones PCT70 PCT176

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
				☐ Current survey			
Barking Owl (breeding)	*Ninox connivens*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. The are not living or dead trees with hollows greater than 20cm diameter and greater than 4m above the ground.	Nil
Squirrel Glider	*Petaurus norfolcensis*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on micro-habitat requirements.	Nil
Koala	*Phascolarctos cinereus*	Endangered	Endangered	☒ BAM-C ☐ TBDC ☐ Previous survey	Yes	N/A	All zones PCT70 PCT176

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
				☐ Current survey			
Superb Parrot (breeding)	*Polytelis swainsonii*	Vulnerable	Vulnerable	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. There are no living or dead E. blakelyi, E. melliodora, E. albens, E. camaldulensis, E. microcarpa, E. polyanthemos, E. mannifera, E. intertexta with hollows greater than 5cm diameter. There are no hollow bearing trees with hollows greater than 4m above the ground or with a DBH of greater than 30cm.	Nil

Common name	Scientific name	Listing status		Sources	Species retained for further assessment?	Reason for exclusion from further assessment	Vegetation zone ID species retained within, including PCT ID
		BC Act	EPBC Act				
Grey-headed Flying-fox (breeding)	*Pteropus poliocephalus*	Vulnerable	Vulnerable	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. No breeding camps, or evidence of breeding camps was recorded in the subject land.	Nil
Masked Owl (breeding)	*Tyto novaehollandiae*	Vulnerable	Not listed	☒ BAM-C ☐ TBDC ☐ Previous survey ☐ Current survey	No	Species is excluded based on habitat constraints. There are no living or dead trees with hollows greater than 20cm diameter.	Nil

Excluded fauna:

Squirrel Glider is excluded because the microhabitat is not suitable for this species on the basis of paucity of suitable trees, that would be consistent with the requirement for this species including large trees with hollows for nesting and breeding, within 50 metres of each other to allow movement through the vegetation. This habitat is not present in the subject land and was not incidentally recorded adjacent to the subject land.

5.2 Presence of candidate species credit species

Table 11 (flora) and Table 12 (fauna) to identify species determined to be present within the subject land based on:

- assumed presence within the subject land
- an important habitat map (for dual credit species)
- targeted threatened species surveys, or
- an expert report.

Table 11 Determining the presence of candidate flora species credit species on the subject land

Common name	Scientific name	Listing status		Method used to determine presence	Present?	Further assessment required? (BAM Subsections 5.2.5 and 5.2.6)
		BC Act	EPBC Act			
A spear-grass	*Austrostipa metatoris*	Vulnerable	Vulnerable	Assumed present	Assumed present	No
A spear-grass	*Austrostipa wakoolica*	Endangered	Endangered	Assumed present	Assumed present	No
Pine Donkey Orchid	*Diuris tricolor*	Vulnerable	Not listed	Assumed present	Assumed present	No
Silky Swainson-pea	*Swainsona sericea*	Vulnerable	Not listed	Assumed present	Assumed present	No
Tylophora linearis	*Tylophora linearis*	Vulnerable	Endangered	Assumed present	Assumed present	No

Table 12 Determining the presence of candidate fauna species credit species on the subject land

Common name	Scientific name	Listing status		Method used to determine presence	Present ?	Further assessment required? (BAM Subsections 5.2.5 and 5.2.6)
		BC Act	EPBC Act			
Eastern Pygmy-possum	*Cercartetus nanus*	Vulnerable	Not listed	Assumed present	Assumed present	No
Square-tailed Kite	*Lophoictinia isura*	Vulnerable	Not listed	Assumed present	Assumed present	No

5.3 Threatened species surveys

Table 13 (flora) and Table 14 (fauna) present the survey effort where targeted threatened species surveys were used to determine presence of the species.

Table 13 Threatened species surveys for candidate flora species credit species on the subject land

Common name	Scientific name	Threatened flora species surveys				Present	Further assessment required (BAM Subsections 5.2.5 and 5.2.6)
		Survey method (transects or grids)	**Timing of survey – within recommended period?** (BAM-C / TBDC)		**Effort** (hours & no. people)		
Holly-leaf Grevillea	*Grevillea ilicifolia sub.sp. ilicifolia*	Transect	☒ Yes Day time 8, 9, 10 August 2023	☐ No <Dates & times>	3 days, 2 people	No	No

Transects were walked across the subject land, by two people, in addition to general observation during the field assessment.

Flora species for which the search effort would have been outside the specified months were also considered during the search transects and were not recorded.

Table 14 Threatened species surveys for candidate fauna species credit species on the subject land

Common name	Scientific name	Threatened fauna species surveys				Present	Further assessment required (BAM Subsections 5.2.5 and 5.2.6)
		Survey method (e.g. harp trap, Elliott trap, bioacoustics, etc.)	**Timing of survey – within recommended period?** (BAM-C / TBDC)		**Effort** (hours & no. people)		
Bush Stone-curlew	*Burhinus grallarius*	Transects, and call playback	☒ Yes 8 and 9 August 2023	☐ No <Dates & times>	30 minutes 2 people	No	No
Little Eagle	*Hieraaetus morphnoides*	Transects and observations	☒ Yes 8, 9, 10 August 2023 <Dates & times>	☐ No <Dates & times>	3 days 2 people	No	No
Koala	*Phascolarctos cinereus*	Spotlighting and scat searches	☒ Yes	☐ No	3 days 2 people	No	No

Common name	Scientific name	Threatened fauna species surveys			Present	Further assessment required (BAM Subsections 5.2.5 and 5.2.6)
		Survey method (e.g. harp trap, Elliott trap, bioacoustics, etc.)	**Timing of survey – within recommended period?** (BAM-C / TBDC)	**Effort** (hours & no. people)		
			8, 9, 10 August 2023 <Dates & times>	2 nights 2 people		

Fauna survey:

- Koala – Koala searches included two nights of targeted spotlighting, and opportunistic implementation of scat searches at the base of suitable trees (suitable size for periodic occupation). No Koalas or evidence of Koala occupation was detected.
- Squirrel Glider – included in the two nights of spotlighting, and search for suitable habitat was completed during the transects. Species was not seen or heard, and habitat was deemed to be degraded for this species.
- Bush Stone-curlew – this species was not flushed/ seen during transects. Call playback was conducted for this species on two nights. The species was not seen or heard during the assessment.
- Nest trees were marked during the search transects, and opportunistically. Small stick nests (likely belonging to White-browned Babbler which were recorded on the subject land) were prolific. One large stick nest likely to be used by a raptor species was identified. No species were seen using this nest. No Little Eagles were seen during the assessment. No Square-tailed Kites were seen during the assessment, however the field assessment was conducted outside the specified months.

Photo 4 – Raptor nest

5.4 Expert reports

No expert reports were used for this assessment.

5.5 More appropriate local data (where relevant)

No local data was used for this assessment.

5.6 Area or count, and location of suitable habitat for a species credit species (a species polygon)

Seven species credit species were assumed to be present.

No EPBC listed species were identified on the subject land, however three flora species assumed to be present are listed under the EPBC Act as Endangered (two) and Vulnerable (one).

Species polygons have been identified for these species as described below:

- A spear-grass (*Austrostipa metatoris*): No species polygon direction is provided for this species. The entire area of native vegetation has been mapped for this species.
- A spear-grass (*Austrostipa wakoolica*): No species polygon direction is provided for this species. The entire area of native vegetation has been mapped for this species.
- Eastern Pygmy-possum: No species polygon direction is provided for this species. The species polygon has been limited to vegetation zone 3 where food species were identified during the field assessment, including eucalyptus species.
- Pine Donkey Orchid: No species polygon direction is provided for this species. The entire area of native vegetation has been mapped for this species.
- Square-tailed Kite: TBDC identifies a 300-metre buffer on nest tress and requires inclusion of all the wooded vegetation within that buffer to be included. Accordingly, a 300 metre buffer has been applied to the single tree identified as containing a raptor nest, and the area of each zone within the buffer was calculated.
- Silky Swainson-pea: No species polygon direction is provided for this species. The entire area of native vegetation has been mapped for this species.
- Tylophora linearis: No species polygon direction is provided for this species. The entire area of native vegetation has been mapped for this species.

Table 15 provides a description of habitat condition for each species polygon.

Table 15 Results for present species (recorded within the subject land)

Common name	**Scientific name**	**Biodiversity risk weighting** (BAM-C & TBDC*)	**SAII entity**** (BAM-C & TBDC)	**Habitat constraints / microhabitats present on the subject land / vegetation zone**	**Abundance – No. individual plants present on subject land** (flora with unit of measure of count)	**Extent (ha) of suitable habitat present on site** (flora or fauna with unit of measure of area)	**TBDC species specific recommendations e.g. buffers, general comments** (where relevant)	**Habitat condition** (vegetation integrity score for each vegetation zone in the polygon – area species only)
A spear-grass	*Austrostipa metatoris*	High (2)	No	Nil – aside from zone 4 where no native vegetation occurs.	Assumed present. Hectare count.	7.95ha	Not available.	Zone 1 – VI:55.9 Zone 2 – VI:38.1 Zone 3 – VI:54.0
A spear-grass	*Austrostipa wakoolica*	High (2)	No	Nil – aside from zone 4 where no native vegetation occurs.	Assumed present. Hectare count.	7.95ha	Not available.	Zone 1 – VI:55.9 Zone 2 – VI:38.1 Zone 3 – VI:54.0
Eastern Pygmy Possum	*Cercartetus nanus*	High (2)	No	Species is unlikely to occur in zone 1 and 2 where food trees are not readily available.	Assumed present. Hectare count.	3.12ha	Species profile: They may occupy small patches of vegetation in fragmented landscapes and although the species prefers habitat with a rich shrub understory, they are known to occur in grassy woodlands and the presence of Eucalypts	Zone 3 – VI:54.0

Common name	**Scientific name**	**Biodiversity risk weighting** (BAM-C & TBDC*)	**SAII entity**** (BAM-C & TBDC)	**Habitat constraints / microhabitats present on the subject land / vegetation zone**	**Abundance – No. individual plants present on subject land** (flora with unit of measure of count)	**Extent (ha) of suitable habitat present on site** (flora or fauna with unit of measure of area)	**TBDC species specific recommendations e.g. buffers, general comments** (where relevant)	**Habitat condition** (vegetation integrity score for each vegetation zone in the polygon – area species only)
							alone is sufficient to support populations in low densities. Feeds largely on nectar and pollen collected from banksias, eucalypts and bottlebrushes; an important pollinator of heathland plants such as banksias; soft fruits are eaten when flowers are unavailable.	
Pine Donkey Orchid	*Diuris tricolor*	Moderate (1.5)	No	Nil – aside from zone 4 where no native vegetation occurs.	Assumed present. Hectare count.	7.95ha	Not available.	Zone 1 – VI:55.9 Zone 2 – VI:38.1 Zone 3 – VI:54.0
Square-tailed Kite	*Lophoictinia isura*	Moderate (1.5)	No	Nil – aside from zone 4 where no native vegetation occurs.	Assumed present. Hectare count.	7.95ha	TBDC: Where a breeding site has been identified in accordance with the BAM the species buffer polygon should be established by providing a circular polygon with a 300m radius around the nest tree and incorporate all woody and	Zone 1 – VI:55.9 Zone 2 – VI:38.1 Zone 3 – VI:54.0

Common name	**Scientific name**	**Biodiversity risk weighting** (BAM-C & TBDC*)	**SAII entity**** (BAM-C & TBDC)	**Habitat constraints / microhabitats present on the subject land / vegetation zone**	**Abundance – No. individual plants present on subject land** (flora with unit of measure of count)	**Extent (ha) of suitable habitat present on site** (flora or fauna with unit of measure of area)	**TBDC species specific recommendations e.g. buffers, general comments** (where relevant)	**Habitat condition** (vegetation integrity score for each vegetation zone in the polygon – area species only)
							non-woody native vegetation within the radius.	
Silky Swainson-pea	*Swainsona sericea*	High (2)	No	Nil – aside from zone 4 where no native vegetation occurs.	Assumed present. Hectare count.	7.95ha	Not available.	Zone 1 – VI:55.9 Zone 2 – VI:38.1 Zone 3 – VI:54.0
Tylophora linearis	*Tylophora linearis*	High (2)	No	Nil – aside from zone 4 where no native vegetation occurs.	Assumed present. Hectare count.	7.95ha	Not available.	Zone 1 – VI:55.9 Zone 2 – VI:38.1 Zone 3 – VI:54.0

6. Identifying prescribed impacts

Few prescribed impacts may be present. These are presented in Table 16.

Table 16 Prescribed impacts identified

Feature	Present	Description of feature characteristics and location	Threatened entities that use, are likely to use, or are part of the habitat feature. Where relevant, threatened species or fauna that are part of a TEC or EC, that are at risk of vehicle strike
Karst, caves, crevices, cliffs, rocks or other geological features of significance	☐Yes / ☒No	N/A No such geological features present.	N/A
Human-made structures	☐Yes / ☒No	N/A No human-made structures present	N/A
Non-native vegetation	☐Yes / ☒No	No relevant not-native vegetation is present. Some exotic species including African Box Thorn were recorded on the subject land, however abundance of native shrub species negates the habitat value this species could have in the landscape.	N/A
Habitat connectivity	☐Yes / ☒No	N/A Habitat connectivity would not be impacted	N/A
Waterbodies, water quality and hydrological processes	☐Yes / ☒No	N/A No waterbodies or hydrological processes would be impacted.	N/A
Wind turbine strikes (wind farm development only)	☐Yes / ☒No	N/A No wind turbines relevant to this proposal.	N/A
Vehicle strikes	☒Yes / ☐No	Vehicle strikes may marginally increase associated with the fast operation of vehicles in the subject land, as well as the increase of vehicles along local roads to access the subject land during construction and operation.	One listed fauna species – Major Mitchell's Cockatoo (ecosystem credit species) was recorded adjacent to the subject land during the assessment. Other fauna and this species may have occasional interaction with vehicles.

Stage 2: Impact assessment (biodiversity values and prescribed impacts)

7. Avoid and minimise impacts

7.1 Avoid and minimise direct and indirect impacts

7.1.1 Project location

The project would be located in an area of historically disturbed land, adjacent to the existing West Wyalong airfield and the Newell Highway, meaning there is already heightened levels of disturbance including noise and vehicle movements surrounding the subject land.

Additional survey data was collected from land within Lot 10 DP1141509 and Lot 11 DP1141509, outside the subject land in March 2025 (see Figure A below) to demonstrate the proposed location effectively avoids impact to biodiversity values elsewhere within these lots and does so as far as is practicable.

Avoidance of impact to Threatened Ecological Communities (TEC):

No TECs occur in the subject land.

The Biodiversity Values Map (BV Map) includes a patch within Lot 10 DP1141509 which has the BV Map Criteria of *Threatened species or communities with potential for serious and irreversible impacts* (Figure 4). It is likely this is identifying predicted distribution of the Critically Endangered Ecological Community (BC Act) *Mallee and Mallee-Broombush dominated woodland and shrubland, lacking Triodia, in the NSW South Western Slopes Bioregion*. Field assessment confirmed that Broombush (*Melaleuca uncinata*) is present where the BV Map occurs within Lot 10 DP 1141509. The Broombush occurs within in an established patch of mallee woodland, dominated by Green Mallee (*Eucalyptus viridis*). Blue Mallee (*Eucalyptus polybractea*) or other mallee species associated with this PCT were not recorded within the plot. However, Blue Mallee was noted to occur in the road corridor of the Newell Highway adjacent to Lot 10 DP1141509.

This TEC is likely to occur within Lot 10 DP1141509, however the proposal is located on land, which is not consistent with this TEC, and the proposal does not impact the area identified on the BV Map.

Relatively small patches PCT 76 *Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions* occur within Lot 10 DP1141509 and Lot 11 DP1141509. PCT 76 is associated with the Endangered Ecological Community (BC Act) *Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions*, and *Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia* (EPBC Act). Areas of PCT 76 are likely to be consistent with the scientific determination for this TEC. This TEC does not occur in the subject land, and it therefore avoided by this proposal.

Avoidance of habitat values:

Habitat values are largely avoided by this proposal.

One tree hollow was recorded within the subject land for this proposal. It was a small hollow in a Which Cypress Pine, a species which occasionally forms hollows in large old specimens. Field assessment in March 2025 confirmed the presence of hollows, including medium sized hollows in the wooded vegetation surrounding the subject land. Hollows were recorded within mallee woodland vegetation as well as within Western Grey Box dominated

vegetation within Lot 10 DP1141509 and Lot 11 DP1141509. An example of these hollows is provided below:

Plate 7-1: Example of hollow bearing tree outside the subject land.

A babbler nest (possibly Grey-crowned Babbler listed as Vulnerable under the BC Act) was recorded in a White Cypress Pine south of the airfield. While babbler nests were also recorded within the subject land, presence of nests within the surrounding woodland confirms habitat is available and currently used outside the subject land. White Cypress Pines are good sources of nesting material and are often used for nesting. White Cypress Pine is abundant outside the subject land, in a range of age cohorts, including substantial regeneration.

Plate 7-2: Example of babbler nest outside the subject land.

Mistletoe (*Amyema* species growing in an *Acacia*) was recorded in one plot within the subject land. During field assessment in March 2025, three species of *Amyema* (*A. miquelii, A. quandang* and *A. preissii*) were recorded outside the subject land, including in the regenerating land. Mistletoes generally were noted in abundance outside the subject land, recorded in three of the seven plots, within the 20 by 20 metre or 20 by 50 metre quadrats. Mistletoe provides an important food source and shelter habitat for an extensive range of species. Substantial numbers of Mistletoe occur outside the subject land and would be avoided by this proposal.

Landscape values:

A mapped unnamed watercourse as well as other unmapped drainage lines lie to the west and south of the existing airport tarmac (Figure 1 and Figure 2). While ephemeral, and minor, positioning of the proposed motorsport park west or south or the existing tarmac would require construction of suitable culvert and crossing infrastructure, which is not required with the proposed subject land location.

Plate 7-3: Example of drainage line outside the subject land, south of the airfield.

Note change in land profile where the watercourse passes through the airfield fence in the photo below.

Plate 7-3: Example of drainage line outside the subject land, south of the airfield.

Vegetation integrity:

During the site visit in March 2025, seven BAM vegetation integrity plots were completed. These captured the following zones:

- Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion (PCT176) – three plots capturing slightly different condition states (plot 1-2025, plot 3-2025 and plot 7-2025)
- Blue Mallee - Bull Mallee - Green Mallee very tall mallee shrubland of the West Wyalong region, NSW South Western Slopes Bioregion (PCT 177) – one plot collected where *Melaleuca uncinata* was recorded (plot 5-2025)
- White Cypress Pine woodland on sandy loams in central NSW wheatbelt (PCT70) – two plots completed in a cleared and regenerating condition state similar to that within the subject land (plot 4-2025 and plot 6-2025)
- Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions (PCT 76) – one plot completed in intact ‘good’ condition woodland (plot 2-2025).
- Mugga Ironbark woodland (PCT 217) – This PCT occupied very small patches, and no plots were completed in this zone.

Vegetation integrity score analysis was conducted using the plots in vegetation considered to be in ‘good’ condition (plot 1-2025 and plot 2-2025). These two plots revealed a vegetation integrity score of 84.5 (PCT 176) and 64.7 (PCT 76) respectively. This is higher than all vegetation scores within the subject land. These ‘good’ condition areas also noted to include more substantial tree hollows, fallen logs and mistletoe. These ‘good’ condition areas are already avoided by the proposal, and this analysis confirms the vegetation is in better condition than that in the subject land.

Vegetation integrity score analysis was conducted using the plots in more recently cleared and regenerating areas of Lot 10 DP1141509 and Lot 11 DP1141509, within PCT70 (two plots) and PCT176 (two plots).

Regenerating areas of PCT 70 were measured using two plots in March 2025. The resulting vegetation integrity score from these two plots is 38.4 when combined, and 31.5 (plot 4-2025) and 44.9 (plot 6-2025) and when calculated separately. These scores vary only slightly and lie between the vegetation integrity scores two vegetation zones recorded for this PCT in the subject land (38.1 and 55.9).

Regenerating areas of PCT 176 were measured using two plots in March 2025 (plot 3-2025 and plot 7-2025). The resulting vegetation integrity score from these two plots is 40.8 when combined, and 40.2 (plot 3-2025) and 35 (plot 7-2025) and when calculated separately. This is lower than the condition recorded in the subject land which showed a vegetation integrity score of 54.

In conclusion, the condition states of vegetation across Lot 10 DP1141509 and Lot 11 DP1141509 varies between the following conditions:

- Land mapped on the Biodiversity Values Map – all avoided by this proposal
- Good condition – a vegetation score greater than 60 – all avoided by this proposal
- Moderate condition – a vegetation score that ranges from 35 to 60. This accounts for all the vegetation in the subject land, as well as all other land within Lot 10 DP1141509 and Lot 11 DP1141509 excluding the existing airport infrastructure.

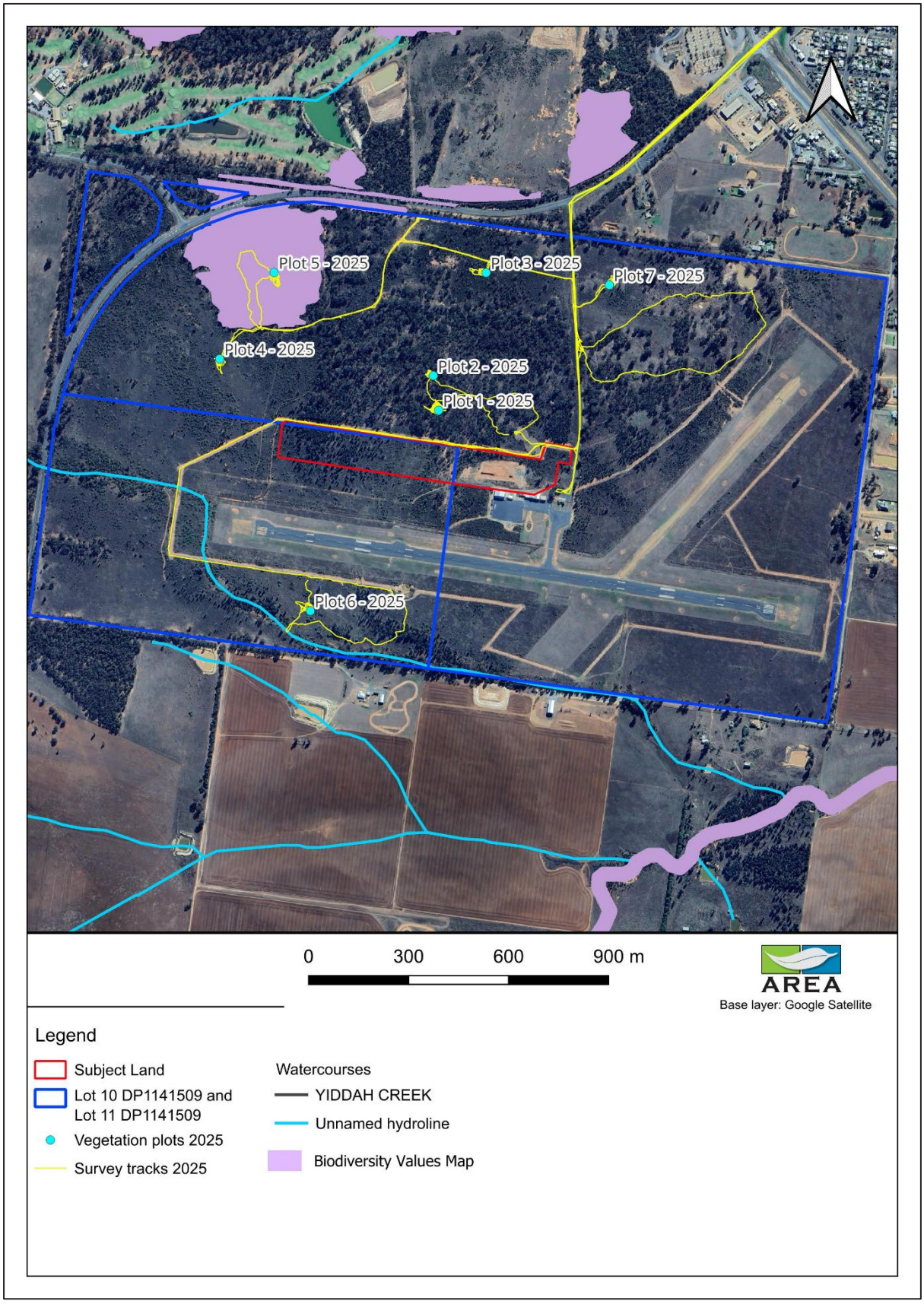
Locating the proposed motorsport part within other areas of Lot 10 DP1141509 and Lot 11 DP1141509 would also result in impact to moderate condition vegetation and would risk impact of some good condition vegetation, with a greater habitat value.

7.1.2 Project design

Project design has avoided impact to native vegetation by positioning the proposal adjacent to the existing airport infrastructure including the existing public road. This removes the requirement for construction of additional access roads which would be required if the project was designed for other areas within Lot 10 DP1141509 and Lot 11 DP1141509.

The project design does not include areas of temporary impact and does not include disturbance of more land than would be required for the construction and operation of this proposal.

Figure A: Additional survey effort to demonstrated biodiversity values avoided – March 2025



7.2 Avoid and minimise prescribed impacts

7.2.1 Project location

This proposal would occur in an area which largely avoids prescribed impacts. Only increase of vehicle movement would be considered a real prescribed impact.

The existing airport tarmac lies immediately to the south of the subject land, meaning removal of native vegetation would not change the local connectivity values.

7.2.2 Project design

The subject land does not include any mapped or otherwise identified waterways. The project design ensures that surface water can continue to move across the landscape relatively unimpeded.

7.3 Other measures considered

No other measures were known to have been considered at the time of preparing this report.

8. Impact assessment

8.1 Direct impacts

8.1.1 Residual direct impacts

Table 17 documents impacts likely to occur on the subject land after steps taken to avoid and minimise impacts (refer to Figure 10).

Table 17 Summary of residual direct impacts

Direct impact (Describe the impact on PCT/TEC/EC or threatened species and their habitat)	**BC Act status**	**EPBC Act status**	**SAII entity**	**Project phase/timing of impact** (e.g. construction, operation, rehabilitation)	**Extent** (ha, number of individuals)
Vegetation clearance will impact PCTs in the subject land. No TECs or ECs would be impacted by this proposal.	Nil	Nil	No	Construction and ongoing during operation.	7.95ha

8.1.2 Change in vegetation integrity score

Table 18 documents the change in vegetation integrity for residual direct impacts on native vegetation, TECs, threatened species and their habitat that were identified on the subject land.

Table 18 Impacts to vegetation integrity

Vegetation zone	**PCT ID**	**Management zone**	**Area** (ha)	**Before development**				**After development**				**Change**
				Composition	**Structure**	**Function**	**VI score**	**Composition**	**Structure**	**Function**	**VI score**	**Change in VI score**
1	70	N/A	2.98	70.6	92.5	26.7	55.9	0	0	0	0	-55.9
2	70	N/A	1.85	56.1	41.1	23.9	38.1	0	0	0	0	-38.1
3	176	N/A	3.12	78.3	64	31.4	54.0	0	0	0	0	-54.0

8.2 Indirect impacts

Table 19 documents residual indirect impacts (likely to occur on native vegetation, threatened entities and their habitat beyond the development footprint).

Table 19 Summary of residual indirect impacts

Indirect impact (Describe impact, e.g. transport of weeds and pathogens form the site to adjacent vegetation)	**Impacted entities** (PCT/threatened entity and their habitats and where relevant, EPBC Act listing)	**Extent** (ha or zone reference)	**Frequency**	**Duration** (long-term/ short-term/ medium-term)	**Project phase/ timing of impact** (e.g. construction, operation, rehabilitation)	**Likelihood and consequences**
Noise during operation of the proposal.	Fauna species using the adjacent vegetation	Vegetation north of the subject land.	As frequent as the motorsport events occur.	Ongoing	Operation	High likelihood of additional noise being generated by the proposal. Given the proximity of the subject land to the West Wyalong Airport, it is unlikely there are sensitive species occupying the vegetation. Therefore the consequences of the additional noise are likely to be minor.

8.3 Prescribed impacts

8.3.1 Karst, caves, crevices, cliffs, rocks or other geological features of significance

No karst, caves, crevices, cliffs, rocks or other geological features of significance are present in the subject land.

8.3.2 Human-made structures

No human made structures are within the subject land.

8.3.3 Non-native vegetation

No non-native vegetation of relevant value was recorded in the subject land.

8.3.4 Habitat connectivity

Habitat connectivity extends from the subject land to the north and west. Connectivity exists from the subject land to moderately large tracts of remnant vegetation up to and including The Charcoal Tank Nature Reserve in the south.

The subject land is bounded by the West Wyalong airport tarmac to the south. Hence, removal of the native vegetation in the subject land would decrease the area of occupancy of native vegetation and would not change the connectivity value of the local landscape.

8.3.5 Waterbodies, water quality and hydrological processes

No waterbodies, water quality or hydrological processes would be impacted by this proposal, assuming that standard hard-stand water management practices are in place as required.

The proposal would not include deep excavation of the subject land.

8.3.6 Wind turbine strikes

This is not associated with a wind turbine proposal.

8.3.7 Vehicle strikes

This proposal does include operation of vehicles in an area currently not occupied by terrestrial vehicles. Operation of this proposed motorsport park should include measures to avoid vehicle strike.

Table 20 documents residual predicted impacts of vehicle strike on threatened fauna.

Table 20 Residual prescribed impacts – vehicle strikes

Threatened fauna or protected fauna that are part of a TEC that are at risk of vehicle strike (identified in Section 6)	**SAII entity**	**Likelihood**	**Estimated vehicle strike rates**	**Consequences**
Fauna at risk of vehicle strike	No	Low	Low	Low - moderate

8.4 Mitigating residual impacts – management measures and implementation

Table 21 provides detail of proposed mitigation and management measures.

Table 21 Summary of proposed mitigation and management measures for residual impacts (direct, indirect and prescribed)

Mitigation measure	**Method/technique**	**Timing**	**Frequency**	**Responsibility**	**Likely efficacy** (including risk of failure)	**MNES** (when relevant)
Reduce likelihood of vehicle/ wildlife interaction.	Ensure appropriate speeds signposted for vehicles accessing the site. Ensure the track is checked and clear of wildlife prior to commencing the motorsport event.	Ongoing	Ongoing	Motorsport park operator.	Slow speeds to access the site and ensuring a clear track prior to an event will l mitigate the low risk of interaction with wildlife.	N/A

Mitigation measure	Method/technique	Timing	Frequency	Responsibility	Likely efficacy (including risk of failure)	MNES (when relevant)
Injury to wildlife during clearing work	Ensure personnel clearing vegetation are briefed regarding wildlife interaction. Response measures should be established for use in the event wildlife is injured or requires removal during the clearing.	During construction	During construction	Proponent and clearing contractor.	The likelihood of wildlife interaction during clearing is moderate, noting there are very few hollow bearing trees (small hollows only) present in the site. An established response process would ensure wildlife can evade injury or be treated swiftly by a veterinarian if required.	N/A

For each measure listed in Table 27, Table 22 provides further details on implementation.

Table 22 <Name of measure> implementation

Measure/action	Monitoring and evaluation strategy (Data, frequency, timing and reporting)	Performance criteria (linked to monitoring and evaluation strategy)	Adaptive management threshold (trigger for adaptive management plan/actions)	Adaptive management response (when triggered)
Signposted speed signs on the approach to the venue	Established prior to construction and operation.	All reasonable steps taken to avoid wildlife injured or killed on the approach to the venue.	An increase of numbers of wildlife injured or killed on the approach to the venue.	Review road speed.
Clear track prior to an event.	Process established prior to operation. Process implemented prior to an event.	No wildlife injured or killed by vehicles on the track during an event.	Frequent interactions/ or need to remove animals from the track.	Review process for pre-event track check.
Prepare a process for response to injured or trapped wildlife.	Prepared prior to construction and implemented as needed during construction.	Wildlife interaction process implemented.	Interaction with wildlife that contradicts the process.	Review the strategy and ensure staff awareness of the process.

8.5 Adaptive management strategy for uncertain impacts (where relevant)

No adaptive management strategies are identified for this proposal.

9. Serious and irreversible impacts

9.1 Assessment for serious and irreversible impacts on biodiversity values

No candidate serious and irreversible impact species were identified by the BAMC or any other means during this assessment.

10. Impact summary

10.1 Determine an offset requirement for impacts

10.1.1 Impacts on native vegetation and TECs or ECs (ecosystem credits)

Table 23 identifies impacts on native vegetation and TECs or ECs that do not require an offset (as per BAM Subsection 9.2.1(3.)). Table 24 identifies impacts that do require an offset (as per BAM Subsection 9.2.1(1.)). Refer to Figure 11 Thresholds for assessment and offsetting impacts.

Table 23 Impacts that do not require offset – ecosystem credits

Vegetation zone	PCT name	TEC	Impact area (ha)	TEC association	Entity at risk of an SAII?	Current VI score
4	Not native vegetation	N/A	1.65	N/A	No	N/A

Table 24 Impacts that require an offset – ecosystem credits

Vegetation zone	PCT name	TEC	Impact area (ha)	Current VI score	Future VI score	Change in VI score	Biodiversity risk weighting	Number of ecosystem credits required
1	White Cypress Pine woodland on sandy loams in central NSW wheatbelt	N/A	2.98	55.9	0	-55.9	1.75	71
2	White Cypress Pine woodland on sandy loams in central NSW wheatbelt	N/A	1.85	38.1	0	-38.1	1.75	31
3	White Cypress Pine woodland on sandy loams in central NSW wheatbelt	N/A	3.12	54.0	0	-54.0	1.5	63
							Total credits	165

10.1.2 Impacts on threatened species and their habitat (species credits)

Table 25 to identifies impacts on threatened species (species credits) that require an offset.

Table 25 Impacts that require an offset – species credits

Common name	Scientific name	BC Act status	EPBC Act status	Loss of habitat (ha) or individuals	Biodiversity risk weighting	Number of species credits required
A spear-grass	*Austrostipa metatoris*	Vulnerable	Vulnerable	ha	2	201
A spear-grass	*Austrostipa wakoolica*	Endangered	Endangered	ha	2	201
Eastern Pygmy-possum	*Cercartetus nanus*	Vulnerable	Not listed	ha	2	84
Pine Donkey Orchid	*Diuris tricolor*	Vulnerable	Not listed	ha	1.5	150
Square-tailed Kite	*Lophoictinia isura*	Vulnerable	Not listed	ha	1.5	81
Silky Swainson-pea	*Swainsona sericea*	Vulnerable	Not listed	ha	2	201
Tylophora linearis	*Tylophora linearis*	Vulnerable	Endangered	ha	2	201
					Total credits	1188

10.1.3 Indirect and prescribed impacts

No additional offsets are proposed to account for residual indirect and prescribed impacts.

Other scenarios

No alternate offsetting scenarios are currently proposed for this proposal.

10.2 Impacts that do not need further assessment

Table 26 identifies impacts that do not need further assessment for ecosystem credits.

Refer to Figure 11 Thresholds for assessment and offsetting impacts.

Table 26 Impacts that do not need further assessment for ecosystem credits

Impact	Location within subject land	Justification why no further assessment is required
Construction and operation of the proposal where there is no native vegetation present.	Impact to land adjacent to the recently constructed exclusion fence which lies to the north or the subject land, with the disturbance form the fence construction occurring within the subject land in some areas. This disturbance appeared to have included scraping of topsoil. Also, an area of land in the subject land appeared to have been recently scraped, with topsoil stockpiled in rows.	No native vegetation was present in these areas at the time of the assessment.

11. Biodiversity credit report

11.1 Ecosystem credits

Table 27 Ecosystem credit class and matching credit profile

Ecosystem credit	Attributes shared with matching credits						
	PCT name	**PCT vegetation class**	**PCT vegetation formation**	**Associated TEC or EC**	**Offset trading group** (BAM Section 10.2, Tables 4 & 5)	**Hollow bearing trees present?**	**IBRA subregion** (in which proposal is located)
73	White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Floodplain Transition Woodlands	Floodplain Transition Woodlands	Nil	White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Yes	Lower Slopes
31	White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Floodplain Transition Woodlands	Floodplain Transition Woodlands	Nil	White Cypress Pine woodland on sandy loams in central NSW wheatbelt	No	Lower Slopes
63	Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion	Floodplain Transition Woodlands	Floodplain Transition Woodlands	Nil	Floodplain Transition Woodlands	No	Lower Slopes

11.2 Species credits

Table 28 Species credit class and matching credit profile

Species credit	Attributes shared with matching credits				
	Name of threatened species	Kingdom	BC Act status	EPBC Act status	IBRA region
201	A spear-grass	Plant	Vulnerable	Vulnerable	Lower Slopes (off set to any in NSW
201	A spear-grass	Plant	Endangered	Endangered	Lower Slopes (off set to any in NSW
84	Eastern Pygmy-possum	Animal	Vulnerable	Not listed	Lower Slopes (off set to any in NSW
150	Pine Donkey Orchid	Plant	Vulnerable	Not listed	Lower Slopes (off set to any in NSW
81	Square-tailed Kite	Animal	Vulnerable	Not listed	Lower Slopes (off set to any in NSW
201	Silky Swainson-pea	Plant	Vulnerable	Not listed	Lower Slopes (off set to any in NSW
201	Tylophora linearis	Plant	Vulnerable	Endangered	Lower Slopes (off set to any in NSW

12. References

See section 1.5.

13. Figures

Figure 1 Site Map

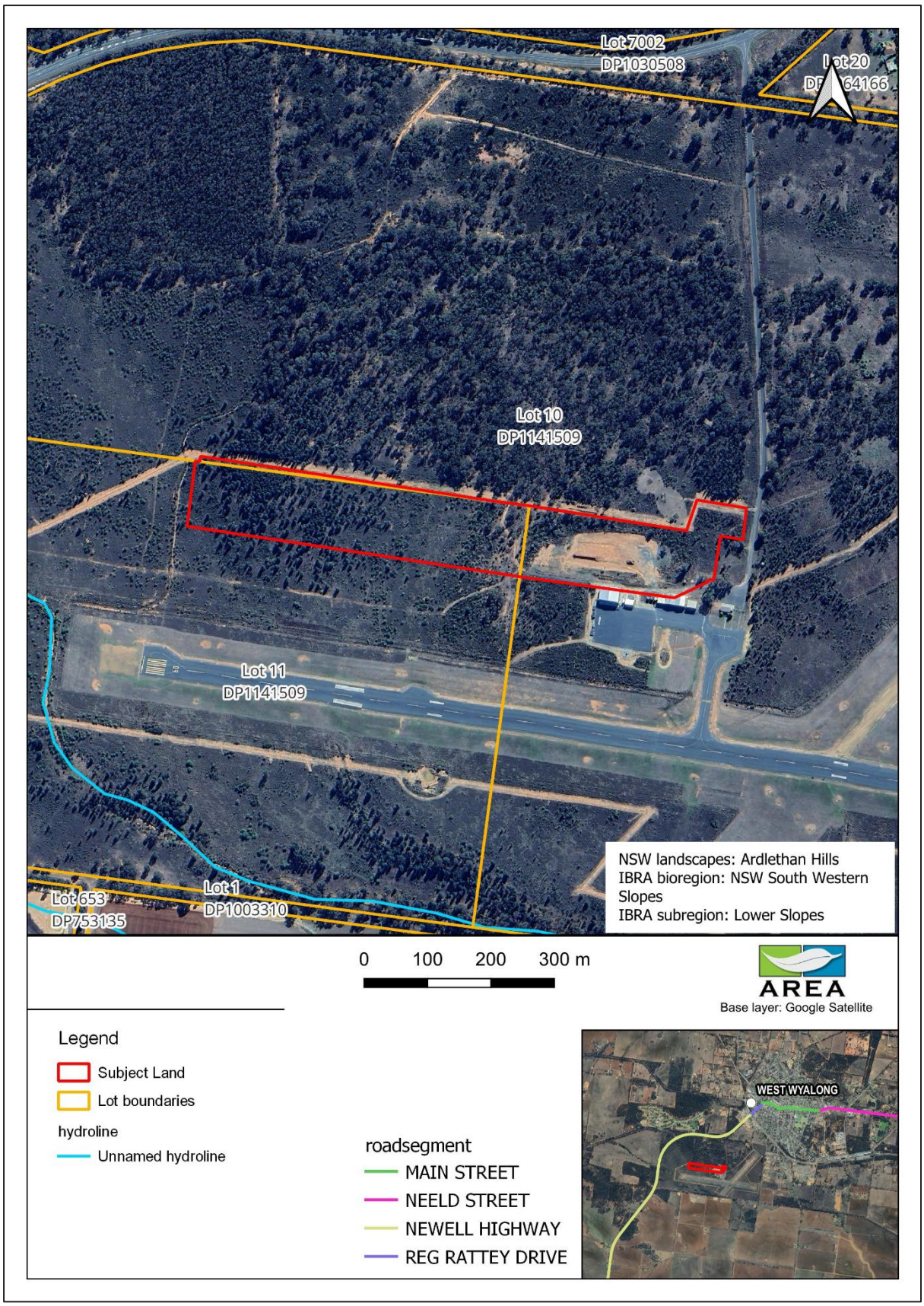


Figure 2 Location Map

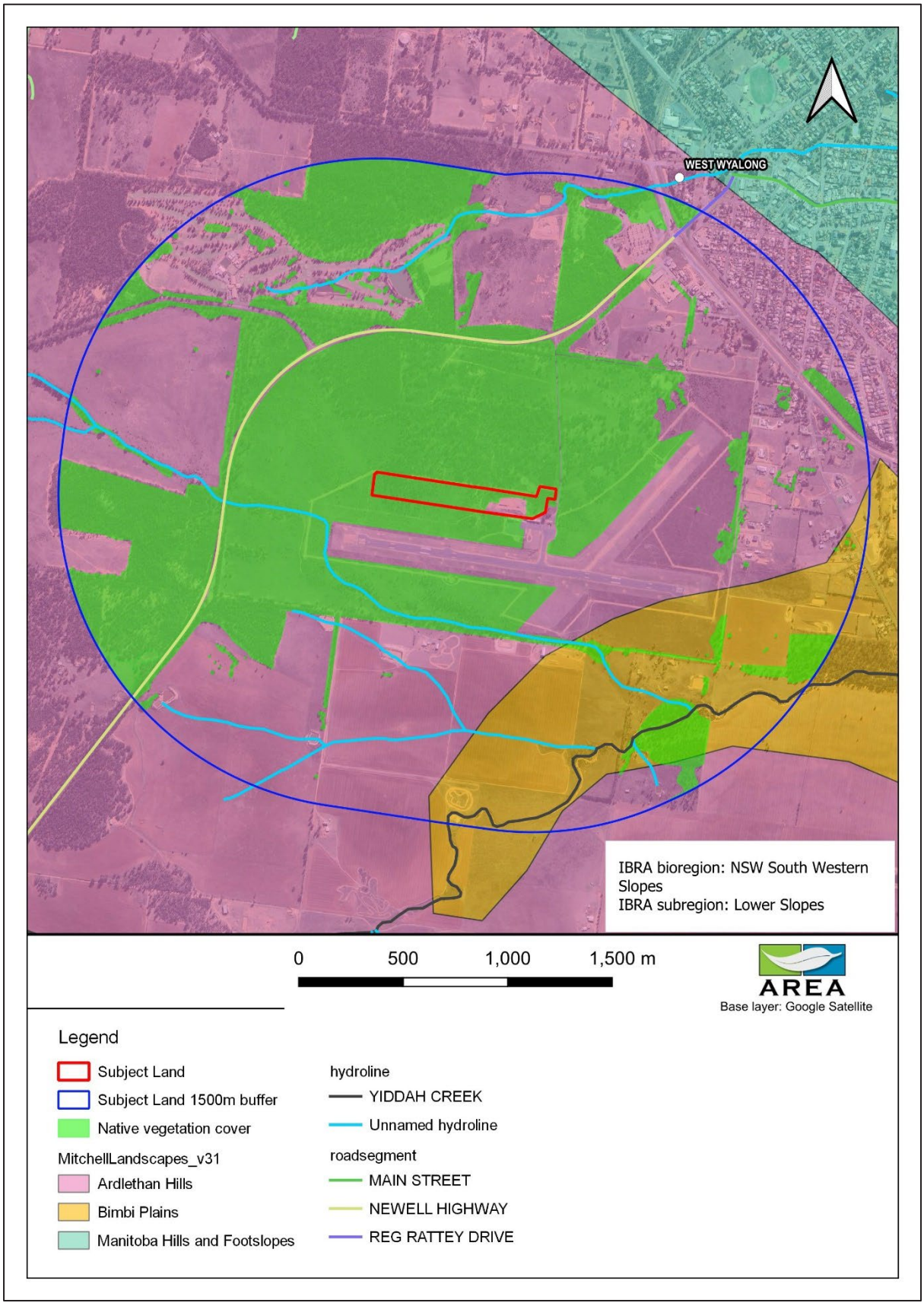


Figure 3 Development layout

Proposal design – provided by the Bland Shire Council.

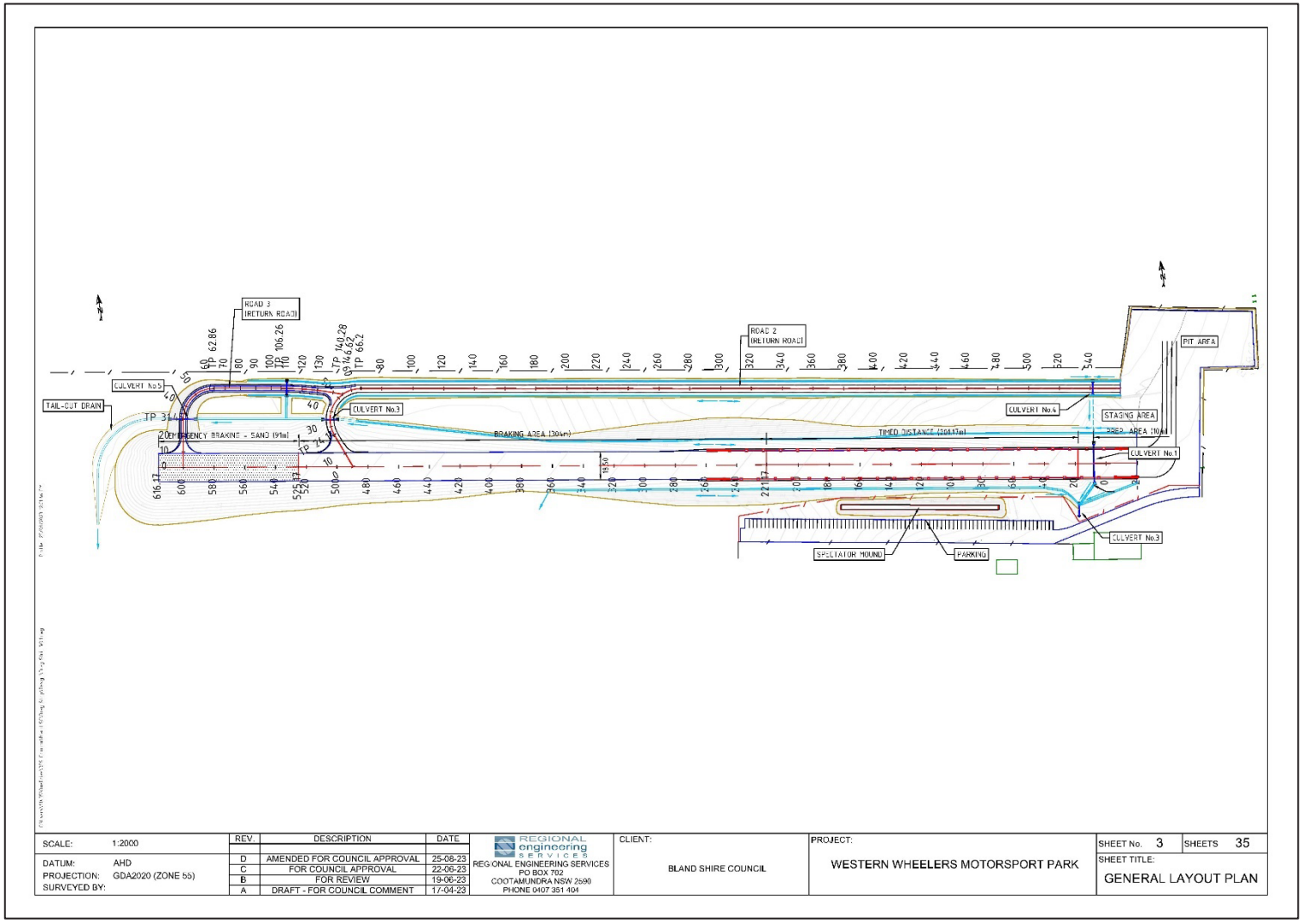


Figure 4 **Biodiversity Values Map**

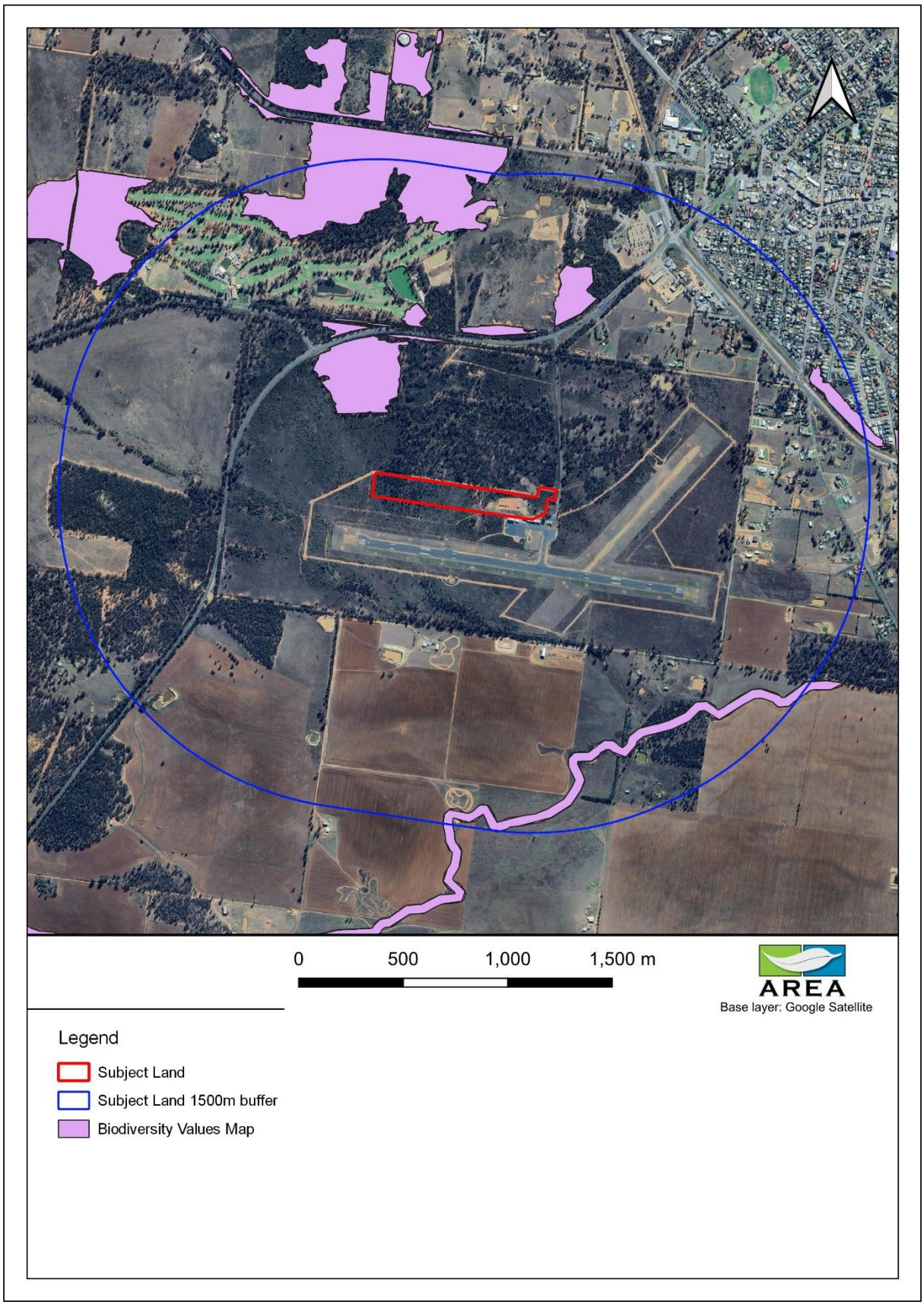


Figure 5 **Field survey locations**

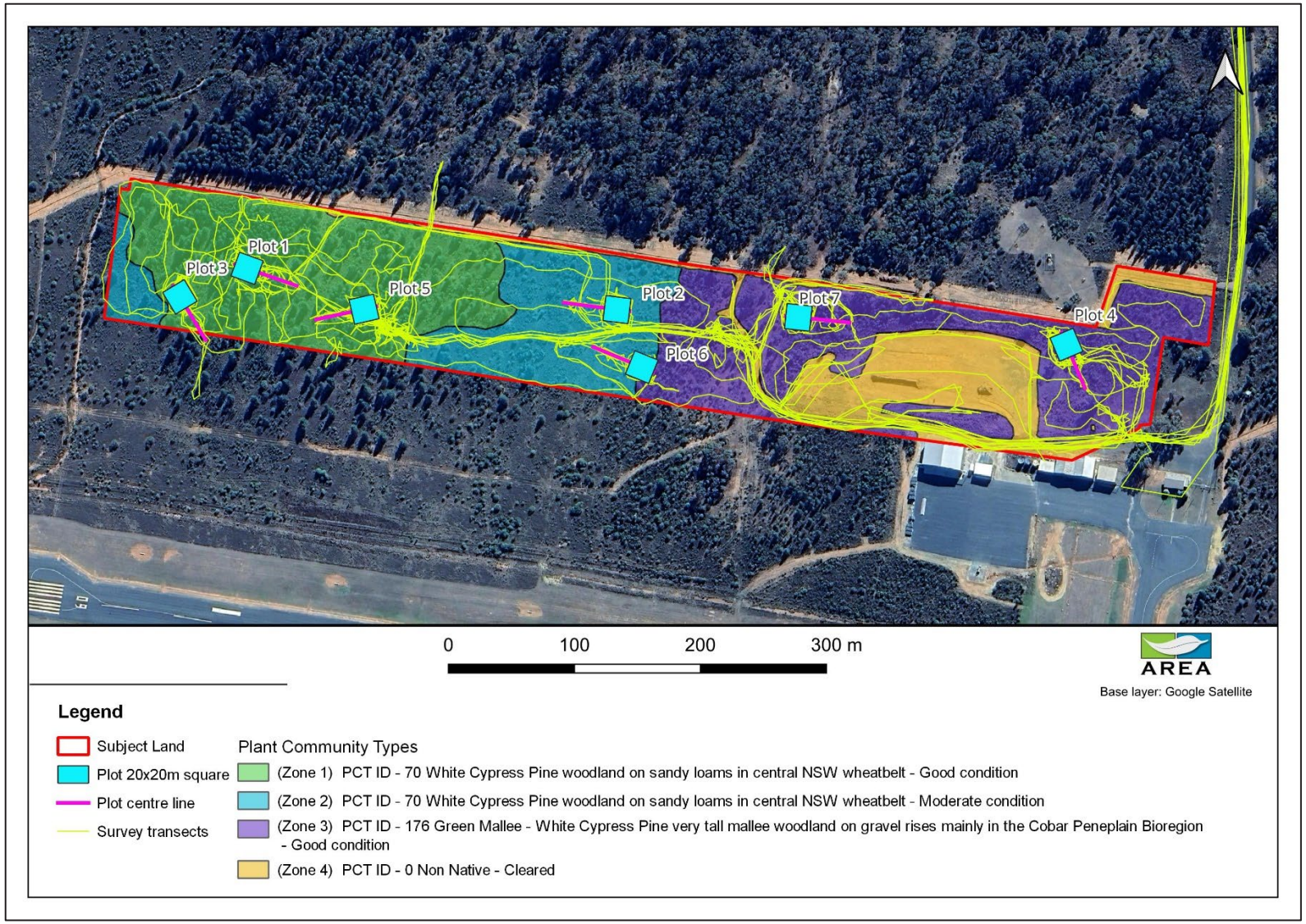


Figure 6 **Native vegetation extent**

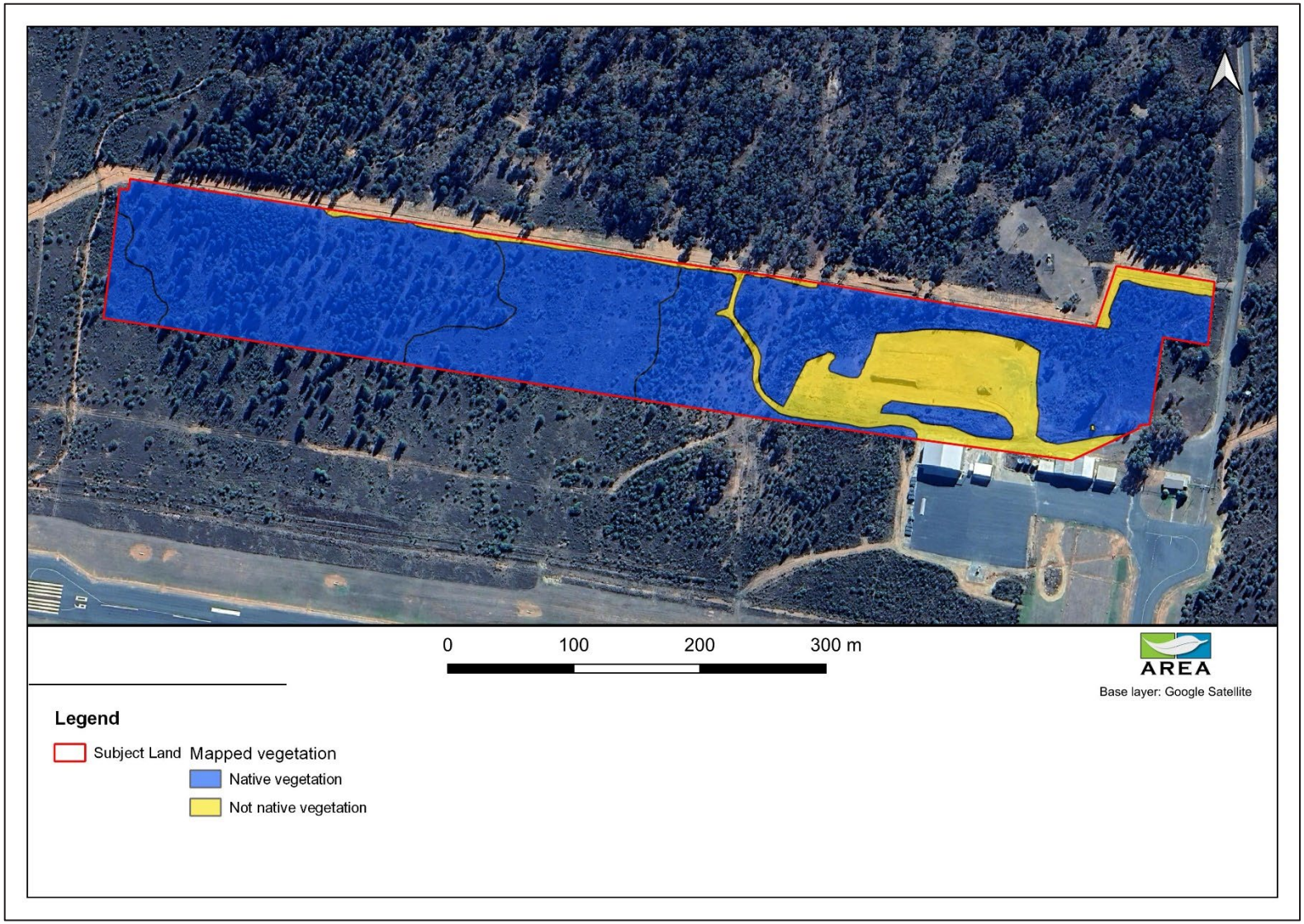


Figure 7 **Plant community types**

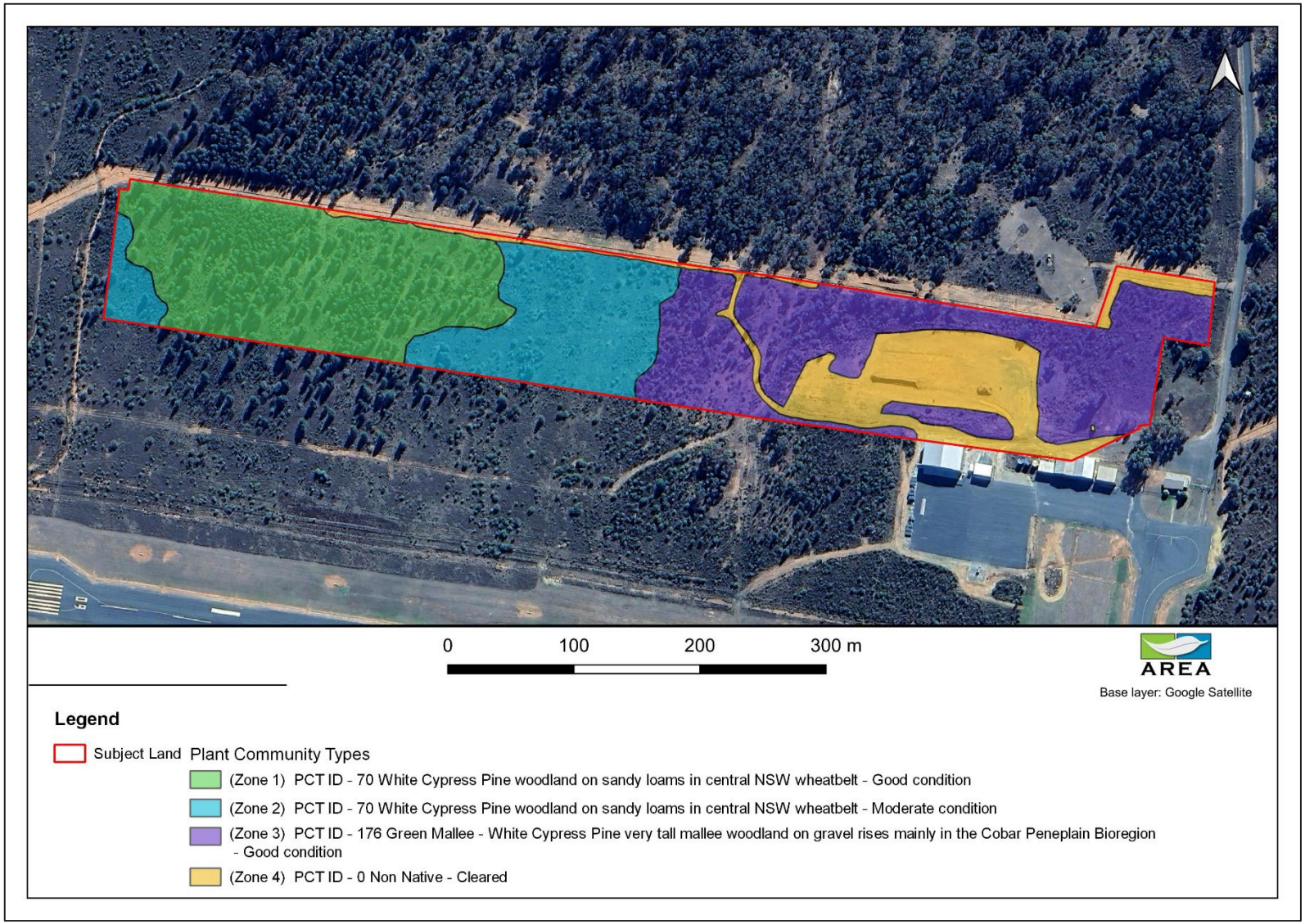


Figure 8 **Vegetation zones (2 figures: Vegetation zones and demonstration of patch size)**

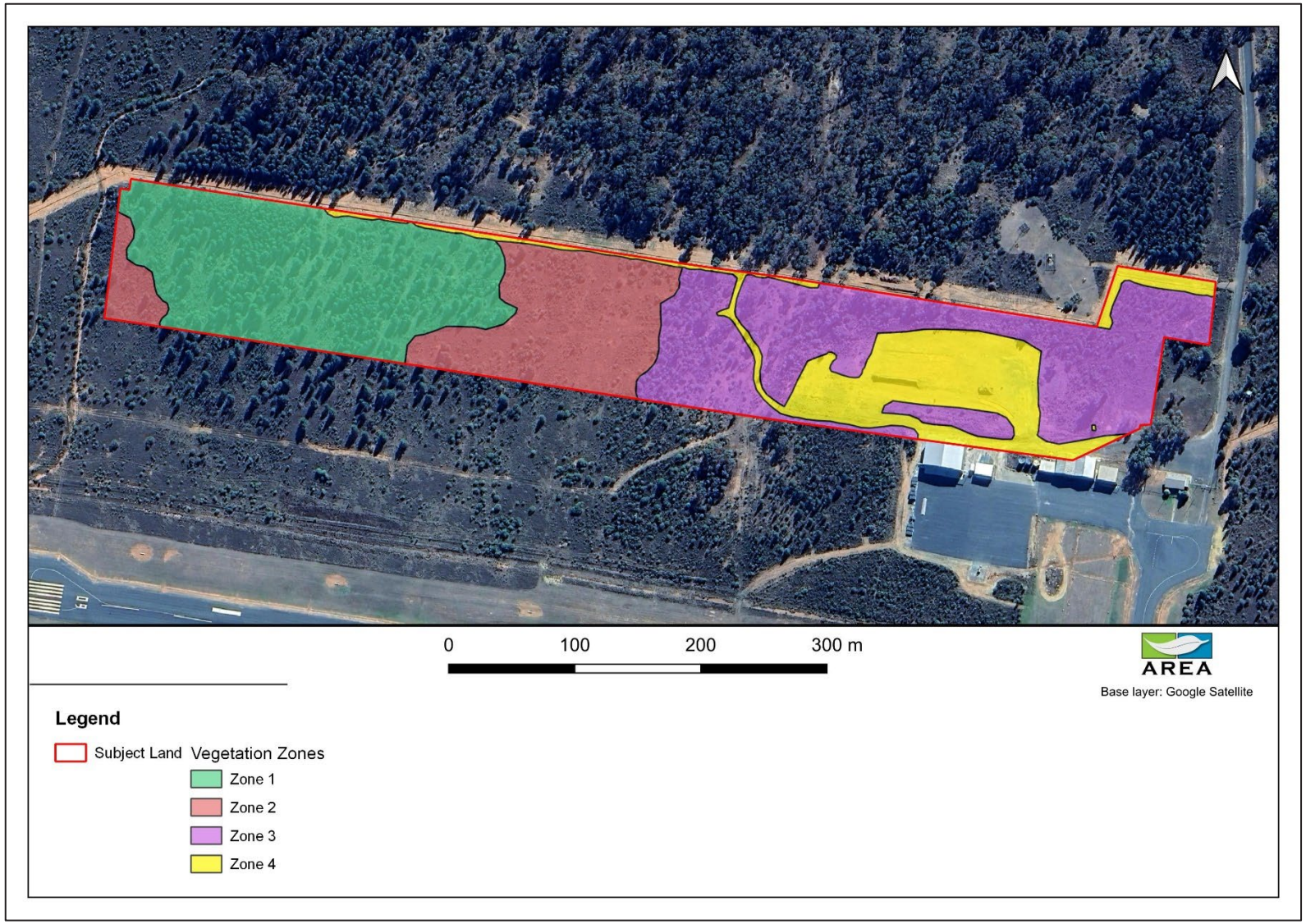
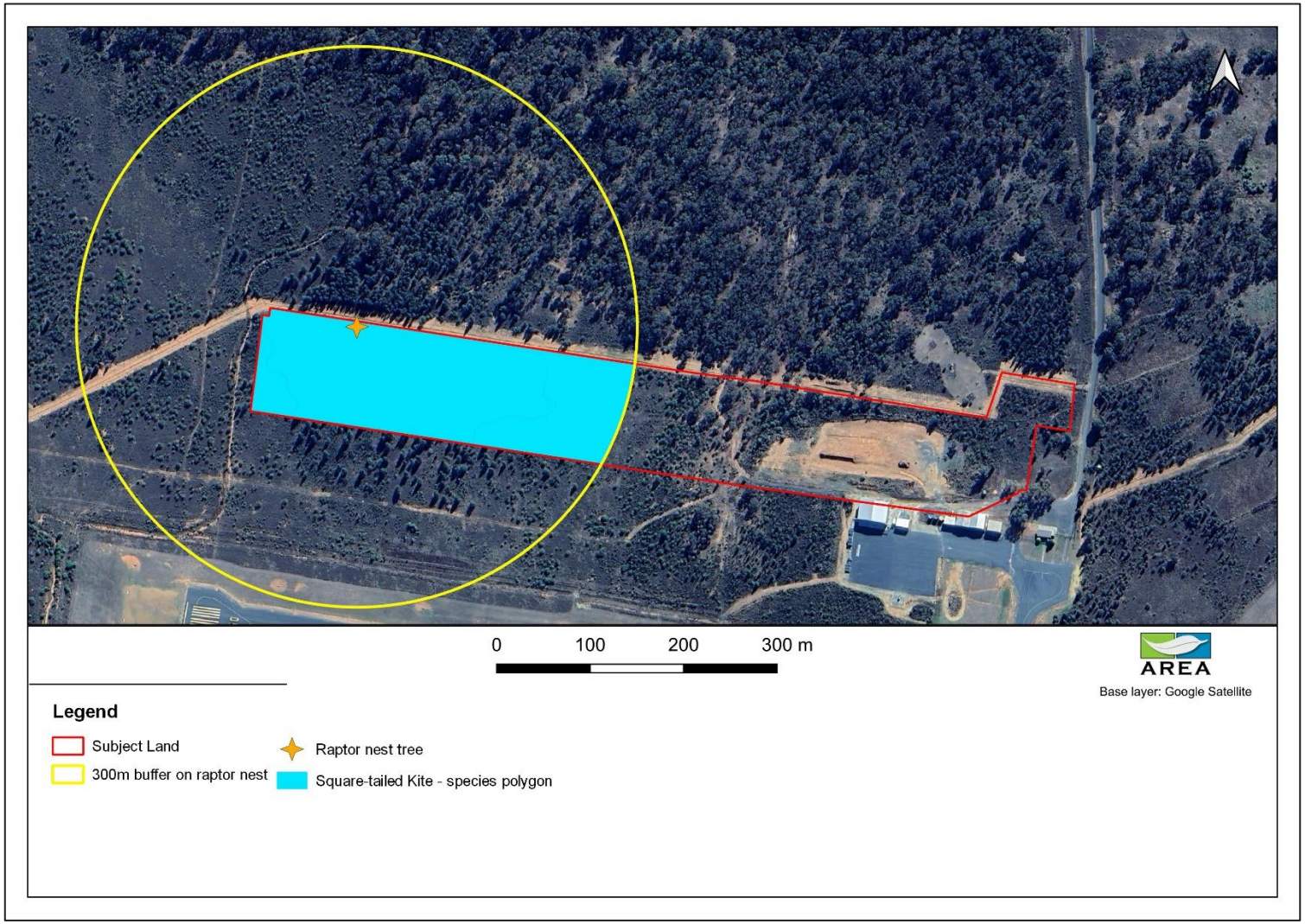


Figure 9 Candidate species credit species records and species polygons

Square-tailed Kite – Vulnerable BC Act



Eastern Pygmy-possum – Vulnerable BC Act

A spear-grass (*A. metatoris*) – Vulnerable BC Act; Vulnerable EPBC Act

A spear-grass (*A. wakoolica*) - Endangered BC Act; Endangered EPBC Act

Tylophora linearis – Vulnerable BC Act; Endangered EPBC Act

Pine Donkey Orchid – Vulnerable BC Act

Silky Swainson-pea – Vulnerable BC Act

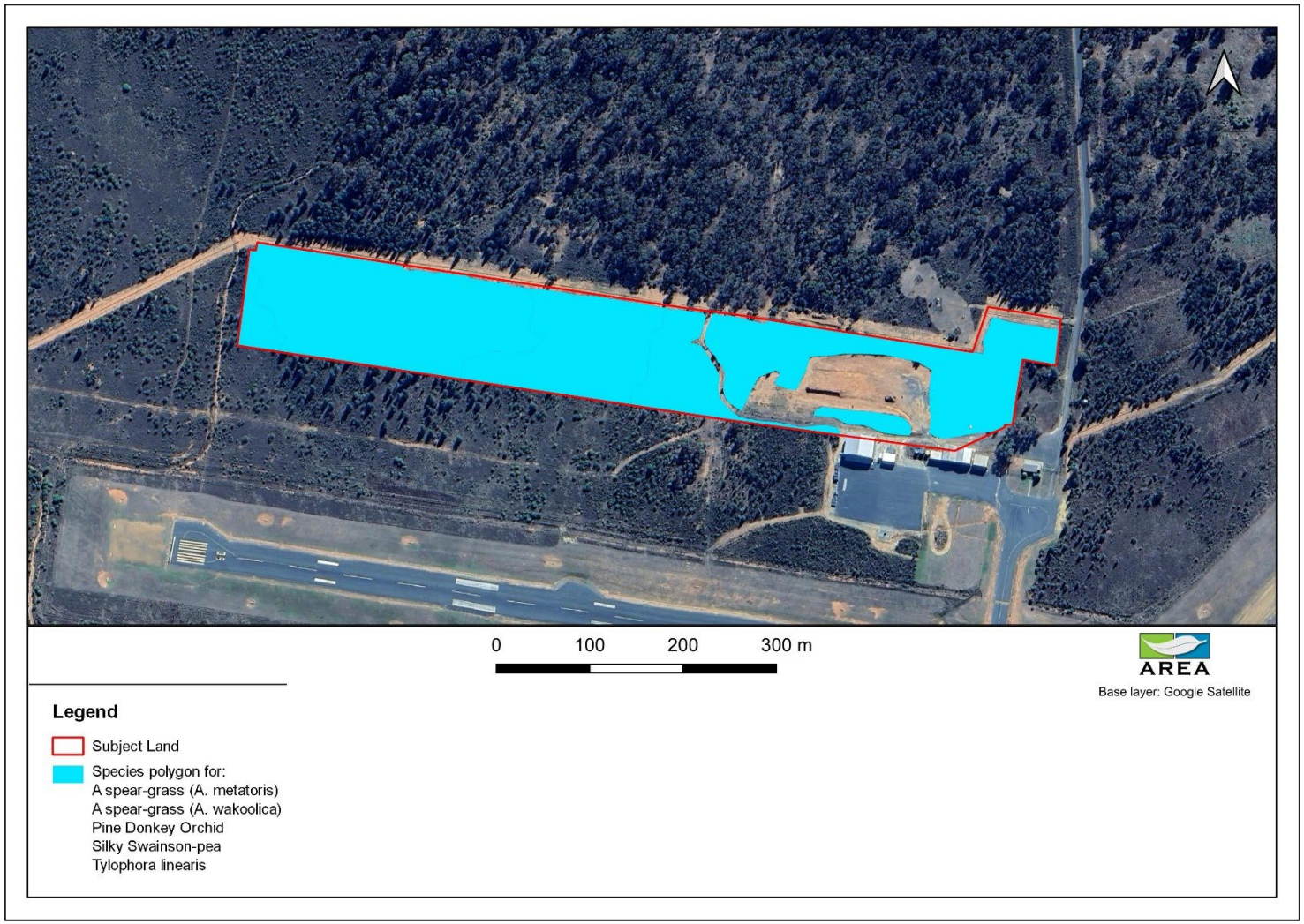


Figure 10 **Final impacts likely to occur on the subject land**

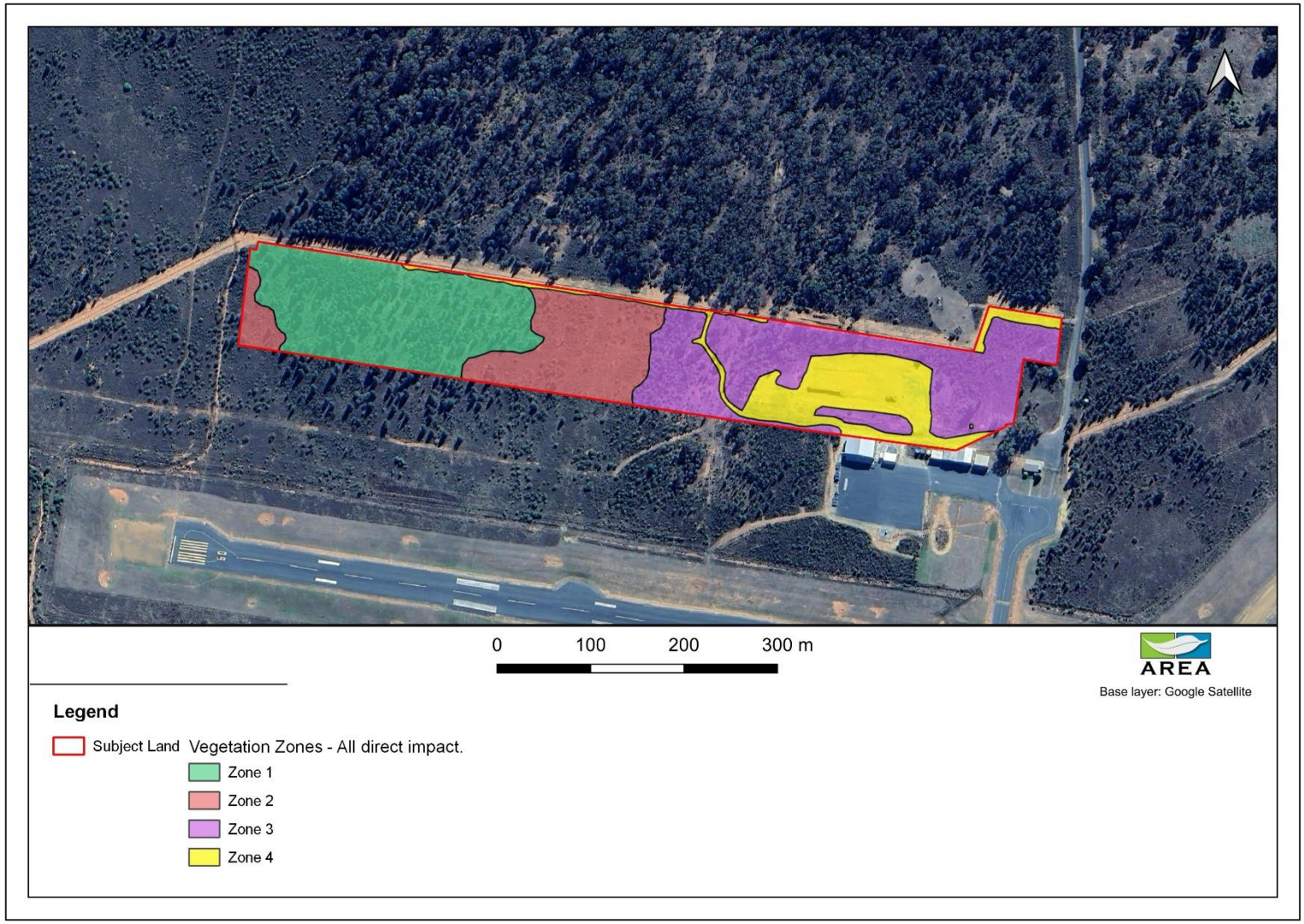
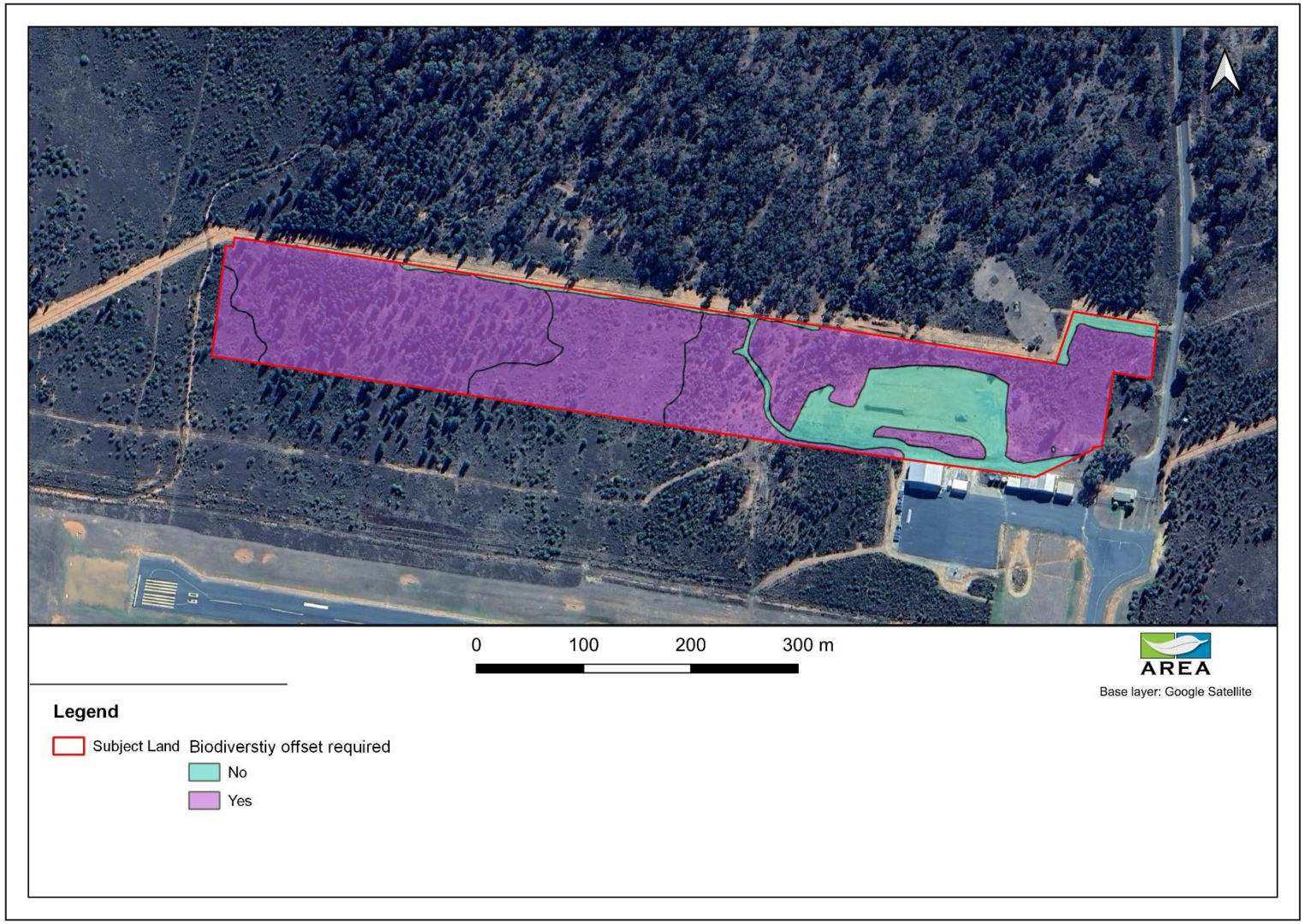


Figure 11 **Thresholds for assessing and offsetting impacts**



Appendix A: BDAR requirements compliance

Table 29 to specify where each component of the BDAR minimum information requirements has been addressed in accordance with BAM Appendix K.

Table 29 Assessment of compliance with BDAR minimum information requirements

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
Introduction	Chapters 2 and 3	**Information**	
		Introduction to the biodiversity assessment including:	–
		☐ brief description of the proposal	<1.1.1>
		☐ identification of subject land boundary, including: ☐ operational footprint ☐ construction footprint indicating clearing associated with temporary/ancillary construction facilities and infrastructure	<1.1.3>
		☐ general description of the subject land	<1.1.3>
		☐ sources of information used in the assessment, including reports and spatial data	<1.5>
		☐ identification and justification for entering the BOS	<1.2>
		Maps and tables	
		☐ Map of the subject land boundary showing the final proposal footprint, including the construction footprint for any clearing associated with temporary/ancillary construction facilities and infrastructure	<Figure 1>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
Landscape	Sections 3.1 and 3.2, Appendix E	**Information**	
		Identification of site context components and landscape features, including:	–
		☐ general description of subject land topographic and hydrological setting, geology and soils	<1.1.3>
		☐ per cent native vegetation cover in the assessment area (as described in BAM Section 3.2)	
		☐ IBRA bioregions and subregions (as described in BAM Subsection 3.1.3(2.))	<3.2.1>
		☐ rivers and streams classified according to stream order (as described in BAM Subsection 3.1.3(3.) and Appendix E)	<3.2.2>
		☐ wetlands within, adjacent to and downstream of the site (as described in BAM Subsection 3.1.3(3.))	<3.2.2>
		☐ connectivity of different areas of habitat (as described in BAM Subsection 3.1.3(5–6.))	<3.2.3>
		☐ karst, caves, crevices, cliffs, rocks and other geological features of significance and for vegetation clearing proposals, soil hazard features (as described in BAM Subsections 3.1.3(7.) and 3.1.3(12.))	<3.2.4>
		☐ areas of outstanding biodiversity value occurring on the subject land and assessment area (as described in BAM Subsection 3.1.3(8–9.))	<3.2.5>
		☐ any additional landscape features identified in any SEARs for the proposal	<3.2.7>
		☐ NSW (Mitchell) landscape on which the subject land occurs	<3.2.6>
		☐ details of field reconnaissance undertaken to confirm the extent and condition of landscape features and native vegetation cover (as described in Operational Manual Stage 1 Section 2.4)	<2.1>
		Maps and tables	
		☐ Site Map ☐ Property boundary ☐ Boundary of subject land ☐ Cadastre of subject land (including labelling of Lot and DP or section plan if relevant) ☐ Landscape features identified in BAM Subsection 3.1.3	<Figure 1>
		☐ Location Map ☐ Digital aerial photography at 1:1,000 scale or finer ☐ Boundary of subject land	<Figure 2>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		☐ Assessment area (i.e. the subject land and either 1500 m buffer area or 500 m buffer for linear development) ☐ Landscape features identified in BAM Subsection 3.1.3 ☐ Additional detail (e.g. local government area boundaries) relevant at this scale	
		Landscape features identified in BAM Subsection 3.1.3 and to be shown on the Site Map and/or Location Map include:	–
		☐ IBRA bioregions and subregions ☐ rivers, streams and estuaries ☐ wetlands and important wetlands ☐ connectivity of different areas of habitat ☐ karst, caves, crevices, cliffs, rocks and other geological features of significance and if required, soil hazard features ☐ areas of outstanding biodiversity value occurring on the subject land and assessment area ☐ any additional landscape features identified in any SEARs for the proposal ☐ NSW (Mitchell) landscape on which the subject land occurs	<Figure 1 & Figure 2>
		Data	
		☐ All report maps as separate jpeg files	–
		Individual digital shape files of:	–
		☐ subject land boundary	–
		☐ assessment area (i.e. subject land and 1500 m buffer area) boundary	–
		☐ cadastral boundary of subject land	–
		☐ areas of native vegetation cover	–
		☐ landscape features	–

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
Native vegetation	Chapter 4, Appendix A and Appendix H	**Information**	
		☐ Identify native vegetation extent within the subject land, including cleared areas and evidence to support differences between mapped vegetation extent and aerial imagery (as described in BAM Section 4.1(1–3.) and Subsection 4.1.1)	<4.1 & Figure 6>
		☐ Provide justification for all parts of the subject land that do not contain native vegetation (as described in BAM Subsection 4.1.2)	<4.1.2>
		☐ Review of existing information on native vegetation including references to previous vegetation maps of the subject land and assessment area (described in BAM Section 4.1(3.) and Subsection 4.1.1)	<2.2.2>
		☐ Describe the systematic field-based floristic vegetation survey undertaken in accordance with BAM Section 4.2	<2.2.3>
		☐ Where relevant, describe the use of more appropriate local data, provide reasons that support the use of more appropriate local data and include the written confirmation from the decision-maker that they support the use of more appropriate local data (as described in BAM Subsection 1.4.2 and Appendix A)	<Insert relevant reference & Appendix G>
		For each PCT within the subject land, describe:	–
		☐ PCT name and ID	<4.1 & Figure 6>
		☐ vegetation class	<4.1.2>
		☐ extent (ha) within subject land	<2.2.2>
		☐ evidence used to identify a PCT including any analyses undertaken, references/sources, existing vegetation maps (BAM Section 4.2(1–3.))	<2.2.3>
		☐ plant species relied upon for identification of the PCT and relative abundance of each species	<Insert relevant reference and Appendix G>
		☐ if relevant, TEC status including evidence used to determine vegetation is the TEC (BAM Subsection 4.2.2(1–2.))	<4.1 & Figure 6>
		☐ estimate of per cent cleared value of PCT (BAM Subsection 4.2.1(5.))	<4.1.2>
		Describe the vegetation integrity assessment of the subject land, including:	–
		☐ identification and mapping of vegetation zones (as described in BAM Subsection 4.3.1)	<4.4 & Figure 8>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		☐ description of vegetation zones within the subject land (as described in Operational Manual Stage 1 Table 2 and Subsection 3.3.2)	<4.4 & Figure 8>
		☐ area (ha) of each vegetation zone	<4.4>
		☐ assessment of patch size (as described in BAM Subsection 4.3.2)	<4.4>
		☐ survey effort (i.e. number of vegetation integrity survey plots) as described in BAM Subsection 4.3.4(1–2.)	<4.5.1>
		☐ use of relevant benchmark data from BioNet Vegetation Classification (as described in BAM Subsection 4.3.3(5.))	<4.5.3>
		Where use of more appropriate local benchmark data is proposed (as described in BAM Subsection 1.4.2, BAM Subsection 4.3.3(5.) and BAM Appendix A):	–
		☐ identify the PCT or vegetation class for which local benchmark data will be applied ☐ identify published sources of local benchmark data (if benchmarks obtained from published sources) ☐ describe methods of local benchmark data collection (if reference plots used to determine local benchmark data)	<4.5.3>
		☐ provide justification for use of local data rather than BioNet Vegetation Classification benchmark values	<4.5.3>
		☐ provide written confirmation from the decision-maker that they support the use of local benchmark data	<Appendix G>
		Maps and tables	
		☐ Map of native vegetation extent within the subject land at scale not greater than 1:10,000 including identification of all areas of native vegetation including areas that are ground cover only, cleared areas (as described in BAM Section 4.1(1–3.)) and all parts of the subject land that do not contain native vegetation (BAM Subsection 4.1.2)	<Figure 6>
		☐ Map of PCTs within the subject land (as described in BAM Section 4.2(1.))	<Figure 7>
		☐ Map of vegetation zones within the subject land (as described in BAM Subsection 4.3.1)	<Figure 8>
		☐ Map the location of floristic vegetation survey plots and vegetation integrity survey plots relative to PCT boundaries	<Figure 5>
		☐ Map of TEC distribution on the subject land and table of TEC listing, status and area (ha)	< >
		☐ Map of patch size locations for each native vegetation zone and table of patch size areas (as described in BAM Subsection 4.3.2)	<Figure 8 & Table 6>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		Table of current vegetation integrity scores for each vegetation zone within the site and including:	–
		☐ composition condition score ☐ structure condition score ☐ function condition score ☐ presence of hollow bearing trees	<Table 7>
		Data	
		☐ All report maps as separate jpeg files	–
		☐ Plot field data (MS Excel format)	
		☐ Plot field datasheets	<Appendix F>
		Digital shape files of:	–
		☐ PCT boundaries within subject land	–
		☐ TEC boundaries within subject land	–
		☐ vegetation zone boundaries within subject land	–
		☐ floristic vegetation survey and vegetation integrity plot locations	–
Threatened species	Chapter 5	**Information**	
		Identify ecosystem credit species likely to occur on the subject land, including:	–
		☐ list of ecosystem credit species derived from the BAM-C (as described in BAM Subsection 5.1.1 and Section 5.2(1.))	< >
		☐ justification and supporting evidence for exclusion of any ecosystem credit species based on geographic limitations, habitat constraints or vagrancy (as described in BAM Subsections 5.2.1 and 5.2.2)	<5.1.1>
		☐ justification for addition of any ecosystem credit species to the list	<5.1.1>
		Identify species credit species likely to occur on the subject land, including:	–
		☐ list of species credit species derived from the BAM-C (as described in BAM Subsection 5.1.1)	<Table 9 & Table 10>
		☐ justification and supporting evidence for exclusions based on geographic limitations, habitat constraints or vagrancy (as described in BAM Subsections 5.2.1 and 5.2.2)	<5.1.2>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		☐ justification and supporting evidence for exclusions based on degraded habitat constraints and/or microhabitats on which the species depends (as described in BAM Subsection 5.2.2)	<5.1.2>
		☐ justification for addition of any species credit species to the list	<5.1.2>
		From the list of candidate species credit species, identify:	–
		☐ species assumed present within the subject land (if relevant) (as described in BAM Subsection 5.2.4(2.a.))	<Table 11 & Table 12>
		☐ species present within the subject land on the basis of being identified on an important habitat map for a species (as described in BAM Subsection 5.2.4(2.d.))	
		☐ species for which targeted surveys are to be completed to determine species presence (BAM Subsection 5.2.4(2.b.))	
		☐ species for which an expert report is to be used to determine species presence (BAM Subsection 5.2.4(2.c.))	
		Present the outcomes of species credit species assessments from:	–
		☐ threatened species survey (as described in BAM Section 5.2.4)	<Table 13 & Table 14>
		☐ expert reports (if relevant) including justification for presence of the species and information used to make this determination (as described in BAM Subsection 5.2.4, Section 5.3, Box 3)	<5.4>
		Where survey has been undertaken include detailed information on:	–
		☐ survey method and effort (as described in BAM Section 5.3)	<Table 13 & Table 14>
		☐ justification of survey method and effort (e.g. citation of peer-reviewed literature) if approach differs from the department's taxa-specific survey guides or where no relevant guideline has been published	<0>
		☐ timing of survey in relation to requirements in the TBDC or the department's taxa-specific survey guides. Where survey was undertaken outside these guides include justification for the timing of surveys	<Table 13 & Table 14 & 0>
		☐ survey personnel and relevant experience	<Declarations ii>
		☐ describe any limitations to surveys and how these were addressed/overcome	<0>
		Where an expert report has been used in place of survey (as described in BAM Section 5.3, Box 3), include:	–
			<5.4>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		☐ justification of the use of an expert report ☐ identify the expert, provide evidence of their expert credentials and departmental approval of expert status ☐ all requirements of Box 3 have been addressed in the expert report	
		Where use of local data is proposed (BAM Subsection 1.4.2):	–
		☐ identify relevant species ☐ identify data to be amended ☐ identify source of information for local data, e.g. published literature, additional survey data, etc. ☐ justify use of local data in preference to VIS Classification or TBDC data	<5.5>
		☐ provide written confirmation from the decision-maker that they support the use of local data	<Appendix G>
		Species polygon completed for species credit species present within the subject land (assumed present or determined on the basis of survey, expert report or important habitat map) ensuring that:	–
		☐ the unit of measure for each species is documented	<Table 15
		for species assessed by area:	–
		☐ the polygon includes the extent of suitable habitat for the target species within the subject land (as described in BAM Subsection 5.2.5)	<Figure 9>
		☐ a description of, and evidence-based justification for, the habitat constraints, features or microhabitats used to map the species polygon including reference to information in the TBDC for that species and any buffers applied	<5.6>
		for species assessed by counts of individuals:	–
		☐ the number of individual plants present on the subject land (as described in BAM Subsection 5.2.5(3.))	<5.6>
		☐ the method used to derive this number (i.e. threatened species survey or expert report) and evidence-based justification for the approach taken	<5.6>
		☐ the polygon includes all individuals located on the subject land with a buffer of 30 m around the individuals or groups of individuals on the subject land	<Figure 9>
		☐ Identify the biodiversity risk weighting for each species credit species identified as present within the subject land (as described in BAM Section 5.4)	<Table 15
		Maps and tables	
		☐ Table showing ecosystem credit species in accordance with BAM Subsection 5.1.1, and identifying:	

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		☐ the ecosystem credit species removed from the list	<Table 8>
		☐ the sensitivity to gain class of each species	<Table 8>
		☐ Table detailing species credit species in accordance with BAM Section 5.2 and identifying:	<Table 9 & Table 10>
		☐ the species credit species removed from the list of species because the species is considered vagrant, out of geographic range or the habitat or microhabitat features are not present	<Table 9 & Table 10>
		☐ the candidate species credit species not recorded on the subject land as determined by targeted survey, expert report or important habitat map	<Table 11 & Table 12>
		☐ Table detailing species credit species recorded or assumed as present within the subject land, habitat constraints or microhabitats associated with the species, counts of individuals (flora)/extent of suitable habitat (flora and fauna) (as described in BAM Subsection 5.2.6) and biodiversity risk weighting (BAM Section 5.4)	<5.6 & Table 15 & >
		☐ Map indicating the GPS coordinates of all individuals of each species recorded within the subject land and the species polygon for each species (as described in BAM Subsection 5.2.5)	<Figure 9>
		Data	
		☐ Digital shape files of suitable habitat identified for survey for each candidate species credit species	–
		☐ Survey locations including GPS coordinates of any plots, transects, grids	
		☐ Digital shape files of each species polygon including GPS coordinates of located individuals	–
		☐ Species polygon map in jpeg format	–
		☐ Expert reports and any supporting data used to support conclusions of the expert report	
		☐ Field datasheets detailing survey information including prevailing conditions, date, time, equipment used, etc.	

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
Prescribed impacts	Chapter 6	**Information**	
		Identify potential prescribed biodiversity impacts on threatened entities, including:	–
		☐ karst, caves, crevices, cliffs, rocks and other geological features of significance (as described in BAM Subsection 6.1.1) ☐ occurrences of human-made structures and non-native vegetation (as described in BAM Subsection 6.1.2) ☐ corridors or other areas of connectivity linking habitat for threatened entities (as described in BAM Subsection 6.1.3) ☐ waterbodies or any hydrological processes that sustain threatened entities (as described in BAM Subsection 6.1.4)	<Table 16>
		☐ protected animals that may use the proposed wind farm development site as a flyway or migration route (as described in BAM Subsection 6.1.5)	
		☐ where the proposed development may result in vehicle strike on threatened fauna or on animals that are part of a threatened ecological community (as described in BAM Subsection 6.1.6)	<Table 16>
		☐ Identify a list of threatened entities that may be dependent upon or may use habitat features associated with any of the prescribed impacts	
		☐ Describe the importance of habitat features to the species including, where relevant, impacts on life cycle or movement patterns (e.g. Subsection 6.1.3)	<6>
		Where the proposed development is for a wind farm:	–
		☐ identify a candidate list of protected animals that may use the development site as a flyway or migration route, including: resident threatened aerial species, resident raptor species and nomadic and migratory species that are likely to fly over the proposal area (as described in BAM Subsection 6.1.5)	
		☐ provide details of targeted survey for candidate species of wind farm developments undertaken in accordance with BAM Subsection 6.1.5(2–3.)	
		☐ predict the habitual flight paths for nomadic and migratory species likely to fly over the subject land and map the likely habitat for resident threatened aerial and raptor species (BAM Subsection 6.1.5(4.))	<Figure 1 & Figure 2>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		Where the proposal may result in vehicle strike:	–
		☐ identify a list of threatened fauna or protected fauna species that are part of a TEC and at risk of vehicle strike due to the proposal	<Table 16>
		Maps and tables	
		☐ Map showing location of any prescribed impact features (i.e. karst, caves, crevices, cliffs, rocks, human-made structures, etc.)	<Figure 1 & Figure 2>
		☐ Map showing location of potential vehicle strike locations	<Figure 1>
		☐ Maps of habitual flight paths for nomadic and migratory species likely to fly over the site and maps of likely habitat for threatened aerial species resident on the site (for wind farm developments only)	<Figure 1 & Figure 2>
		Data	
		☐ Digital shape files of prescribed impact feature locations	–
		☐ Prescribed impact features map in jpeg format	–
Avoid and minimise impacts	Chapter 7	**Information**	
		Demonstration of efforts to avoid and minimise impacts on biodiversity values (including prescribed impacts) associated with the proposal location in accordance with Chapter 7, including an analysis of alternative:	–
		☐ modes or technologies that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed mode or technology	<7.1.2 & 7.2.2>
		☐ routes that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed route	<7.1.1 & 7.2.1>
		☐ alternative locations that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed location	<7.1.1 & 7.2.1>
		☐ alternative sites within a property on which the proposal is located that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed site	<7.1.1 & 7.2.1>
		☐ Describe efforts to avoid and minimise impacts (including prescribed impacts) to biodiversity values through proposal design (as described in BAM Sections 7.1 and 7.2)	<7.1.2 & 7.2.2>
		☐ Identification of any other site constraints that the proponent has considered in determining the location and design of the proposal (as described in BAM Subsection 7.2.1(3.))	<7>
		☐ Detail measures or options considered but not implemented because they are not feasible and/or practical (e.g. due to site constraints)	<7.3>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		Maps and tables	
		☐ Table of measures to be implemented to avoid and minimise the impacts of the proposal, including action, outcome, timing and responsibility	
		☐ Map of alternative footprints considered to avoid or minimise impacts on biodiversity values; and of the final proposal footprint, including construction and operation	<Figure 3>
		☐ Maps demonstrating indirect impact zones where applicable	<Figure 10>
		Data	
		Digital shape files of:	–
		☐ alternative and final proposal footprint	–
		☐ direct and indirect impact zones	–
		☐ Maps in jpeg format	–
Assessment of impacts	Chapter 8, Sections 8.1 and 8.2	**Information**	
		☐ Determine the impacts on native vegetation and threatened species habitat, including a description of direct impacts of clearing of native vegetation, threatened ecological communities and threatened species habitat (as described in BAM Section 8.1)	<Table 17>
		Assessment of indirect impacts on vegetation and threatened species and their habitat including (as described in BAM Section 8.2):	–
		☐ description of the nature, extent, frequency, duration and timing of indirect impacts of the proposal	<Table 19>
		☐ documenting the consequences to vegetation and threatened species and their habitat including evidence-based justifications	<8.2>
		☐ reporting any limitations or assumptions, etc. made during the assessment	<8.2>
		☐ identification of the threatened entities and their habitat likely to be affected	<Table 19>
		Assessment of prescribed biodiversity impacts (as described in BAM Section 8.3) including:	–
		assessment of the nature, extent frequency, duration and timing of impacts on the habitat of threatened species or ecological communities associated with:	–
		☐ karst, caves, crevices, cliffs, rocks and other features of geological significance	<8.3.1>
		☐ human-made structures	<8.3.2>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		☐ non-native vegetation	<8.3.3>
		☐ connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range	<8.3.4>
		☐ movement of threatened species that maintains their life cycle	<8.3.4>
		☐ water quality, waterbodies and hydrological processes that sustain threatened species and threatened ecological communities	<8.3.5>
		☐ assessment of the impacts of wind turbine strikes on protected animals	<1.1.1>
		☐ assessment of the impacts of vehicle strikes on threatened species of animals or on animals that are part of a TEC	<8.3.7>
		☐ evaluate the consequences of prescribed impacts	<1.1>
		☐ describe impacts that are uncertain	<8.2 & 1.1>
		☐ document limitations to data, assumptions and predictions	<8.2 & 1.1>
		Maps and tables	
		☐ Table showing change in vegetation integrity score for each vegetation zone as a result of identified impacts	<Table 18>
		Data	
		N/A	–
Mitigation and management of impacts	Chapter 8, Sections 8.4 and 8.5	**Information**	
		Identification of measures to mitigate or manage impacts in accordance with the recommendations in BAM Sections 8.4 and 8.5 including:	–
		☐ techniques, timing, frequency and responsibility ☐ identify measures for which there is risk of failure ☐ evaluate the risk and consequence of any residual impacts	<Table 21>
		☐ document any adaptive management strategy proposed	<1.1>
		Identification of measures for mitigating impacts related to:	–
		☐ displacement of resident fauna (as described in BAM Subsection 8.4.1(2.))	<8.4>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		☐ indirect impacts on native vegetation and habitat (as described in BAM Subsection 8.4.1(3.)) ☐ mitigating prescribed biodiversity impacts (as described in BAM Subsection 8.4.2)	
		☐ Details of the adaptive management strategy proposed to monitor and respond to impacts on biodiversity values that are uncertain (BAM Section 8.5)	<1.1>
		Maps and tables	
		☐ Table of measures to be implemented before, during and after construction to mitigate and manage impacts of the proposal, including action, outcome, timing and responsibility	<Table 21>
		Data	
		N/A	–
Impact summary	Chapter 9	**Information**	
		Identification and assessment of impacts on TECs and threatened species that are at risk of a serious and irreversible impacts (SAII, in accordance with BAM Section 9.1) including:	–
		☐ addressing all criteria in Subsection 9.1.1 for each TEC listed as at risk of an SAII present on the subject land	< >
		☐ for each TEC, report the extent of the TEC in NSW	<
		☐ addressing all criteria in Subsection 9.1.2 for each threatened species at risk of an SAII present on the subject land	>
		☐ for each threatened species, report the population size in NSW	
		☐ documenting assumptions made and/or limitations to information ☐ documenting all sources of data, information, references used or consulted ☐ clearly justifying why any criteria could not be addressed	
		☐ Identification of impacts requiring offset in accordance with BAM Section 9.2	<Table 24 & Table 25>
		☐ Identification of impacts not requiring offset in accordance with BAM Subsection 9.2.1(3.)	<Table 23>
		☐ Identification of areas not requiring assessment in accordance with BAM Section 9.3	<Table 26>
		Maps and tables	
		☐ Map showing the extent of TECs at risk of an SAII within the subject land	
		☐ Map showing location of threatened species at risk of an SAII within the subject land	

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		Map showing location of:	–
		☐ impacts requiring offset	<Figure 11>
		☐ impacts not requiring offset	<Figure 11>
		☐ areas not requiring assessment	<Figure 11>
		Data	
		Digital shape files of:	–
		☐ extent of TECs at risk of an SAII within the subject land	–
		☐ location of threatened species at risk of an SAII within the subject land	–
		☐ boundary of impacts requiring offset	–
		☐ boundary of impacts not requiring offset	–
		☐ boundary of areas not requiring assessment	–
		☐ Maps in jpeg format	–
Impact summary	Chapter 10	**Information**	
		Ecosystem credits and species credits that measure the impact of the development on biodiversity values, including:	–
		☐ future vegetation integrity score for each vegetation zone within the subject land (Equation 25 and Equation 26 in BAM Appendix H) ☐ change in vegetation integrity score (BAM Subsection 8.1.1) ☐ number of required ecosystem credits for the direct impacts of the proposal on each vegetation zone within the subject land (BAM Subsection 10.1.2)	<Table 24>
		☐ biodiversity risk weighting for each	<Table 24 & Table 25>
		☐ number of required species credits for each candidate threatened species that is directly impacted on by the proposal (BAM Subsection 10.1.3)	<Table 25>
		Maps and tables	
		☐ Table of PCTs requiring offset and the number of ecosystem credits required	<Table 24>
		☐ Table of threatened species requiring offset and the number of species credits required	<Table 25>

BDAR section	BAM ref.	BAM requirement	Page reference(s) in the BDAR
		Data	
		☐ Submitted proposal in the BAM Calculator	–
Biodiversity credit report	Chapter 10	**Information**	
		☐ Description of credit classes for ecosystem credits and species credits at the development or clearing site or land to be biodiversity certified (BAM Section 10.2)	<Table 27 & Table 28>
		☐ BAM credit report in pdf format	<Appendix H>
		Maps and tables	
		☐ Table of credit class and matching credit profile	<Table 28>
		Data	
		☐ BAM credit report in pdf format	<Appendix H>

Appendix B: Vegetation survey data

Table 30 Vegetation survey data and locations

plot	pct	area	patchsize	condition class	zone	easting	northing	bearing	compTree	compShrub	compGrass	compForbs	compFerns	compOther	strucTree	strucShrub	strucGrass	strucForbs	strucFerns	strucOther	funLargeTrees	funHollowtrees	funLitterCover	funLenFallenLogs	funTreeStem5to9	funTreeStem10to19	funTreeStem20to29	funTreeStem30to49	funTreeStem50to79	funTreeRegen	funHighThreatExotic	Plot-based vegetation survey?	Vegetation integrity survey?
1	70	2.98	1000	Good	1	516925	6244965	114	2	6	6	4	1	0	50	4.3	64.2	1.5	0.1	0	0	0	6.8	0	2	10	16	2	0	Y	0.1	☐ Yes ☒ No	☒ Yes ☐ No
2	70	1.85	1000	Moderate	2	517238	6244928	212	1	4	7	3	1	0	1	37.3	73.8	0.4	0.1	0	0	0	3.0	0	19	1	0	0	0	Y	0.1	☐ Yes ☒ No	☒ Yes ☐ No
3	70	2.98	1000	Good	1	516876	6444948	160	1	2	6	4	1	0	20	18	88.2	0.4	0.1	0	0	0	6.8	0	100+	3	0	3	0	Y	0	☐ Yes ☒ No	☒ Yes ☐ No
4	176	3.12	1000	Good	3	517581	6244910	17	2	4	7	5	1	1	1.8	46.1	32.2	0.5	0.2	0.1	0	0	15.4	0	0	1	1	0	0	Y	0	☐ Yes ☒ No	☒ Yes ☐ No
5	70	2.98	1000	Good	1	517037	6244931	102	1	3	5	6	1	0	60	1.7	65.6	1	0.5	0	0	1	7.0	0	50	26	4	0	0	N	0.1	☐ Yes ☒ No	☒ Yes ☐ No
6	70/ 176	N/A	1000	N/A	N/A	517257	6244880	276	1	5	6	4	1	0	1.5	10.8	61.8	0.4	0.1	0	0	0	3.2	0	0	0	0	0	0	Y	0	☐ Yes ☒ No	☒ Yes ☐ No
7	176	3.12	1000	Good	3	517362	6244924	98	2	5	9	6	1	1	40	8.6	51.2	0.6	0.1	0.1	0	0	11	13	60+	6	1	0	0	Y	0	☐ Yes ☒ No	☒ Yes ☐ No

Appendix C: Credit reports

NSW GOVERNMENT

BAM Credit Summary Report

Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00042846/BAAS22015/23/00042849	West Wyalong Motorsport Park	22/06/2023
Assessor Name	Report Created	BAM Data version *
David Sturman	15/11/2023	61
Assessor Number	BAM Case Status	Date Finalised
BAAS22015	Finalised	15/11/2023
Assessment Revision	Assessment Type	BOS entry trigger
0	Part 4 Developments (General)	BOS Threshold: Area clearing threshold

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

Ecosystem credits for plant communities types (PCT), ecological communities & threatened species habitat

Zone	Vegetation zone name	TEC name	Current Vegetation integrity score	Change in Vegetation integrity (loss / gain)	Area (ha)	Sensitivity to loss (Justification)	Species sensitivity to gain class	BC Act Listing status	EPBC Act listing status	Biodiversity risk weighting	Potential SAII	Ecosystem credits
Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion												
3	176_Good	Not a TEC	54	54.0	3.1	PCT Cleared - 20%	High Sensitivity to Gain			1.50		63
											Subtotal	**63**

BAM Credit Summary Report

White Cypress Pine woodland on sandy loams in central NSW wheatbelt												
1	70_Good	Not a TEC	55.9	55.9	3	PCT Cleared - 65%	High Sensitivity to Gain			1.75		73
2	70_Moderate	Not a TEC	38.1	38.1	1.8	PCT Cleared - 65%	High Sensitivity to Gain			1.75		31
											Subtotal	**104**
											Total	**167**

Species credits for threatened species

Vegetation zone name	Habitat condition (Vegetation Integrity)	Change in habitat condition	Area (ha)/Count (no. individuals)	Sensitivity to loss (Justification)	Sensitivity to gain (Justification)	BC Act Listing status	EPBC Act listing status	Potential SAII	Species credits
Austrostipa metatoris / A spear-grass (Flora)									
70_Good	54.8	54.8	3	Biodiversity Conservation Act listing status	Ecology or response to management is poorly known	Vulnerable	Vulnerable	False	82
70_Moderate	38.1	38.1	1.8	Biodiversity Conservation Act listing status	Ecology or response to management is poorly known	Vulnerable	Vulnerable	False	35

NSW GOVERNMENT

BAM Credit Summary Report

176_Good	54.0	54.0	3.1	Biodiversity Conservation Act listing status	Ecology or response to management is poorly known	Vulnerable	Vulnerable	False	84
								Subtotal	**201**
Austrostipa wakoolica / A spear-grass (Flora)									
70_Good	54.8	54.8	3	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Endangered	Endangered	False	82
70_Moderate	38.1	38.1	1.8	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Endangered	Endangered	False	35
176_Good	54.0	54.0	3.1	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Endangered	Endangered	False	84
								Subtotal	**201**

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BAM Credit Summary Report

Cercartetus nanus / Eastern Pygmy-possum (Fauna)									
176_Good	54.0	54.0	3.1	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Vulnerable	Not Listed	False	84
								Subtotal	**84**
Diuris tricolor / Pine Donkey Orchid (Flora)									
70_Good	54.8	54.8	3	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Vulnerable	Not Listed	False	61
70_Moderate	38.1	38.1	1.8	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Vulnerable	Not Listed	False	26
176_Good	54.0	54.0	3.1	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Vulnerable	Not Listed	False	63
								Subtotal	**150**

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BAM Credit Summary Report

Lophoictinia isura / Square-tailed Kite (Fauna)									
70_Good	54.8	54.8	3	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Vulnerable	Not Listed	False	61
70_Moderate	38.1	38.1	1.4	Biodiversity Conservation Act listing status	Effectiveness of management in controlling threats	Vulnerable	Not Listed	False	20
								Subtotal	**81**
Swainsona sericea / Silky Swainson-pea (Flora)									
70_Good	54.8	54.8	3	Biodiversity Conservation Act listing status	Ability to colonise improved habitat	Vulnerable	Not Listed	False	82
70_Moderate	38.1	38.1	1.8	Biodiversity Conservation Act listing status	Ability to colonise improved habitat	Vulnerable	Not Listed	False	35
176_Good	54.0	54.0	3.1	Biodiversity Conservation Act listing status	Ability to colonise improved habitat	Vulnerable	Not Listed	False	84
								Subtotal	**201**

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BAM Credit Summary Report

Tylophora linearis / Tylophora linearis (Flora)									
70_Good	54.8	54.8	3	Biodiversity Conservation Act listing status	Quantity class of viable seeds produced	Vulnerable	Endangered	False	82
70_Moderate	38.1	38.1	1.8	Biodiversity Conservation Act listing status	Quantity class of viable seeds produced	Vulnerable	Endangered	False	35
176_Good	54.0	54.0	3.1	Biodiversity Conservation Act listing status	Quantity class of viable seeds produced	Vulnerable	Endangered	False	84
								Subtotal	**201**

BAM Biodiversity Credit Report (Like for like)

Proposal Details

Assessment Id 00042846/BAAS22015/23/00042849	Proposal Name West Wyalong Motorsport Park	BAM data last updated * 22/06/2023
Assessor Name David Sturman	Assessor Number BAAS22015	BAM Data version * 61
Proponent Names	Report Created 15/11/2023	BAM Case Status Finalised
Assessment Revision 0	Assessment Type Part 4 Developments (General)	Date Finalised 15/11/2023
BOS entry trigger BOS Threshold: Area clearing threshold	* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.	

Potential Serious and Irreversible Impacts

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID
Nil		

Species
Nil

Additional Information for Approval

BAM Biodiversity Credit Report (Like for like)

PCT Outside Ibra Added

None added

PCTs With Customized Benchmarks

PCT
No Changes

Predicted Threatened Species Not On Site

Name
Grantiella picta / Painted Honeyeater
Haliaeetus leucogaster / White-bellied Sea-Eagle

Ecosystem Credit Summary (Number and class of biodiversity credits to be retired)

Name of Plant Community Type/ID	Name of threatened ecological community	Area of impact	HBT Cr	No HBT Cr	Total credits to be retired
70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt	Not a TEC	4.8	73	31	104
176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion	Not a TEC	3.1	0	63	63

BAM Biodiversity Credit Report (Like for like)

70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt	**Like-for-like credit retirement options**					
	Class	Trading group	Zone	HBT	Credits	IBRA region
	Floodplain Transition Woodlands This includes PCT's: 56, 70, 74, 76, 80, 81, 82, 237, 244, 248, 251, 628	Floodplain Transition Woodlands >=50% and <70%	70_Good	Yes	73	Lower Slopes, Bogan-Macquarie, Inland Slopes, Lachlan Plains, Murray Fans, Murrumbidgee and Nymagee. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.
	Floodplain Transition Woodlands This includes PCT's: 56, 70, 74, 76, 80, 81, 82, 237, 244, 248, 251, 628	Floodplain Transition Woodlands >=50% and <70%	70_Moderate	No	31	Lower Slopes, Bogan-Macquarie, Inland Slopes, Lachlan Plains, Murray Fans, Murrumbidgee and Nymagee. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.
176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion	**Like-for-like credit retirement options**					
	Class	Trading group	Zone	HBT	Credits	IBRA region

BAM Biodiversity Credit Report (Like for like)

	Inland Rocky Hill Woodlands This includes PCT's: 104, 106, 122, 175, 176, 177, 178, 180, 184, 185, 186, 188, 218, 239, 256, 257, 258, 292, 317, 318, 319, 328, 329, 332, 334, 357, 424, 427, 439	Inland Rocky Hill Woodlands <50%	176_Good	No	63	Lower Slopes, Bogan-Macquarie, Inland Slopes, Lachlan Plains, Murray Fans, Murrumbidgee and Nymagee. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.

Species Credit Summary

Species	Vegetation Zone/s	Area / Count	Credits
Austrostipa metatoris / A spear-grass	**70_Good, 70_Moderate, 176_Good**	8.0	201.00
Austrostipa wakoolica / A spear-grass	**70_Good, 70_Moderate, 176_Good**	8.0	201.00
Cercartetus nanus / Eastern Pygmy-possum	**176_Good**	3.1	84.00
Diuris tricolor / Pine Donkey Orchid	**70_Good, 70_Moderate, 176_Good**	8.0	150.00
Lophoictinia isura / Square-tailed Kite	**70_Good, 70_Moderate**	4.4	81.00

BAM Biodiversity Credit Report (Like for like)

Swainsona sericea / Silky Swainson-pea	**70_Good, 70_Moderate, 176_Good**	8.0	201.00
Tylophora linearis / Tylophora linearis	**70_Good, 70_Moderate, 176_Good**	8.0	201.00

Credit Retirement Options

Like-for-like credit retirement options

Austrostipa metatoris / A spear-grass	Spp	IBRA subregion
	Austrostipa metatoris / A spear-grass	Any in NSW
Austrostipa wakoolica / A spear-grass	Spp	IBRA subregion
	Austrostipa wakoolica / A spear-grass	Any in NSW
Cercartetus nanus / Eastern Pygmy-possum	Spp	IBRA subregion
	Cercartetus nanus / Eastern Pygmy-possum	Any in NSW
Diuris tricolor / Pine Donkey Orchid	Spp	IBRA subregion
	Diuris tricolor / Pine Donkey Orchid	Any in NSW
Lophoictinia isura / Square-tailed Kite	Spp	IBRA subregion
	Lophoictinia isura / Square-tailed Kite	Any in NSW

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BAM Biodiversity Credit Report (Like for like)

Swainsona sericea / Silky Swainson-pea	Spp	IBRA subregion
	Swainsona sericea / Silky Swainson-pea	Any in NSW
Tylophora linearis / Tylophora linearis	Spp	IBRA subregion
	Tylophora linearis / Tylophora linearis	Any in NSW

BAM Candidate Species Report

Proposal Details

Assessment Id 00042846/BAAS22015/23/00042849	Proposal Name West Wyalong Motorsport Park	BAM data last updated * 22/06/2023
Assessor Name David Sturman	Report Created 15/11/2023	BAM Data version * 61
Assessor Number BAAS22015	Assessment Type Part 4 Developments (General)	BAM Case Status Finalised
Assessment Revision 0	Date Finalised 15/11/2023	BOS entry trigger BOS Threshold: Area clearing threshold

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

List of Species Requiring Survey

Name	Presence	Survey Months
Austrostipa metatoris A spear-grass	Yes (assumed present)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Austrostipa wakoolica A spear-grass	Yes (assumed present)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Burhinus grallarius Bush Stone-curlew	No (surveyed)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☑ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?

NSW GOVERNMENT

BAM Candidate Species Report

Cercartetus nanus Eastern Pygmy-possum	Yes (assumed present)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Diuris tricolor Pine Donkey Orchid	Yes (assumed present)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Grevillea ilicifolia subsp. ilicifolia Holly-leaf Grevillea	No (surveyed)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☑ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Hieraaetus morphnoides Little Eagle	No (surveyed)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☑ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Lophoictinia isura Square-tailed Kite	Yes (assumed present)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Phascolarctos cinereus Koala	No (surveyed)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☑ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?

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BAM Candidate Species Report

Swainsona sericea Silky Swainson-pea	Yes (assumed present)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?
Tylophora linearis Tylophora linearis	Yes (assumed present)	☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec ☐ Survey month outside the specified months?

Threatened species Manually Added

None added

Threatened species assessed as not on site

Refer to BAR for detailed justification

Common name	Scientific name	Justification in the BAM-C
Barking Owl	Ninox connivens	Habitat constraints
Glossy Black-Cockatoo	Calyptorhynchus lathami	Habitat constraints
Grey-headed Flying-fox	Pteropus poliocephalus	Habitat constraints
Large-eared Pied Bat	Chalinolobus dwyeri	Habitat constraints
Major Mitchell's Cockatoo	Lophochroa leadbeateri	Habitat constraints
Masked Owl	Tyto novaehollandiae	Habitat constraints
Squirrel Glider	Petaurus norfolcensis	Habitat degraded
Superb Parrot	Polytelis swainsonii	Habitat constraints
Swift Parrot	Lathamus discolor	Habitat constraints
White-bellied Sea-Eagle	Haliaeetus leucogaster	Habitat constraints

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Proposal Details

Assessment Id	Proposal Name	BAM data last updated *
00042846/BAAS22015/23/00042849	West Wyalong Motorsport Park	22/06/2023
Assessor Name	Report Created	BAM Data version *
David Sturman	15/11/2023	61
Assessor Number	Assessment Type	BAM Case Status
BAAS22015	Part 4 Developments (General)	Finalised
Assessment Revision	BOS entry trigger	Date Finalised
0	BOS Threshold: Area clearing threshold	15/11/2023

* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

Threatened species reliably predicted to utilise the site. No surveys are required for these species. Ecosystem credits apply to these species.

Common Name	Scientific Name	Vegetation Types(s)
Barking Owl	Ninox connivens	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Black Falcon	Falco subniger	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Black-chinned Honeyeater (eastern subspecies)	Melithreptus gularis gularis	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Brown Treecreeper (eastern subspecies)	Climacteris picumnus victoriae	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Chestnut Quail-thrush	Cinclosoma castanotum	176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Corben's Long-eared Bat	Nyctophilus corbeni	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Diamond Firetail	Stagonopleura guttata	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt

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Diamond Firetail	Stagonopleura guttata	176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Dusky Woodswallow	Artamus cyanopterus cyanopterus	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Gilbert's Whistler	Pachycephala inornata	176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Glossy Black-Cockatoo	Calyptorhynchus lathami	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Grey Falcon	Falco hypoleucos	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Grey-crowned Babbler (eastern subspecies)	Pomatostomus temporalis temporalis	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Grey-headed Flying-fox	Pteropus poliocephalus	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Hooded Robin (south-eastern form)	Melanodryas cucullata cucullata	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Little Eagle	Hieraaetus morphnoides	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Little Pied Bat	Chalinolobus picatus	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion

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Major Mitchell's Cockatoo	Lophochroa leadbeateri	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Malleefowl	Leipoa ocellata	176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Masked Owl	Tyto novaehollandiae	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Pied Honeyeater	Certhionyx variegatus	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Scarlet Robin	Petroica boodang	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Shy Heathwren	Hylacola cautus	176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Speckled Warbler	Chthonicola sagittata	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Spotted Harrier	Circus assimilis	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Square-tailed Kite	Lophoictinia isura	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Stripe-faced Dunnart	Sminthopsis macroura	176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Superb Parrot	Polytelis swainsonii	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Swift Parrot	Lathamus discolor	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion

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Turquoise Parrot	Neophema pulchella	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
Varied Sittella	Daphoenositta chrysoptera	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
White-throated Needletail	Hirundapus caudacutus	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion
Yellow-bellied Sheathtail-bat	Saccolaimus flaviventris	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
		176-Green Mallee - White Cypress Pine very tall mallee woodland on gravel rises mainly in the Cobar Peneplain Bioregion

Threatened species Manually Added

None added

Threatened species assessed as not within the vegetation zone(s) for the PCT(s)

Common Name	Scientific Name	Plant Community Type(s)
Painted Honeyeater	Grantiella picta	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt
White-bellied Sea-Eagle	Haliaeetus leucogaster	70-White Cypress Pine woodland on sandy loams in central NSW wheatbelt

Threatened species assessed as not within the vegetation zone(s) for the PCT(s)

Refer to BAR for detailed justification

Common Name	Scientific Name	Justification in the BAM-C
Painted Honeyeater	Grantiella picta	Habitat constraints
White-bellied Sea-Eagle	Haliaeetus leucogaster	Habitat constraints