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Biodiversity Assessment Report

Proposed 4 Lot Rural Residential Subdivision

Nottingham Road, Wee Jasper, NSW.

Lot 119 DP 1088125

October 2024

Version	Final
Date	27 November 2024
Project Number	140269_2

Contents

1. Introduction

1.1. Background

This report has been prepared by Macrozamia Environmental on behalf of the proponent of a 4 lot rural subdivision of a 2013ha parcel of relatively undeveloped land supporting significant tracts of native vegetation to the west of the village of Wee Jasper in the Yass Valley Local Government Area.

The proponent and owner of the subject land intends to subdivide the lands for the purposes of developing 4 residential lots being 75ha, 140ha, 388ha and a residual lot of 1410ha.

The development makes use of existing access and internal roads and will include provision of a building envelope on each resulting lot with asset protection zones and effluent management areas.

The subject land has a varied past having been used for forestry and agriculture and supports basic rural structures. Internal roads and fencing have been well maintained and these existing developments have been used where practical for the proposed subdivision.

The works occur in an over-cleared landscape dominated by grazing enterprises, land uses that have carried on in the district for over 200 years. The majority of the vegetation on the subject land is pasture grassland composed of both native and exotic species. Despite this and past land uses, the subject land is well vegetated in most cases and offers a range of values to local biodiversity particularly through a range of vegetation structure and good continuity to woodland remnants throughout the assessment area.

This Biodiversity Assessment Report considers the potential impacts of the proposal on biodiversity matters including during the construction and operation phases of the development and both direct and indirect impacts.

Terminology used in this report aims to be consistent with the NSW Biodiversity Assessment Method 2020;

Assessment area refers to the local environment, surrounding the subject land within a buffer distance of 1500m of the subject land.

Subject land refers to the parcel of land containing the proposed development, in this case it is the whole of Lot 119 DP 1088125.

Development footprint refers to the areas of direct impacts of the proposal, it includes the footprint of the development and any ancillary works.

The proposal location and subject land are identified on Map 1-1 of this report and the development footprint is detailed in the concept plans at Appendix 1 of the REF.

1.2. Site Description

The assessment area occurs in a rural environment in the Southern Tablelands of NSW and has a long history of agricultural use, typically grazing. The vast majority of the lowlands in this landscape have been cleared of native vegetation and sown to pasture. Forestry, particularly softwood production is widespread locally large tracts of managed pine forest occur immediately to the northwest, State Forest, and south, freehold, of the subject land.

The subject land itself is a large irregularly shaped lot, steeply undulating over ridges and valleys, broader valleys are open grassland to woodland, the steeper lands and ridges are well vegetated with native forest. It has in the past been used for forestry and while most forest has regenerated to an advanced state, associated infrastructure including tracks, drainage, roads and fencing have been continually been maintained and are generally in good condition. Various basic structures occur supporting basic storage or temporary habitation as well as a farm dam of approximately 0.6ML.

No areas of outstanding biodiversity value, as identified under the BC Act, occur within the subject land, assessment area or nearby.

1.3. Aims of this Report

The purpose of this report is to identify and assess the terrestrial biodiversity, including flora, fauna and ecological communities occurring in the study area and the likely impacts of the proposed development on these matters, with consideration of the site's landscape context. This report addresses the legislative framework below;

i. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

   a. Biodiversity Matters of National Environmental Significance

      Identification of protected matters at risk of impact and assessment of significance of any impact

ii. *NSW Biodiversity Conservation Act 2016* (BC Act)

   a. Part 4, Divisions 2 and 5

      Consideration of listed species, ecological communities and key threatening processes to be considered under s7.3

   b. Section 7.3

      Test of Significance, for determining whether proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats

iii. *State Environmental Planning Policy (Biodiversity and Conservation) 2021*

   a. Chapter 3 Koala habitat protection 2020

   3.6 Step 1—Is the land potential koala habitat?

   (1) Before a council may grant consent to a development application for consent to carry out development on land to which this Part applies, the council must be satisfied as to whether or not the land is a potential koala habitat.

   (2) The council may be satisfied as to whether or not land is a potential koala habitat only on information obtained by it, or by the applicant, from a person who is qualified and experienced in tree identification.

   (3) If the council is satisfied—

   (a) that the land is not a potential koala habitat, it is not prevented, because of this Chapter, from granting consent to the development application, or

   (b) that the land is a potential koala habitat, it must comply with section 3.7.

   3.7 Step 2—Is the land core koala habitat?

   (1) Before a council may grant consent to a development application for consent to carry out development on land to which this Part applies that it is satisfied is a potential koala habitat, it must satisfy itself as to whether or not the land is a core koala habitat.

   (2) The council may be satisfied as to whether or not land is a core koala habitat only on information obtained by it, or by the applicant, from a person with appropriate qualifications and experience in biological science and fauna survey and management.

   (3) If the council is satisfied—

(a) that the land is not a core koala habitat, it is not prevented, because of this Chapter, from granting consent to the development application, or

(b) that the land is a core koala habitat, it must comply with section 3.8.

3.8 Step 3—Can development consent be granted in relation to core koala habitat?

(1) Before granting consent to a development application for consent to carry out development on land to which this Part applies that it is satisfied is a core koala habitat, there must be a plan of management prepared in accordance with Part 3 that applies to the land.

(2) The council's determination of the development application must not be inconsistent with the plan of management.

The Koala SEPP has been addressed in Section 6 of this report.

iv. *Yass Valley Local Environmental Plan 2013* (LEP)

a. Clause 6.3 – Terrestrial Biodiversity

The objectives of this clause are to protect, maintain or improve the diversity of the native vegetation, including:

(a) protecting biological diversity of native flora and fauna, and

(b) protecting the ecological processes necessary for their continued existence, and

(c) encouraging the recovery of threatened species, communities or populations and their habitats.

This clause applies to development on land that is identified as "Biodiversity" on the Terrestrial Biodiversity Map.

The whole of the subject land is mapped as 'Biodiversity' by this LEP map. This report addresses each part of this clause throughout the report.

In summary, this Biodiversity Assessment Report aims to

- Provide a description of the subject site and study area
- Describe the methods used to assess biodiversity
- Identify the key flora and fauna species & vegetation communities present in the study area, including an assessment of potential habitat values of the site and their interaction with habitats outside the study area
- Identifies the listed threatened species, populations migratory species & ecological communities with potential to occur in the study area
- Define the potential impacts of the proposal on biodiversity and assess the significance of potential impacts on threatened species, populations and ecological communities and migratory species &
- Meet the requirements of the environmental planning framework above.

It is important to note that note all species that occur on or use this site, particularly fauna, could be identified without an extended survey period of several seasons and over numerous site visits. A survey of this extent is beyond the scope of this assessment. To compensate for this, habitats have been assessed with consideration of potentially occurring species applying the principle, particularly in relation to listed matters.

1.4. Description of Proposal

It is intended that works will be completed in the 2024 – 2025 financial year depending on the proponent's operational schedule and competing priorities. The proposal is to develop the subject land through subdivision of one holding consisting of one lot, Lot 119 DP 1088125 into four large rural lots each accommodating provision for a future dwelling. For each proposed lots, the plan includes one building envelope a residential dwelling, associated bushfire asset protection zone and onsite wastewater management. The proposal makes use of existing fencing, access ways and vehicular tracks.

Temporary development during construction will include erosion and sediment controls and stockpiling & plant parking areas. These are contained within the proposed bushfire asset protection zones in areas that are currently clear of woody vegetation.

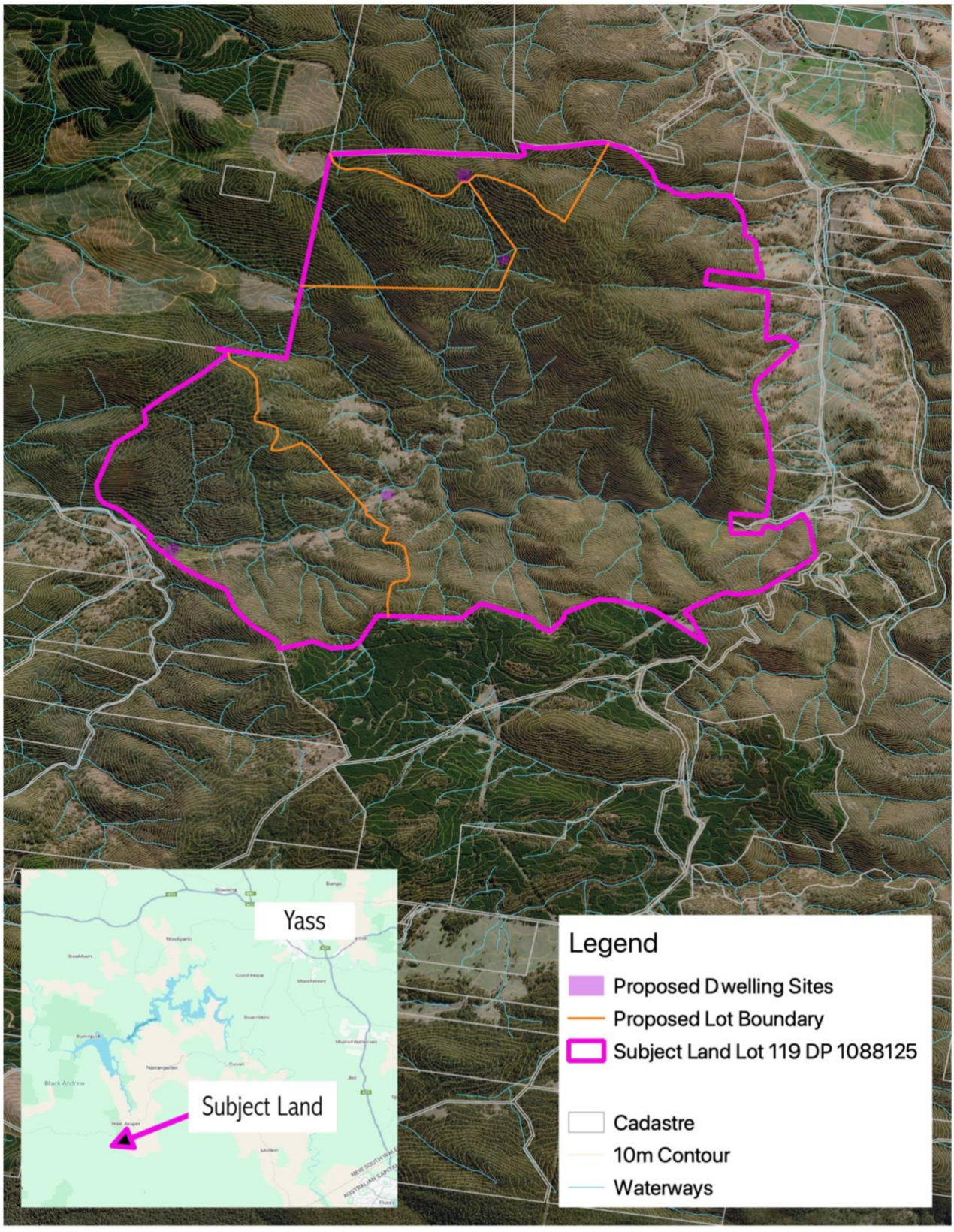
Specific details of the proposal are available in Appendix 1 Concept Plan and the Statement of Environmental Effects.

The scope of the works is summarised as follows;

- Completion of design and planning approvals/ licences, permits, as required
- Allocation of building envelope as described above and detailed in concept plans
- Designation of effluent management area and bushfire asset protection zone as described above and detailed in concept plans, Appendix 1
- Completion of subdivision works certificate requirements, attainment of subdivision certificate & registration of subdivision
- Operation of development.

In order to minimise impacts on biodiversity, provisions of the NSW Rural Boundary Clearing Code will be excluded from resulting lots through an instrument to be applied under Section 88B of the Conveyancing Act 1919 to each lot requires the retention and management of vegetation for conservation.

This Biodiversity Assessment considers the potential impact on flora and fauna of the proposal including matters protected under legislation. The impact assessment is based on construction requirements of the project including any removal of vegetation, earthworks, construction methodology, temporary facilities and intended subsequent land use.



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Map 1-1
Subject Land and Locality

0 1,000 2,000 m

2. Methods

2.1. Literature and Database Review

The study area and its landscape context were considered through a literature and database review in preparation for field survey and to inform survey aims and threatened biodiversity assessments. Aerial photography, NSW Government GIS data and NSW & Commonwealth databases as well as Macrozamia Environmental's records from previous surveys all informed this review, the following sources being key to this assessment;

- Current versions of legislation referred to in section 1.3 of this Biodiversity Assessment, NSW Legislation website
- Commonwealth Government Species Profiles and Threats (SPRAT) database http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl
- Commonwealth Department of Climate Change, Energy, the Environment and Water Protected Matters Search Tool https://pmst.awe.gov.au/#/map?lng=131.50634765625003&lat=-28.671310915880834&zoom=5&baseLayers=Imagery,ImageryLabels
- NSW Threatened Biodiversity Database Collection (TBDC) https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet
- Australia's IBRA Bioregions and sub-bioregions http://environment.gov.au/land/nrs/science/ibra/australias-bioregions-maps
- Department of Environment and Climate Change NSW (DECC) (2002). Descriptions for NSW (Mitchell) Landscapes, Version 2.
- NSW Government SEED Mapping & SEED Layer Intersection Tool
- ePlanning spatial viewer https://www.planningportal.nsw.gov.au/spatialviewer
- NSW Biodiversity Values Map
- State Vegetation Type Map (SVTM) Dec 2023
- NSW Spatial Services SixMaps https://maps.six.nsw.gov.au
- Yass Valley Local Environment Plan 2013

Wherever applicable, NSW and Commonwealth government policies and guidelines have been adopted in the undertaking of this assessment, the following have been key to preparation of this assessment;

- Threatened Species Test of Significance Guidelines NSW Office of Environment and Heritage 2018
- The EPBC Act Matters of National Environmental Significance: Significant Impact Guidelines, Department of Environment, Water, Heritage and the Arts 2013.

Threatened species, populations and migratory species that were recorded within 10km of the study area in the BioNet Atlas of NSW Wildlife and listed in the EPBC Protected Matters Search Tool were considered for their likelihood of occurrence in the study area the following factors informed this assessment;

- The location, habitats and dates of records
- Habitat within the study area and habitats in the landscape including the continuity of suitable habitats for the matter under consideration
- Scientific literature pertaining to each matter and applying ecological knowledge to the assessment.

The potential for each threatened matter or migratory species to occur was then considered and the necessity for targeted field surveys was determined. Following field surveys and review of habitat occurring in the study area, the potential for species, communities or populations to use the study area or to be impacted directly or indirectly by the proposal was assessed, this assessment is summarised in the table at Appendix 3 of this report.

2.2. Field Survey

The study area was surveyed by an ecologist on 14th May mid-morning to mid-afternoon, 3rd October mid-afternoon to after dusk & 4th October from pre dawn to mid-afternoon 2024. Conditions were clear and mild to warm, becoming cloudy on the 4th. Minimal rain had fallen over the previous week. Rainfall has been more than typical over the past three years which could impact the range of flora recorded.

Conditions were adequate for opportunistic fauna survey, an assessment of habitats present was made that also sufficiently considers the potential for fauna to occur on the site in the vicinity of areas at risk of impact by the proposal.

Surveys were adequate for and of sufficient time to satisfactorily assess each vegetation community in the vicinity of the project impact area, effort was focused on areas of direct impact of the proposal particularly the development footprint, along existing access tracks, proposed dwelling and bushfire asset protection zones. Other areas of the study area were also inspected briefly as practical to confirm vegetation communities present, potential weed issues, habitats available including artificial structures and potential for threatened matters occurring.

During site inspections the study area was defined, vegetation communities mapped and notes made on the flora and fauna species identified within and adjacent to the impact area of the proposal. A photo/ videographic record including using RPA photography was made aiding in documenting the site characteristics and confirming flora identification.

2.3. Flora and Vegetation Communities

All flora and fauna species identified were recorded along with ecological communities and habitat components occurring on the site.

Flora was surveyed using the random meander technique (Cropper 1993) focusing on each vegetation community occurring in the impact areas. Notes were made of individual plant species present and vegetation communities mapped and defined then compared with OEH defined Plant Community Types and checked against described listed vegetation communities.

Targeted surveys were undertaken for threatened species of plants that were considered to have potential to occur on the site based on desktop research or where habitats on site were found to be suitable.

Floral nomenclature is consistent with The Plant Information Network System of The Royal Botanic Gardens and Domain Trust PlantNET online resource.

2.4. Fauna and Fauna Habitats

Incidental fauna survey was undertaken for birds, amphibians, reptiles and mammals, which included opportunistic observations of fauna, active searching of signs of direct and indirect occurrence including scats, tracks, scratch & feeding marks, burrows, calls, pellets and remnants such as bones, fur and feathers.

Where suitable habitat components were present, targeted searches were undertaken for fauna presence or signs of past presence. For example loose rocks and timber were lifted in search of reptiles and rocky areas observing for basking reptiles, wet areas were approached quietly to listen for frogs and in suitable habitat bird calls were used for identification.

Habitat components that may be used for foraging, roosting, breeding or nesting by any potentially occurring fauna were considered, along with the continuity of habitat present within the study area as well as stepping stone or corridor habitat that may connect the study area to other parts of the landscape, particularly to areas of quality habitat and biodiverse areas or conservation areas.

Habitat surveys targeted tree hollows, stags, bird nests, possum dreys, decorticating bark, rock shelters, rock outcrops / crevices, mature / old growth trees, food species particularly nectar producing and palatable species such as mistletoes and proteaceae species.

Where present, artificial structures such as culverts, dams, service pits and structures were also considered for their habitat value.

Faunal nomenclature is consistent with;

- Cogger, H. (1992). Reptiles and Amphibians of Australia, Revised Edition. Reed, Sydney.
- Morcombe, M. (2000). Field Guide to Australian Birds. Steve Parish Publishing Pty Ltd, Queensland.
- Strahan, R. (1995). The Mammals of Australia. Australian Museum/Reed Books, Syd.

2.5. Survey Limitations

The flora survey aimed to record all the key and most frequent species occurring on the study area in order to accurately describe vegetation characteristics and classify plant community types present as well as all important weed species. Beyond this, as many flora species as practically could be recorded were. Despite this, a definitive list of the flora occurring in the study area cannot be derived without structured surveys over several seasons. Such survey effort is beyond the scope of this assessment given past land uses on the site, its degraded nature and the minimal nature of the proposal's impacts.

Surveys were adequate to determine native vegetation extent and therefore to calculate native vegetation clearing, the potentially reduced species richness detected does not result in environmental planning implications.

Despite these limitations the biodiversity assessment undertaken for flora, vegetation communities and fauna is adequate to undertake appropriate biodiversity impact assessment. Further flora species would be recorded during longer surveys over different seasons however sufficient data has been collected to detect flora and habitats of threatened matters.

Biodiversity survey following OEH's published threatened species survey and assessment guidelines was not undertaken as sufficient detail to determine the likelihood of occurrence of threatened species and communities as well as potentially occurring migratory species for the purposes of this assessment has been achieved through flora and habitat assessment during the field survey.

3. Results

3.1. Literature and Database Review

Desktop assessment has identified the following characteristics of the site;

3.1.1. Interim Biogeographic Regionalisation for Australia Version 7

The Interim Biogeographic Regionalisation for Australia (IBRA) is a geospatial system for categorising landscapes into assemblages of common characteristics including climate, geology, landform, native vegetation and species assemblages. The 89 IBRA regions are further apportioned into a total of 419 subregions across the continent which are more localised and homogenous geomorphological divisions.

This system of categorisation based on broad environmental features enables for more effective management biodiversity and helps to define Plant Community Types as well as predict likelihood of threatened species and communities occurring.

The subject land occurs in the Bondo Subregion of the South Eastern Highlands IBRA region and just outside the Murrumbateman Subregion.

3.1.2. Landform and drainage

The study area occurs at an elevation of 1060 to 430m amsl and is steeply gently undulating and dissected, several first and second order streams drain the land into Racecourse Creek and Micalong Creek, third order drainage lines that traverse the site flowing to the east and into the Goodradigbee River 2km downstream of the subject land. The Goodradigbee River is a tributary to Lake Burrinjuck, an important irrigation water supply dam and part of the Murrumbidgee Catchment.

The majority of the landform and drainage on the subject land is in its natural state however, as part of its land use history over the past 100 years earthworks have occurred creating road formations, drainage and flat areas. These features have largely been maintained and are being utilised by the proposal wherever possible, a small farm dam has also been constructed occurring immediately to the west of proposed Lot 2.

3.1.3. Soils and geology

The NSW Soil and Land Information Soil Landscape Mapping does not cover the subject lands, the Great Soil Group classification maps the majority of the lands as Lithosols and upper hilltops as Yellow Podzolic soils. These soils are generally of lower fertility however in the open valley along Micalong Creek soil fertility as well as depth improve.

The geology is mapped as Silurian S-type volcanics rocks Lithology, Volcanic rocks varying in composition from felsic to intermediate and associated sedimentary rocks. Lithologies include pyroclastic flows (ignimbrite), tuff, sandstone, shale and minor limestone.

Soils across the site are largely stable protected by good vegetative cover, no areas were observed as being at risk of accelerated erosion.

3.1.4. Environmental planning

3.1.4.1. Yass Valley Local Environmental Plan 2013 (LEP)

Land Use Table

Under this instrument the subject land is zoned RU1 Primary Production, this zoning encourage primary production operations while catering for a range of uses while maintaining the rural character of the land. Objectives also encourage protection and management of areas of high conservation, scientific, cultural or aesthetic values and protection/ enhancement of receiving watercourses and groundwater systems.

LEP Clause 6.3 Terrestrial biodiversity

The whole of the subject site is mapped by the LEP as "*Biodiversity*", as such Clause 7.2 Terrestrial biodiversity applies.

The objectives of this clause are to protect, maintain or improve the diversity of the native vegetation, including;

- protecting biological diversity of native flora and fauna, and
- protecting the ecological processes necessary for their continued existence, and
- encouraging the recovery of threatened species, communities or populations and their habitats.

Under this Clause;

(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority has considered a report that addresses the following matters—

(a) identification of any potential adverse impact of the proposed development on any of the following—

(i) a native vegetation community,

(ii) the habitat of any threatened species, population or ecological community,

(iii) a regionally significant species of plant, animal or habitat,

(iv) a habitat corridor,

(v) a wetland,

(vi) the biodiversity values within a reserve, including a road reserve or a stock route, and

(b) a description of any proposed measures to be undertaken to ameliorate any such potential adverse impact.

(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development is consistent with the objectives of this clause and—

(a) the development is designed, sited and managed to avoid the potential adverse environmental impact, or

(b) if a potential adverse impact cannot be avoided, the development—

(i) is designed and sited so as to have minimum adverse impact, and

(ii) incorporates effective measures so as to have minimal adverse impact, and

(iii) mitigates any residual adverse impact through the restoration of any existing disturbed or modified area on the site.

Requirements of this Clause is addressed throughout this report.

The proposed development has been designed, sited and managed to avoid potential adverse environmental impacts, effective measures are incorporated to minimise adverse impacts and are detailed in Section 9 of this report. The proponent considered alternatives for siting the works and subsequently determined that the least impact to biodiversity would result from siting the development in existing cleared and earth worked areas.

3.1.4.2. The State Environmental Planning Policy (Biodiversity and Conservation) 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 (BC SEPP) consolidates several repealed SEPPs that help to manage conservation of biodiversity.

Chapter 3 Koala habitat protection 2020 of the BC SEPP applies to this project due to its land zoning, RU1 Primary Production.

This Chapter aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline—

(a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and

(b) by encouraging the identification of areas of core koala habitat, and

(c) by encouraging the inclusion of areas of core koala habitat in environment protection zones.

Under this Chapter the following steps are to be taken;

3.6 Step 1—Is the land potential koala habitat?

(1) Before a council may grant consent to a development application for consent to carry out development on land to which this Part applies, the council must be satisfied as to whether or not the land is a potential koala habitat.

(2) The council may be satisfied as to whether or not land is a potential koala habitat only on information obtained by it, or by the applicant, from a person who is qualified and experienced in tree identification.

(3) If the council is satisfied—

(a) that the land is not a potential koala habitat, it is not prevented, because of this Chapter, from granting consent to the development application, or

(b) that the land is a potential koala habitat, it must comply with section 3.7.

3.7 Step 2—Is the land core koala habitat?

(1) Before a council may grant consent to a development application for consent to carry out development on land to which this Part applies that it is satisfied is a potential koala habitat, it must satisfy itself as to whether or not the land is a core koala habitat.

(2) The council may be satisfied as to whether or not land is a core koala habitat only on information obtained by it, or by the applicant, from a person with appropriate qualifications and experience in biological science and fauna survey and management.

(3) If the council is satisfied—

(a) that the land is not a core koala habitat, it is not prevented, because of this

Chapter, from granting consent to the development application, or

(b) that the land is a core koala habitat, it must comply with section 3.8.

3.8 Step 3—Can development consent be granted in relation to core koala habitat?

(1) Before granting consent to a development application for consent to carry out development on land to which this Part applies that it is satisfied is a core koala habitat, there must be a plan of management prepared in accordance with Part 3 that applies to the land.

This SEPP is addressed in Section 6 of this report.

3.1.4.3. NSW Biodiversity Conservation Act 2016

The NSW Biodiversity Conservation Act 2016 (BC Act) has been designed to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development. It is a broad legislative tool and the key piece of NSW legislation addressing conservation matters in the state. In terms of development impact assessment and planning, the BC Act works in conjunction with the EP&A Act to deliver the NSW Biodiversity Assessment Method and the Test of Significance assessment for threatened biodiversity matters as well as the listings of threatened matters and key threatening processes.

Clause 7.2 (1) defines *"likely to significantly affect threatened species"* as;

(1) For the purposes of this Part, development or an activity is likely to significantly affect threatened species if—

(a) it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or

(b) the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or

(c) it is carried out in a declared area of outstanding biodiversity value.

An inventory of BC Act listed matters that occur or may occur in the landscape of the project site has been curated in Appendix 3 of this report. Based on the biology of each matter, its known geographic range and nearby records an assessment of risk of impact on the matter has been made, any matter that has been determined as having a real chance or possibility of being impacted has been further assessed through a Test of Significance;

7.3 Test for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats

(1) The following is to be taken into account for the purposes of determining whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats—

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity—

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

(c) in relation to the habitat of a threatened species or ecological community—

(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),

(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

Section 4, Threatened Species Populations & Ecological Communities, of this report addresses findings of desktop review of threatened biodiversity.

3.1.4.4. Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) specifies that approval is required from the Commonwealth Minister for the Environment for actions that have, will have or are likely to have a significant impact on a matter of "national environmental significance".

The Act identifies nine matters of national environmental significance being:

1) World Heritage properties
2) National heritage places
3) Wetlands of international importance (Ramsar wetlands)
4) Threatened species and ecological communities
5) Migratory species
6) Commonwealth marine areas
7) Nuclear actions (including uranium mining)
8) Great Barrier Reef Marine Park
9) Water impacts from coal seam gas and large coal mining actions

Matters number 4 (Threatened species, ecological communities) and 5 (Migratory species) are relevant to this proposal and have been addressed along with BC Act listed matters. Section 5 of this report addresses the EPBC Act.

3.1.5. Application of the Biodiversity Assessment Method

The BC Act provides a series of native vegetation clearing thresholds and the Biodiversity Values Map (BVM) to determine the necessity for the impacts on biodiversity of a development to be assessed under the Biodiversity Assessment Method (BAM) and entry to the BC Act's Biodiversity Offset Scheme (BOS). The thresholds are a native vegetation area clearing trigger, the Biodiversity Values Map trigger and the significant impact to listed matters trigger, while these triggers do not apply to Part V projects as they do to Part IV each are detailed below.

1. **Native vegetation area clearing trigger;**

On the subject land the native vegetation clearing threshold to trigger entry to the BOS is 1ha.

Native vegetation as defined by the BC Act includes all vegetation that is native to NSW, regardless of whether it is native to the subject site's bioregion or has been planted. Clearing includes all removal or destruction of native vegetation including through expected future uses of the development.

Vegetation clearing for the proposal is minimal, the proposal has been designed and sited to avoid and minimise impacts to biodiversity including clearing native vegetation. All internal roads, accessways and fences are existing and require no clearing of vegetation, proposed house sites are located in areas devoid of woody vegetation minimising the impacts of asset protection zones (APZs).

Clearing of native vegetation for the proposal is limited to the following

- Permanent removal of forbs and grasses for proposed dwellings and associated curtilage of up to 600m^2 at each dwelling site, this would include clearing required for an effluent management area at each dwelling site.
- Accommodation of APZs, clearing required is demonstrated in Table 3.1 below, APZ requirements are detailed in Appendix 1 of the Bushfire Assessment Report *Waratah Bushfire 2024*, in accordance with RFS guidelines *Standards for Asset Protection Zones*. These requirements don't require clearing of all vegetation, tree canopy cover is to be less than 15% at maturity and be separated by 5m attainment of these conditions has been considered in determining the required clearing,

Table 3-1 Clearing Required for Proposal

Proposed Lot	APZ required	Existing areas in APZ clear of native woody vegetation (meets APZ requirements)	APZ Clearing Required	Total Clearing Required
1	13 200m^2	5340m^2	6700m^2	7 900m^2
2	6 460m^2	4380m^2	880m^2	2080m^2
3	11 860m^2	1700m^2	0	0m^2
4	8 300m^2	550m^2	0	0m^2
			Total Clearing Required	**9980m^2**

As native vegetation clearing proposed is less than the 10 000m^2 trigger for this site, the native vegetation clearing trigger is not activated.

2. Biodiversity Values Map (BVM) trigger;

Several parts of the subject land are mapped on the BVM predominantly in riparian areas, the proposal has been designed to avoid impacting these BVM mapped areas and makes use of existing fencing as lot boundaries necessitating no fencing works required for the subdivision. See Figure 3-1 below BVM mapping.

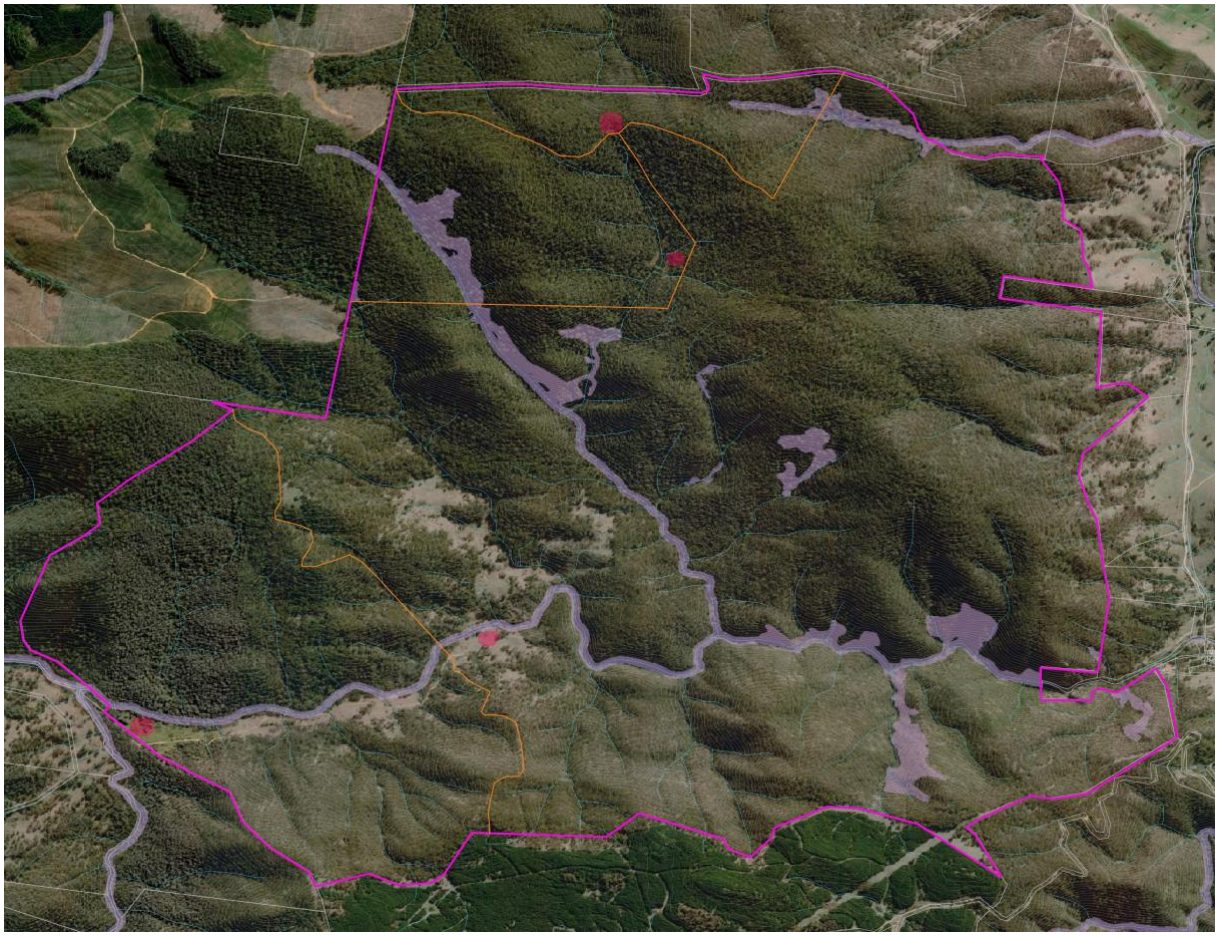

Figure 3-1 BVM Mapping in the vicinity of the project area, subject site indicated in pink, proposed dwelling sites in red and BVM mapping in purple.

3. **Significant impact to listed matters trigger;**

Where there is potential for BC Act listed matters (species, populations or ecological communities) to be impacted by the proposal a test of significance must be undertaken to determine the significance of any impact.

Where this test determines a significant impact is likely the BAM is triggered.

The potential for protected matters occurring in the study area has been assessed in the threatened matter evaluations table at Appendix 3 and are discussed in Section 4 of this report. This assessment found that no listed matter is at risk of a significant impact and this trigger is not activated.

Application of the BAM

The proposal has been designed and sited to avoid impacts to biodiversity and in doing so avoids triggering entry to the BAM. The proposal is not eligible for entry and assessment under the BOS and a BDAR is not required.

3.2. Vegetation communities and flora species

The study area occurs in an environment that has supported eucalypt dominated woodland and forest for many years prior to European settlement. These ecosystems have been progressively modified over the past 200 years, intersected by road and utility corridors and cleared for urban development and agriculture, typically grazing enterprises in the lower flatter parts of the landscape while hill tops and ridges have typically been cleared for timber and allowed to regenerate. In some parts of the landscape native vegetation communities are

relatively intact, particularly on upper slopes and ridges, however they can rarely be considered 'old growth' having suffered disturbance and clearing periodically in the past.

Throughout the assessment area there are a range of vegetation communities across the full spectrum of condition states, cleared agricultural lands dominated by exotic pasture occur particularly to the northeast, in some cases with remnants of native woodland, to the northwest and south large areas are managed softwood plantations. National Park to the north and east manage for conservation large tracts of native vegetation. Native forest also occurs on private holdings often effectively managed for conservation though often occur in degraded states.

The subject land is largely occupied by mature native forest in a high condition state, despite past land uses involving earthworks and road & track construction. The lower, flatter parts of the land typically along Micalong Creek have been cleared and managed as pasture. Each proposed house site has been cleared in the past requiring minimal impact to native vegetation.

Areas of native vegetation persisting in the landscape close to and on the subject land are mapped by the NSW State Vegetation Type Map as being of the Plant Community Types listed in Table 3-2 and illustrated in Figure 3-2 SVTM Plant Community Types;

Table 3-2 NSW State Vegetation Type Map PCTs in the vicinity of the project area

No.	PCT Name	Vegetation Form	Vegetation Class
3365	Bondo Slopes Red Stringybark Grassy Forest	Grassy Woodlands	Southern Tableland Grassy Woodlands
3297	Kosciuszko Snow Gum-Mountain Gum Moist Forest	Wet Sclerophyll Forests (Grassy sub-formation)	Southern Tableland Wet Sclerophyll Forests
3730	Bondo Slopes Dry Stringybark Forest	Dry Sclerophyll Forests (Shrubby sub-formation)	Southern Tableland Dry Sclerophyll Forests
3292	Bondo Slopes Peppermint Moist Grassy Forest	Wet Sclerophyll Forests (Grassy sub-formation)	Southern Tableland Wet Sclerophyll Forests
4126	Bondo Slopes Dry Peppermint Shrub Forest	Dry Sclerophyll Forests (Shrubby sub-formation)	Southern Tableland Dry Sclerophyll Forests
3291	Bondo Montane Valley Flats Forest	Wet Sclerophyll Forests (Grassy sub-formation)	Southern Tableland Wet Sclerophyll Forests
3377	Southwest Foothills Apple Box Grassy Forest	Grassy Woodlands	Southern Tableland Grassy Woodlands
3541	Southwest Ranges Stringybark Exposed Forest	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Upper Riverina Dry Sclerophyll Forests
3307	Kosciuszko-Namadgi Alpine Ash Moist Grassy Forest	Wet Sclerophyll Forests (Grassy sub-formation)	Montane Wet Sclerophyll Forests
3337	Bondo Frost Hollow Grassy Woodland	Grassy Woodlands	Tableland Clay Grassy Woodlands
3293	Bondo Slopes Peppermint Sheltered Fern Forest	Wet Sclerophyll Forests (Grassy sub-formation)	Southern Tableland Wet Sclerophyll Forests
3930	Bondo Montane Flats Swamp Woodland	Freshwater Wetlands	Montane Bogs and Fens

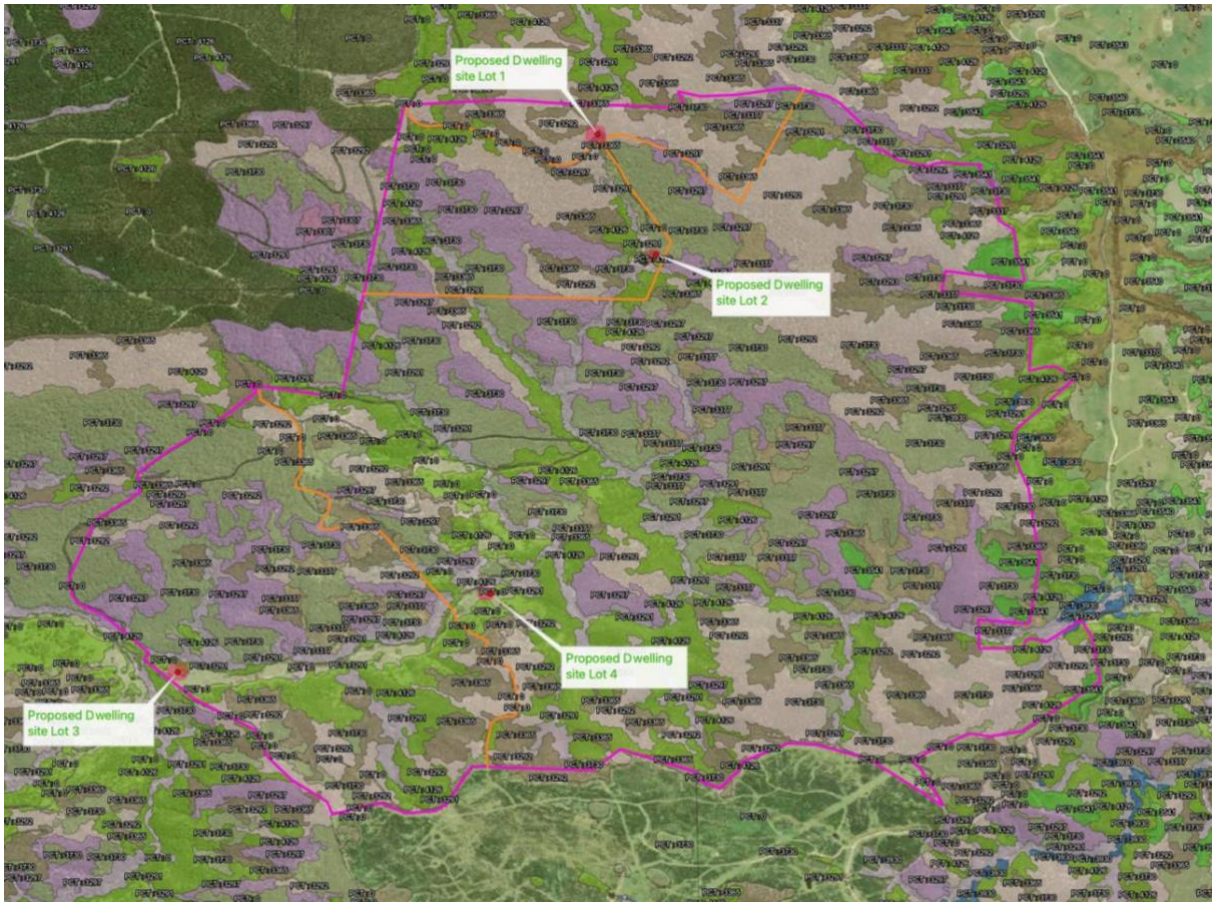

Figure 3-2, SVTM Plant Community Type mapping in the subject land, Subject land in pink, proposed dwelling sites and lot boundaries indicated.

During site inspections it was found that most of these PCTs are present, based on prima facie impressions, and reasonably accurately mapped however many of these PCTs are floristically similar and ecotones between each can be broad. Surveys in the impact areas of the proposed dwellings revealed the following;

Proposed dwelling sites 3 & 4.

These proposed dwelling sites occur largely in exotic pasture with nearby exotic landscaping. Remnant vegetation in the immediate vicinity suggest the PCT 4126 B*ondo Slopes Dry Peppermint Shrub Forest* occurred. No impact to native vegetation is proposed in these areas.

Proposed dwelling sites 1 & 2.

These proposed dwelling sites occur in areas of PCT 3730 *Bondo Slopes Dry Stringybark Forest* mostly in a high condition state however past land uses have cleared vegetation at the site of each proposed dwelling. Each of these PCTs is descried as follows;

3730 Bondo Slopes Dry Stringybark Forest

A tall dry sclerophyll open forest found on ridges and upper slopes of the Bondo subregion of the South Eastern Highlands and higher ranges in the adjacent upper NSW South Western Slopes bioregion. This PCT is known from Burrinjuck and Brindabella south to Lobs Hole Ravine and Tooma, and west to Wereboldera, Carabost and Woomargama. It occurs at elevations of 350-900 metres asl with mean annual precipitation of 850-1250 mm, on quartz-rich sedimentary, granitoid or acid volcanic substrates. A mid-dense tree canopy very frequently contains Eucalyptus macrorhyncha and/or Eucalyptus dives, commonly with Eucalyptus mannifera. The sparse to mid-dense shrub stratum commonly includes Hibbertia obtusifolia, Platylobium formosum and Melichrus urceolatus, occasionally with Monotoca

scoparia, Pimelea linifolia, Cassinia longifolia or Dillwynia phylicoides. The ground layer almost always includes the hardy forb Gonocarpus tetragynus, commonly accompanied by a diverse mix of graminoids (Lomandra filiformis, Dianella revoluta, Lomandra longifolia, Stylidium graminifolium), grasses (Poa sieberiana), small soft forbs (Wahlenbergia stricta, Hydrocotyle laxiflora) and the sprawling subshrubs Hardenbergia violacea and Hovea linearis. This community may grade into PCT 3365 on nearby footslopes and saddles with greater accumulated soil depth.

Neither PCT 4126 Bondo Slopes Dry Peppermint Shrub Forest or PCT 3730 Bondo Slopes Dry Stringybark Forest are associated with a Threatened Ecological Community.

No threatened matters were recorded as part of this assessment however it is likely that many threatened species occur on the subject land. Surveys focused on the areas of the likely impacts being the proposed dwelling sites, if threatened flora species occurred in these areas it is likely they would have been detected.

The exotic species Blackberry was recorded on the subject land which is classed as a Weed of National Significance listed under the Biosecurity Act 2015, the land manager must prevent, eliminate or minimise the biosecurity risk that this species poses so far is reasonably practical. The construction phase of the development must have strategies in place to prevent the spread of weed species on the subject land as well as on other properties.

3.3. Fauna and Fauna Habitat

The subject land offers a range of habitat components that would support the habitation, foraging and movement of a wide range of native fauna. Diverse arboreal habitat is common and widespread across much of the land, trees of a range of age classes and species are present, supporting fissures and small hollows suited to small birds, arboreal mammals and tree roosting bats as well as medium and large hollows suited to birds and arboreal mammals.

Foraging habitat present is suited to fauna adapted to dry sclerophyll forest ecosystems, particularly those that require mature intact vegetation. The abundant wattles offer sap that is of use to several fauna particularly sugar gliders.

Seasonally flowering/ fruiting grasses and forbs offer nectar for short periods of the year which are an important part of the diet of many insects and birds.

Insectivorous birds and bats as well as carnivorous fauna are generally also able to forage across this site particularly at warmer times of the year during periods of greater biotic activity.

The several watercourses that traverse the project site are valuable habitat providing a water source for all fauna and habitat for frogs and other fauna making use of water plants. These wetland areas are in particularly good condition for a rural landscape and form a hub of ecological activity.

Continuity across the study area as well as beyond the study area across the landscape is very good, generally there is very little disruption to connecting habitats, impediments include narrow tracks, minor roads, and cleared corridors of agricultural lands.

The subject land's close proximity to large areas of intact forest as well as woodland remnants across the landscape significantly increases its value to fauna, it is likely that a range of fauna make use of resources in the subject land.

A range of birds including Australian magpie, laughing kookaburra white wing chough and crimson rosellas were observed, along with signs of macropods.

As formal fauna surveys were not undertaken habitats available were considered for their potential to support threatened species.

No threatened fauna species were recorded however the quality and diversity of habitats present are suited to a range of fauna listed under the BC Act and the EPBC Act, see Appendix 3 for specific discussion of potentially occurring species.

Each proposed dwelling site was considered for threatened fauna habitat and found to not support specific habitat resources or connectivity features important to threatened fauna that are not also widely available throughout the subject land.

3.4. Impacts

The proposal is to subdivide the lands for the purposes of developing 4 rural lots being 75ha, 140ha, 388ha and a residual lot of 1410ha. Each lot will be provisioned with a building envelope for residential dwelling with asset protection zones and effluent management areas.

The development makes use of existing accesses and internal roads, fencing and cleared areas for proposed dwelling sites. This design avoids and significantly minimises impacts to biodiversity however, the following impacts to biodiversity would be required to accommodate required APZs, all impacts for each proposed dwelling site occurs within the areas described below.

- Proposed Lot 1; Clearing of 7 900m^2 of high condition Bondo Slopes Dry Stringybark Forest
- Proposed Lot 2; Clearing of 2 080m^2 of high condition Bondo Slopes Dry Stringybark Forest
- No native vegetation impacts for proposed Lot 3 & 4 are required, up to 1200m2 of exotic pasture grasses will be impacted, this impact to biodiversity is negligible.
- No impacts to vegetation for roads, tracks or accessways are required.

Construction impacts

Total biodiversity impacts of the proposal is the permanent removal of 9980m^2 of high condition Bondo Slopes Dry Stringybark Forest.

Temporary impacts

Stockpiling & compound areas to be used during construction will occur within cleared areas of the APZs described above.

Erosion and sediment controls will be employed where required and be low impact, not requiring the removal of mature trees.

Temporary impacts will not add to the total construction impacts.

Operation phase impacts

The operation of the development would result in impacts consistent with the existing uses of the subject land, land uses or zoning will not change. While these rural residential impacts will increase they are negligible particularly given the size of land they are distributed over.

Consideration of combined impacts

The magnitude of impact on biodiversity values of the proposed development are low, no vegetation communities or habitats will be significantly modified or impacted to an extent that they would become limited in the landscape or hinder biological continuity or resilience.

4. Threatened Species, Populations and Ecological Communities

The potential for protected matters to be impacted by the proposed development has been assessed in the threatened matter evaluations table at Appendix 3 of this report.

The findings of this assessment are as follows;

4.1. Threatened species

Appendix 3 addressed 86 listed species that have been recorded within 10km of the study area or wider areas of the Southern Tablelands and considered to have some potential to occur on the subject land. This preliminary threatened species assessment considered each of these species in the context of the proposed impacts to vegetation, specifically the removal of 9980m^2 of high condition *Bondo Slopes Dry Stringybark Forest*. Following this assessment, it was considered that the following 4 species could make use of habitat to be removed, the significance of impact on these species has been considered through a Test of Significance undertaken in line with the Threatened Species Test of Significance Guidelines, OEH 2018.

- *Petauroides Volans*
  Greater glider
- *Petaurus australis*
  yellow-bellied glider
- *Petaurus norfolcensis*
  Squirrel glider
- *Phascogale tapoatafa*
  Brush-tailed phascogale

Following the Test of Significance it was found a significant impact on these species was **not likely** to occur as a result of the proposal for the following reasons;

• The proposal will not affect the lifecycle of these species such that the local population will be at risk of loss

- The proposal will not remove any potential important habitat for these species
- The proposal will not fragment or isolate potential habitat for these species
- Key threatening processes are minor
- The proposal will not impact areas of Outstanding Biodiversity Value
- Indirect impacts are not of a scale that are likely to impact these species or their habitat.

No other Threatened Species listed under the BC Act were considered likely to occur on the site or be impacted by the proposal.

4.1. Endangered Populations

No Endangered Populations listed under the BC Act have been considered likely to be at risk of impact by the proposal.

4.2. Threatened Ecological Communities

Appendix 3 addressed 2 listed communities, following this assessment, it was considered that no community warranted further assessment due to not being present.

5. Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) specifies that approval is required from the Commonwealth Minister for the Environment for actions that have, will have or are likely to have a significant impact on a matter of "national environmental significance" of the nine matters of national environmental significance, Matters number 4 (Threatened species, ecological communities) and 5 (Migratory species) are relevant to this proposal.

5.1. Threatened Species & Ecological Communities:

Threatened species listed under this act have been considered in the Appendix 3 assessment along with NSW BC Act listed species.

The Commonwealth Environment Department protected matters search tool was used to highlight any maters of national environmental significance that could be of concern. No additional matters were considered likely to be impacted by the proposal.

5.2. Migratory Species:

In addition to threatened species and ecological communities, the EPBC Act allows for the listing of internationally protected migratory species, i.e. species listed under the Japan-Australia Migratory Bird Agreement (JAMBA), the China - Australia Migratory Bird Agreement (CAMBA) and the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).

No protected migratory species were observed on site at the time of this assessment or considered likely to occur on the site or rely on resources provided by its habitat.

6. State Environmental Planning Policy (Biodiversity and Conservation) 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 (BC SEPP) consolidates several repealed SEPPs that help to manage conservation of biodiversity.

6.1. Chapter 3 Koala habitat protection 2020

Chapter 3 Koala habitat protection 2020 applies to the whole of the subject land being zoned RU1 Primary Production.

This Chapter aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline. In the context of this proposal the following sections are applied;

3.6 Step 1—Is the land potential koala habitat?

(1) Before a council may grant consent to a development application for consent to carry out development on land to which this Part applies, the council must be satisfied as to whether or not the land is a potential koala habitat.

(2) The council may be satisfied as to whether or not land is a potential koala habitat only on information obtained by it, or by the applicant, from a person who is qualified and experienced in tree identification.

(3) If the council is satisfied—

(a) that the land is not a potential koala habitat, it is not prevented, because of this Chapter, from granting consent to the development application, or

(b) that the land is a potential koala habitat, it must comply with section 3.7.

3.7 Step 2—Is the land core koala habitat?

(1) Before a council may grant consent to a development application for consent to carry out development on land to which this Part applies that it is satisfied is a potential koala habitat, it must satisfy itself as to whether or not the land is a core koala habitat.

(2) The council may be satisfied as to whether or not land is a core koala habitat only on information obtained by it, or by the applicant, from a person with appropriate qualifications and experience in biological science and fauna survey and management.

(3) If the council is satisfied—

(a) that the land is not a core koala habitat, it is not prevented, because of this Chapter, from granting consent to the development application, or

(b) that the land is a core koala habitat, it must comply with section 3.8.

1. Is the land potential koala habitat?

Potential koala habitat is present across the subject land and in the impact areas.

2. Is the land core koala habitat?

The BC SEPP defines *core koala habitat* as *an area of land with a resident population of koalas, evidenced by attributes such as breeding females, being females with young, and recent sightings of and historical records of a population*.

No indications of a resident koala population were detected on the subject land or observed in the impact areas, it is unlikely to be *core koala habitat*.

The proposal *is likely to have low or no impact on koalas or koala habitat*.

7. NSW Fisheries Management Act 1994

The FM Act aims to conserve, develop, and share the fishery resources of NSW for the benefit of present and future generations. In particular, the objects of this Act are to:

- Conserve fish stocks and key fish habitats
- Conserve threatened species, populations and ecological communities of fish and marine vegetation
- Promote ecologically sustainable development, including the conservation of biological diversity.

This BAR considers the parts of the FM Act that relate to biodiversity.

The FM Act identifies threatened aquatic species, populations and ecological communities and requires an assessment of significance for potential significant impacts to any of these entities.

Several waterways on the subject land are mapped as Key Fish Habitat, being Micalong Creek, Racecourse Creek and 4 tributaries to this system. The proposal does not require works in or near these waterways. In all cases APZs required are outside a 20m buffer of the waterways and no tracks or waterway crossings require works as part of the proposal.

Works will not cause any short or long-term alteration to water levels or flow, obstruction of fish passage or adverse impacts on fish habitat.

No species, populations or communities listed under this act were recorded on site at the time of this assessment or are considered likely to occur on this site. No Tests of Significance have been prepared for species protected by this act in relation to the proposed development.

8. Assessment of the Biodiversity Impact

Considering the information detailed above that has been summarised from information collected during field and desktop investigations and assessments of significance for threatened species and communities the following final assessments are made.

8.1. Direct Impacts

The proposal will result in the following direct impacts on biodiversity;

- Permanent removal of 9980m^2 of high condition Bondo Slopes Dry Stringybark Forest.

Measures to offset this vegetation removal have not been considered warranted as the impact is highly diluted in a large area of similar contiguous habitat. The impacted vegetation is less than 1ha (>0.005%) of over 20 000ha of continuous native forest within 10km of the subject land. Additionally, the subject land does not offer any sites suitable for offsetting measures.

No unique habitat resources, such as old hollow bearing trees, are impacted by the proposal.

8.2. Indirect Impacts

Construction and operation impacts are confined to the subject land in close proximity to the proposed dwelling sites, it is very unlikely biodiversity will be indirectly impact by the development particularly considering the dilution of the impact in a very large area of habitat.

There is potential however for the works to spread weed material across the project area or to other sites, impact mitigation measures at Section 9 of this report mitigate this risk.

8.3. Potential Impacts on Flora

Vegetation impacts described above will not significantly impact any threatened flora or endangered ecological communities. Land uses will be consistent with current land uses of the site.

The proposal will not involve the removal of any important or significant vegetation – in the context of the habitats present across the subject land or significantly degrade the ecological value of the project area.

8.4. Potential Impacts on Fauna and Habitat

No areas important habitat components for fauna will be impacted – in the context of the habitats present across the subject land. Habitat resources impacted are all common and widespread on the subject land and throughout the landscape. Impacts will not fragment habitat to any extent than is currently the case and will not impede the movement of fauna.

9. Impact Mitigation Measures

The following impact mitigation measures are recommended for adoption to reduce the likelihood of any negative impacts on flora and fauna associated with this proposal both in the short and long term.

Table 3 Impact mitigation measures

Impact	Mitigation measure	Techniques	timing	Responsibility
Displacement of resident fauna	Vegetation management plan	A vegetation management plan must be prepared by a suitably qualified and experienced person to manage the clearing and grubbing of native vegetation for the works and to protect vegetation that is not to be impacted. This plan is to be implemented and meet the following criteria; • The plan will be prepared with consideration of the final construction plans for the works • The plan will ensure that unique and important habitat resources such as hollow bearing trees or foraging habitat is protected • The plan will include details of implementation of other mitigation measures detailed below	Pre-Construction	Constriction contractor & developer
	Scheduled clearing	Clearing trees is not to occur during spring when there	Construction phase	Constriction contractor &

Impact	Mitigation measure	Techniques	timing	Responsibility
		is a higher possibility of the trees on the site being used for nesting		developer
	Pre-clearing surveys	Within 5 days before proposed clearing of trees a suitably qualified and experienced ecologist will survey trees to be cleared for nesting fauna. If nesting fauna is present clearing is to be delayed until such time as the fauna has ceased using the tree as breeding habitat and a further pre-clearing survey, as described above confirms the trees are not being used as breeding habitat	Pre-construction & construction phase	Constriction contractor & developer
Impacts to retained vegetation	Marking of clearing limits	Clearing limits are to be established and demarcated onsite using a distinct physical barrier prior to the commencement of clearing works. This will be designated as a 'no go' area for plant, equipment, vehicles and stockpiling. Where an erosion and sediment control plan requires operation in this area for effective erosion and sediment control this will be permitted	Pre-construction & construction phase	Constriction contractor & developer

Impact	Mitigation measure	Techniques	timing	Responsibility
Impacts to vegetation at new lot boundary	Legally enforceable covenant	There is to be a Restriction as to User under *Section 88E* of the *Conveyancing Act 1919*, (or similar effective instrument) the prescribed authority being Yass Valley Council, affecting Lots 1, 2, 3 & 4 including the following: No vegetation is to be cleared or removed from the boundary area other than for weed control, without the written approval of the Yass Valley Council.	Implemented at subdivision, enforced permanently	Developer
Additional impacts to intact native vegetation	No additional fencing of boundaries in native forest	Low impact marker posts such as painted star pickets may be used	Construction phase/ post construction	Constriction contractor & developer
Promotion of invasive exotic species	Weed management plan	A weed management plan is to be prepared and implemented	Construction phase & post construction	Constriction contractor & developer
	Prevent importation of weed material	All plant and equipment to be used in the construction of the proposal will be cleaned and weed free prior to entry to the site	Construction phase	Constriction contractor & developer
	Promote locally native vegetation and prohibit invasive	In order to minimise indirect impacts of future land uses, future development on resulting lots are	Future Development Application	Future landowners

Impact	Mitigation measure	Techniques	timing	Responsibility
	exotic vegetation	to adopt a landscape plan that incorporates locally native vegetation and prohibits invasive exotic vegetation (environmental or agricultural weeds)		
Indirect impacts on receiving waters	Implement ESCP	An Erosion and Sediment Control Plan (ESCP) for the construction of the development is to be prepared and implemented in accordance with "*The Blue Book*" (Landcom, 2004) and issuance of any subsequent construction certificate for the works is to consider the adequacy of this ESCP	Pre-construction, construction & post construction	Constriction contractor & developer

10. Conclusion

This report has assessed the flora and fauna associated with the subject land and the extent and nature of impacts on biodiversity of the proposed works to develop a 4 lot rural subdivision.

The proposed development has been designed and sited so as to avoid and minimise impacts to biodiversity values. Residual impacts have been considered through this assessment which has found impacts on biodiversity to be low and manageable in the context of the landscape.

Tests of Significance were undertaken for the following matters in accordance with the NSW DPIE Threatened Species Test of Significance Guidelines;

- *Petauroides Volans*
  Greater glider
- *Petaurus australis*
  yellow-bellied glider
- *Petaurus norfolcensis*
  Squirrel glider
- *Phascogale tapoatafa*
  Brush-tailed phascogale

These tests concluded the proposal was not likely to result in a significant impact to any of these listed matters.

It is essential that this report's impact mitigation measures be implemented in order to manage potential weed issues on the site and ensure that adjoining lands are not impacted.

The proposal is not likely to have a significant impact on listed threatened species, populations or ecological communities.

There are no other biodiversity issues associated with this proposal the net impact of this proposal on flora and fauna and biodiversity generally will be negligible.

11. References

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Appendix 1 – Site Photographs

Photo 1; Site of proposed dwelling Lot 4, typical view of exotic grassland parts of subject land, in which proposed dwelling sites of Lot 3&4 occur.

Photo 2; Site of proposed dwelling Lot 3, no clearing of native vegetation required

Photo 3; Site of proposed dwelling Lot 3, no clearing of native vegetation required

Photo 4; Predominantly cleared area of dwelling site on proposed Lot 2.

Photo 3; site of proposed lot 1 dwelling, largely cleared of woody vegetation from past land uses.

Photo 6, Example of existing internal tracks & fencing in very good condition.

Appendix 2 – Flora Recorded

Family	Species	Common Name	Exotic	BC Status	EPBC Status
Anthericaceae	*Thysanotus tuberosus*	Common Fringe-lily			
Apiaceae	*Daucus glochidiatus*	Native Carrot			
Apiaceae	*Hydrocotyle laxiflora*	Stinking Pennywort			
Apiaceae	*Hydrocotyle tripartita*	Pennywort			
Apiaceae	*Oreomyrrhis eriopoda*	Australian Carraway			
Asparagaceae	*Arthropodium strictum*	Chocolate Lily			
Asphodelaceae	*Bulbine bulbosa*	Bulbine Lily			
Asphodelaceae	*Bulbine glauca*	Rock Lily			
Asphodelaceae	*Dianella longifolia*	Blueberry Lily			
Aspleniaceae	*Asplenium flabellifolium*	Necklace Fern			
Aspleniaceae	*Pleurosorus rutifolius*	Bristly Cloak Fern			
Asteraceae	*Brachyscome aculeata*	Hill Daisy			
Asteraceae	*Calotis scabiosifolia var. integrifolia*	Rough Burr-daisy			
Asteraceae	*Carthamus lanatus*	Saffron Thistle	*		
Asteraceae	*Carthamus spp.*		*		
Asteraceae	*Cassinia aculeata*	Dolly Bush			
Asteraceae	*Centipeda minima subsp. minima*	spreading sneezeweed			
Asteraceae	*Chrysocephalum apiculatum*	Common Everlasting			
Asteraceae	*Cirsium vulgare*	Spear Thistle	*		
Asteraceae	*Conyza spp.*		*		
Asteraceae	*Craspedia variabilis*	Common Billy-buttons		P	
Asteraceae	*Cymbonotus lawsonianus*	Bear's Ear			
Asteraceae	*Euchiton sphaericus*	Star Cudweed			
Asteraceae	*Euchiton spp.*				
Asteraceae	*Hypochaeris radicata*	Catsear	*		
Asteraceae	*Lactuca serriola*	Prickly Lettuce	*		
Asteraceae	*Leptorhynchos squamatus*	Scaly Buttons			
Asteraceae	*Olearia spp.*				
Asteraceae	*Senecio hispidulus*	Hill Fireweed			
Asteraceae	*Silybum marianum*	Variegated Thistle	*		

Family	Species	Common Name	Exotic	BC Status	EPBC Status
Asteraceae	*Sonchus asper*	Prickly Sowthistle	*		
Asteraceae	*Vittadinia cuneata var. cuneata*				
Asteraceae	*Xerochrysum viscosum*	Sticky Everlasting			
Blechnaceae	*Blechnum minus*	Soft Water Fern			
Blechnaceae	*Blechnum nudum*	Fishbone Water Fern			
Boraginaceae	*Echium plantagineum*	Patterson's Curse	*		
Brassicaceae	*Brassica spp.*	Brassica	*		
Brassicaceae	*Capsella bursa-pastoris*	Shepherd's Purse	*		
Campanulaceae	*Lobelia gibbosa*	Tall Lobelia			
Campanulaceae	*Wahlenbergia communis*	Tufted Bluebell			
Campanulaceae	*Wahlenbergia gracilis*	Sprawling Bluebell			
Caryophyllaceae	*Petrorhagia nanteuilii*	Proliferous Pink	*		
Caryophyllaceae	*Stellaria pungens*	Prickly Starwort			
Chenopodiaceae	*Einadia nutans*	Climbing Saltbush			
Clusiaceae	*Hypericum gramineum*	Small St John's Wort			
Clusiaceae	*Hypericum perforatum*	St. Johns Wort	*		
Convolvulaceae	*Convolvulus erubescens*	Pink Bindweed			
Convolvulaceae	*Dichondra repens*	Kidney Weed			
Crassulaceae	*Crassula sieberiana*	Australian Stonecrop			
Cyperaceae	*Carex appressa*	Tall Sedge			
Cyperaceae	*Carex inversa*	Knob Sedge			
Cyperaceae	*Carex spp.*				
Cyperaceae	*Lepidosperma laterale*	Variable Sword-sedge			
Dilleniaceae	*Hibbertia obtusifolia*	Hoary Guinea Flower			
Ericaceae	*Astroloma humifusum*	Native Cranberry			
Ericaceae	*Brachyloma daphnoides*	Daphne Heath			
Ericaceae	*Epacris microphylla*	Coral Heath			
Ericaceae	*Leucopogon ericoides*	Pink Beard-heath			
Ericaceae	*Lissanthe strigosa*	Peach Heath			

Family	Species	Common Name	Exotic	BC Status	EPBC Status
Fabaceae (Faboideae)	*Daviesia latifolia*	Bitter-pea			
Fabaceae (Faboideae)	*Dillwynia spp.*				
Fabaceae (Faboideae)	*Glycine clandestina*	Twining glycine			
Fabaceae (Faboideae)	*Hardenbergia violacea*	False Sarsaparilla			
Fabaceae (Faboideae)	*Hovea linearis*				
Fabaceae (Faboideae)	*Indigofera australis*	Australian Indigo			
Fabaceae (Faboideae)	*Medicago spp.*		*		
Fabaceae (Faboideae)	*Platylobium formosum*				
Fabaceae (Faboideae)	*Pultenaea spp.*				
Fabaceae (Mimosoideae)	*Acacia dealbata*	Silver Wattle			
Fabaceae (Mimosoideae)	*Acacia gunnii*	Ploughshare Wattle			
Fabaceae (Mimosoideae)	*Acacia melanoxylon*	Blackwood			
Fabaceae (Mimosoideae)	*Acacia rubida*	Red-stemmed Wattle			
Fabaceae (Mimosoideae)	*Acacia ulicifolia*	Prickly Moses			
Gentianaceae	*Centaurium spp.*		*		
Geraniaceae	*Geranium retrorsum*	Cranesbill Geranium			
Geraniaceae	*Geranium solanderi*	Native Geranium			
Goodeniaceae	*Goodenia hederacea subsp. hederacea*				
Haloragaceae	*Gonocarpus tetragynus*	Poverty Raspwort			
Haloragaceae	*Haloragis heterophylla*	Variable Raspwort			
Juncaceae	*Juncus spp.*				
Juncaceae	*Luzula densiflora*	Woodrush			
Lamiaceae	*Marrubium vulgare*	White Horehound	*		
Lomandraceae	*Lomandra confertifolia*	Matrush			
Lomandraceae	*Lomandra filiformis*	Wattle Matt-rush			

Family	Species	Common Name	Exotic	BC Status	EPBC Status
Lomandraceae	*Lomandra longifolia*	Spiny-headed Mat-rush			
Loranthaceae	*Amyema pendula subsp. pendula*				
Lythraceae	*Lythrum hyssopifolia*	Hyssop Loosestrife			
Malvaceae	*Brachychiton populneus*	Kurrajong			
Myrtaceae	*Callistemon sieberi*	River Bottlebrush			
Myrtaceae	*Calytrix tetragona*	Common Fringe-myrtle			
Myrtaceae	*Eucalyptus bridgesiana*	Apple Box			
Myrtaceae	*Eucalyptus dalrympleana*	Mountain Gum			
Myrtaceae	*Eucalyptus dives*	Broad-leaved Peppermint			
Myrtaceae	*Eucalyptus macrorhyncha*	Red Stringybark			
Myrtaceae	*Eucalyptus mannifera*	Brittle Gum			
Myrtaceae	*Eucalyptus radiata*	Narrow-leaved Peppermint			
Myrtaceae	*Eucalyptus rubida subsp. rubida*				
Myrtaceae	*Eucalyptus viminalis*	Ribbon Gum			
Myrtaceae	*Leptospermum multicaule*	Silver Tea-tree			
Orchidaceae	*Caladenia spp.*			P	
Pinaceae	*Pinus radiata*	Radiata Pine	*		
Pittosporaceae	*Billardiera spp.*				
Pittosporaceae	*Bursaria spinosa*	Native Blackthorn			
Plantaginaceae	*Plantago lanceolata*	Lamb's Tongues	*		
Plantaginaceae	*Plantago spp.*	Plantain			
Poaceae	*Aira spp.*		*		
Poaceae	*Anthoxanthum odoratum*	Sweet Vernal Grass	*		
Poaceae	*Austrostipa spp.*				
Poaceae	*Avena spp.*	Oats	*		
Poaceae	*Bothriochloa macra*	Red Grass			
Poaceae	*Briza maxima*	Quaking Grass	*		
Poaceae	*Bromus spp.*				
Poaceae	*Cynodon dactylon*	Common Couch			
Poaceae	*Dichelachne hirtella*	Plumegrass			

Family	Species	Common Name	Exotic	BC Status	EPBC Status
Poaceae	*Echinopogon ovatus*	Forest Hedgehog Grass			
Poaceae	*Holcus lanatus*	Yorkshire Fog	*		
Poaceae	*Hordeum leporinum*	Barley Grass	*		
Poaceae	*Microlaena stipoides*	Weeping Grass			
Poaceae	*Panicum effusum*	Hairy Panic			
Poaceae	*Phalaris aquatica*	Phalaris	*		
Poaceae	*Poa sieberiana*	Snowgrass			
Poaceae	*Rytidosperma spp.*				
Polygonaceae	*Rumex brownii*	Swamp Dock			
Proteaceae	*Lomatia myricoides*	River Lomatia			
Pteridaceae	*Cheilanthes sieberi*	Rock Fern			
Rosaceae	*Acaena echinata*	Sheep's Burr			
Rosaceae	*Rosa rubiginosa*	Sweet Briar	*		
Rosaceae	*Rubus fruticosus sp. agg.*	Blackberry complex	*		
Rosaceae	*Rubus parvifolius*	Native Raspberry			
Rubiaceae	*Asperula conferta*	Common Woodruff			
Rubiaceae	*Galium gaudichaudii*	Rough Bedstraw			
Santalaceae	*Exocarpos cupressiformis*	Cherry Ballart			
Sapindaceae	*Dodonaea viscosa*	Sticky Hop-bush			
Scrophulariaceae	*Verbascum thapsus subsp. thapsus*	Great Mullein	*		
Scrophulariaceae	*Verbascum virgatum*	Twiggy Mullein	*		
Solanaceae	*Solanum nigrum*	Black-berry Nightshade	*		
Stackhousiaceae	*Stackhousia monogyna*	Creamy Candles			
Stylidiaceae	*Stylidium graminifolium*	Grass Triggerplant			
Urticaceae	*Urtica urens*	Small Nettle	*		
Violaceae	*Viola betonicifolia*	Native Violet			

Appendix 3 – Threatened Matter Evaluations Table

Type	Species	BC Act Status	EPBC Act Status	Risk of Impact
Marsupials	*Cercartetus nanus*	Vulnerable		May occur in subject land where flowering understory plants occur, however not in impacted areas, not at risk of impact
Marsupials	*Dasyurus maculatus*	Vulnerable	Endangered	May occur across subject land however impacted areas are not an important part of the large home range of this species, not at risk of impact
Marsupials	*Isoodon obesulus obesulus*	Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Marsupials	*Petauroides volans*	Endangered	Endangered	Likely to occur in impacted area, see Test of Significance
Marsupials	*Petaurus australis*	Vulnerable	Vulnerable	Likely to occur in impacted area, see Test of Significance
Marsupials	*Petaurus norfolcensis*	Vulnerable		Likely to occur in impacted area, see Test of Significance
Marsupials	*Phascogale tapoatafa*	Vulnerable		Likely to occur in impacted area, see Test of Significance
Marsupials	*Phascolarctos cinereus*	Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Rodents	*Mastacomys fuscus*	Vulnerable	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Rodents	*Pseudomys fumeus*	Critically Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Bats	*Chalinolobus dwyeri*	Vulnerable	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Bats	*Chalinolobus picatus*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Bats	*Falsistrellus tasmaniensis*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Bats	*Miniopterus orianae oceanensis*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Bats	*Pteropus poliocephalus*	Vulnerable	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact

Type	Species	BC Act Status	EPBC Act Status	Risk of Impact
Birds	*Anthochaera phrygia*	Critically Endangered	Critically Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Ardeotis australis*	Endangered		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Artamus cyanopterus cyanopterus*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Botaurus poiciloptilus*	Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Burhinus grallarius*	Endangered		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Callocephalon fimbriatum*	Vulnerable	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Calyptorhynchus lathami lathami*	Vulnerable	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Chthonicola sagittata*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Circus assimilis*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Climacteris picumnus victoriae*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Daphoenositta chrysoptera*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Ephippiorhynchus asiaticus*	Endangered		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Falco subniger*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Glossopsitta porphyrocephala*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact

Type	Species	BC Act Status	EPBC Act Status	Risk of Impact
Birds	*Glossopsitta pusilla*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Grantiella picta*	Vulnerable	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Haliaeetus leucogaster*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Hamirostra melanosternon*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Hieraaetus morphnoides*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Hylacola cautus*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Ixobrychus flavicollis*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Lathamus discolor*	Endangered	Critically Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Limicola falcinellus*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Lophoictinia isura*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Melanodryas cucullata cucullata*	Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Melithreptus gularis gularis*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Ninox connivens*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Ninox strenua*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact

Type	Species	BC Act Status	EPBC Act Status	Risk of Impact
Birds	*Pachycephala inornata*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Pachycephala olivacea*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Petroica boodang*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Petroica phoenicea*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Petroica rodinogaster*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Polytelis swainsonii*	Vulnerable	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Pomatostomus temporalis temporalis*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Stagonopleura guttata*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Tyto novaehollandiae*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Birds	*Tyto tenebricosa*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Crinia sloanei*	Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Litoria aurea*	Endangered	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Litoria booroolongensis*	Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Litoria castanea*	Critically Endangered	Critically Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact

Type	Species	BC Act Status	EPBC Act Status	Risk of Impact
Amphibians	*Litoria raniformis*	Endangered	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Litoria spenceri*	Critically Endangered	Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Litoria verreauxii alpina*	Endangered	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Mixophyes balbus*	Endangered	Vulnerable	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Pseudophryne corroboree*	Critically Endangered	Critically Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Amphibians	*Pseudophryne pengilleyi*	Critically Endangered	Critically Endangered	May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Reptiles	*Aprasia parapulchella*	Vulnerable	Vulnerable	Requires specific habitat components which are not present, not at risk of impact
Reptiles	*Delma impar*	Vulnerable	Vulnerable	Requires specific habitat components which are not present, not at risk of impact
Reptiles	*Varanus rosenbergi*	Vulnerable		May occur in subject land however does not rely on resources present in impacted areas, not at risk of impact
Invertebrates	*Paralucia spinifera*	Endangered	Vulnerable	Requires specific habitat components which are not present, not at risk of impact
Invertebrates	*Synemon plana*	Vulnerable	Vulnerable	Requires specific habitat components which are not present, not at risk of impact
Shrubs	*Discaria nitida*	Vulnerable		Not recorded in impact area, not at risk of impact
Shrubs	*Pimelea bracteata*	Critically Endangered		Not recorded in impact area, not at risk of impact
Shrubs	*Pomaderris cotoneaster*	Endangered	Endangered	Not recorded in impact area, not at risk of impact
Shrubs	*Pultenaea humilis*	Vulnerable		Not recorded in impact area, not at risk of impact
Herbs and Forbs	*Ammobium craspedioides*	Vulnerable	Vulnerable	Not recorded in impact area, not at risk of impact
Herbs and Forbs	*Carex raleighii*	Endangered		Not recorded in impact area, not at risk of impact
Herbs and Forbs	*Leucochrysum albicans subsp. tricolor*	Endangered	Endangered	Not recorded in impact area, not at risk of impact
Herbs and Forbs	*Senecio garlandii*	Vulnerable		Not recorded in impact area, not at risk of impact

Type	Species	BC Act Status	EPBC Act Status	Risk of Impact
Herbs and Forbs	*Swainsona sericea*	Vulnerable		Not recorded in impact area, not at risk of impact
Herbs and Forbs	*Thesium australe*	Vulnerable	Vulnerable	Not recorded in impact area, not at risk of impact
Orchids	*Caladenia concolor*	Endangered	Vulnerable	Not recorded in impact area, not at risk of impact
Orchids	*Prasophyllum bagoense*	Critically Endangered	Critically Endangered	Not recorded in impact area, not at risk of impact
Orchids	*Prasophyllum keltonii*	Critically Endangered	Critically Endangered	Not recorded in impact area, not at risk of impact
Orchids	*Pterostylis alpina*	Vulnerable		Not recorded in impact area, not at risk of impact
Orchids	*Pterostylis foliata*	Vulnerable		Not recorded in impact area, not at risk of impact
Orchids	*Pterostylis oreophila*	Critically Endangered	Critically Endangered	Not recorded in impact area, not at risk of impact
Orchids	*Thelymitra alpicola*	Vulnerable		Not recorded in impact area, not at risk of impact

Appendix 4 – Threatened Species Tests of Significance

Threatened Species Test of Significance

Tests of significance are prepared in accordance with the NSW DPIE Threatened Species Test of Significance Guidelines (OEH 2018) in the context of the proposed development and expected future uses as outlined in the Biodiversity Assessment Report, specifically;

- To subdivide the lands for the purposes of developing 4 residential lots being 75ha, 140ha, 388ha and a residual lot of 1410ha.
- To permanently remove 9980m^2 of high condition Bondo Slopes Dry Stringybark Forest to accommodate APZs for dwelling sites on proposed lot 1&2.

Conditions provided at Section 9 of the Biodiversity Assessment must be implemented.

Assessment of Significance for the threatened species;

Common Name	Species	BC Act Status	EPBC Act Status
Greater glider	*Petauroides volans*	Endangered	Endangered
Yellow-bellied glider	*Petaurus australis*	Vulnerable	Vulnerable
Squirrel glider	*Petaurus norfolcensis*	Vulnerable	
Brush-tailed phascogale	*Phascogale tapoatafa*	Vulnerable	

In the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

These arboreal mammals make use of intact, mature native forests, in the local area over 20 000ha of such forest occurs, they are dependent on forest with mature trees bearing hollows as well as a variety of tree species.

The Threatened Species Test of Significance Guidelines (OEH 2018) define the local population as;

> *The local population of resident fauna species comprises those individuals known or likely to occur in the study area, as well as any individuals occurring in adjoining areas (contiguous or otherwise) that are known or likely to utilise habitats in the study area*

Each of these threatened species is likely to occur in the subject land and adjoining native forest. Proposed works will impact less than 1ha of suitable habitat for these species being less than 0.005% of the habitat available to the local population, additionally the habitat impacted does not include unique or important features such as large old hollow bearing trees, a resource that is common elsewhere across the subject land.

The proposal will not fragment the local population of these species or disrupt their lifecycle processes in any way, indirect impacts are not of a magnitude that will have an adverse effect on the life cycle of the species and its viability is not at risk of decline due to the proposal.

In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

i.is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

ii.is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

Not Applicable, entity is not a community.

In relation to the habitat of a threatened species or ecological community:

i. the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and

ii. whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and

iii. the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

Works will impact two small areas of suitable habitat for these species, 7 900m^2 on proposed Lot 1 and 2080m^2 on proposed Lot 2. In each case impacted vegetation adjoins existing clearing and tracks associated with past land uses. Consequently the vegetation impacted suffers edge effects and is of lesser value to these threatened species than the remaining native forest across the subject land, additionally the habitat impacted does not include unique or important features such as large old hollow bearing trees, a resource that is common elsewhere across the subject land.

Works will not fragment or isolate any potential habitat for this species.

The habitat impacted by the works is not important to the long term survival of the species being a small, less than 0.005% of the habitat available locally.

Whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),

There are no areas of declared areas of outstanding biodiversity value in proximity of the project area, due to this separation there is no chance that the activity will either directly or indirectly impact an Area of Outstanding Biodiversity Value.

Whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

The action includes the key threatening process;

- Clearing of native vegetation

Up to 9980m^2 of high condition Bondo Slopes Dry Stringybark Forest would be impacted to accommodate APZs for the proposal. This is a small and insignificant impact in the context of the vast area of Bondo Slopes Dry Stringybark Forest and other native forest present in the local area.

Conclusions
Following the above assessment, a significant impact on;

- Greater glider *Petauroides volans*
- Yellow-bellied glider *Petaurus australis*
- Squirrel glider *Petaurus norfolcensis*
- Brush-tailed phascogale *Phascogale tapoatafa*

Is found to be **not likely** as a result of the proposal;

- The proposal will not affect the lifecycle of these species such that the local population will be at risk of loss
- The proposal will not remove any potential important habitat for these species
- The proposal will not fragment or isolate potential habitat for these species
- Key threatening processes are minor
- The proposal will not impact areas of Outstanding Biodiversity Value
- Indirect impacts are not of a scale that are likely to impact these species or their habitat.