

28 November 2023

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[Andrew.Harrigan@evt.com](mailto:Andrew.Harrigan@evt.com)

cc: euan\_diver@evt.com  
chloe\_chalk@evt.com

Dear Andrew Harrigan,

**Re: 230203 – Sonnblick Lodge Demolition BOS Evaluation Report**

It is understood that development approval is required from the NSW Department of Planning and Environment (DPE) to proceed with demolition of the building and associated concrete paths, landings, and stairs of Sonnblick Lodge located 10 Bobuck Lane Thredbo, NSW 2625. The site is located within Lot 802 DP1119757, which is 339m<sup>2</sup> in size. The Statement of Environmental Effects (SEE) is to be submitted to DPE accompanying a Development Application and will be assessed under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) which requires the evaluation of the Biodiversity Offset Scheme (BOS) triggers.

This letter report aims to evaluate the proposed Sonnblick Lodge demolition works against the BOS triggers. NGH completed a site visit and desktop assessment to validate biodiversity values within the subject land. The results of this assessment are outlined within this letter.

The proposed demolition is located on 10 Bobuck Lane Thredbo. The site consists of a 58-year-old building (RP Data Pty Ltd, 2023) with exotic grasses and planted natives around the dwelling. The development footprint is 0.0145 ha. This is displayed in the Sonnblick Site layout Map (Appendix E).

This assessment is based on a provisional demolition design explained in the demolition projects fee proposal provided to NGH on the 9<sup>th</sup> of March 2023 (Appendix G), which may change in the future, and as such, impacts and advice provided in this report may also require updating.

The following key terms prescribed by the BOS are used to describe the proposal:

- **development footprint** – refers to the entirety of the area, which is subject to direct impact via proposed demolition, known as the proposal area in the SEE.
- **Subject land** – an area around the development footprint which may be subject to indirect impacts.

## Context

Provided that the vegetation being cleared is native, then the BC Reg sets out threshold levels for when the BOS will be triggered. Triggering the BOS requires the preparation of Biodiversity Development Assessment Report (BDAR). The threshold has two criteria:

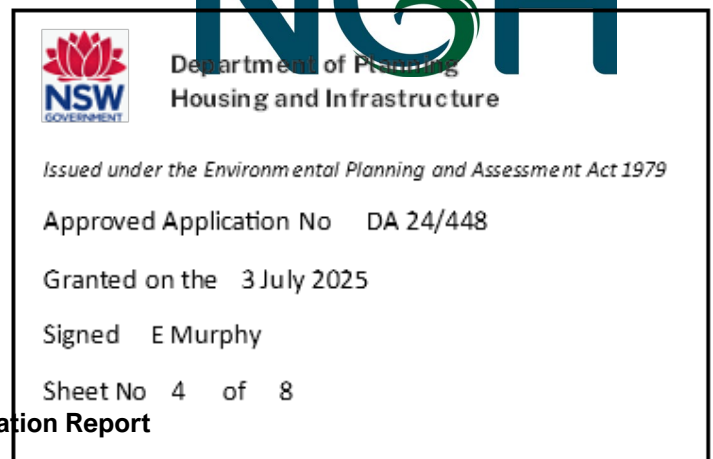
- Clearing of native vegetation exceeds an area threshold. The area threshold varies depending on the minimum lot size (as determined by the relevant Local Environmental Plan (LEP)), or actual lot size (where there is no minimum lot size provided for the relevant land under the LEP).
- Whether the impacts occur within areas mapped on the Biodiversity Values Map (BV Map) published by the Environment Agency Head.

If the area of native vegetation clearing does not meet the above thresholds:

## Canberra

8/27 Yallourn Street (PO Box 62) Fyshwick ACT 2609

T. (02) 6280 5053 E. [ngh@nghconsulting.com.au](mailto:ngh@nghconsulting.com.au) W. [nghconsulting.com.au](http://nghconsulting.com.au) ABN 31 124 444 622 ACN 124 444 622



- The impacts to threatened flora, fauna, populations and communities must be assessed against a Test of Significance (ToS) as per Section 7.3 of the BC Act. If a significant impact is considered likely, then the BOS applies to the proposed development.

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) protects nationally and internationally important flora, fauna, ecological communities and heritage places, which are defined in the EPBC Act as matters of national environmental significance (MNES). The EPBC Act requires an evaluation of the potential for impact upon MNES due to the proposal. The significance of MNES impacts must then be assessed in accordance with the *Significance impact guidelines 1.1 – matters of national environmental significance* (DoE, 2013) via an Assessment of Significance (AoS). Where a proposal is likely to have a significant impact on a matter of national environmental significance, the proposal is referred to the Federal Environment Minister.

## Clearing thresholds

### Methodology

To ascertain whether the proposal exceeds the native vegetation clearing thresholds, the minimum lot size must be determined along with the quantity of native vegetation to be cleared. This was undertaken by desktop assessment to determine minimum lot size, a field assessment to determine native vegetation extent and GIS analysis to determine area of native vegetation proposed to be cleared.

### Results

#### Desktop assessment

There is no minimum lot size for Lot 802 DP1119757 according to the BV Map and Threshold Tool (NSW Government, 2023). Hence, the minimum lot size is equal to the entire lot size which is less than one hectare (0.03ha). As shown in Table 1, the native vegetation clearing threshold for the subject land is 0.25ha or more.

Table 1 Native vegetation area clearing thresholds (bold indicates the threshold that applies to the subject site)

Minimum lot size associated with the property	Threshold for clearing, above which the BAM and offsets scheme apply
<b>Less than 1 ha</b>	<b>0.25 ha or more</b>
1 ha to less than 40 ha	0.5 ha or more
40 ha to less than 1000 ha	1 ha or more
1000 ha or more	2 ha or more

#### Field survey

A field assessment was conducted on the 12<sup>th</sup> of May 2023 with two NGH ecologist assessing the subject land. The surrounding vegetation was classified as largely 'exotic'. Most of the vegetation surrounding the building was exotic grasses with no native grasses being recorded (as seen in Appendix ). It was noted that there are planted native trees and shrubs including one, *Eucalyptus pauciflora* and one *Leptospermum grandifolium*, between the building and the adjacent lodges. One mature *E.pauciflora* tree will be impacted by the demolition as it is within the lot boundary. This is the only native vegetation being impacted by the proposed works and is calculated as around 30m<sup>2</sup> in area, or 0.003 ha.

### GIS impact calculations

As shown in Table 2, 0.003 ha (~30m<sup>2</sup>) of native vegetation is expected to require clearing. This falls under the BOS threshold; the proposal will not trigger the BOS on the basis of native vegetation clearing quantity.

Table 2 Native and exotic vegetation extent in subject land and development footprint

Location	Development footprint
Native vegetation	30m <sup>2</sup> (0.003ha)
Exotic vegetation*	27.84
Total	339m <sup>2</sup> (0.03ha)

## Biodiversity Values mapping

### Methodology

The Biodiversity Values Map (BV Map) identifies land with high biodiversity value that is particularly sensitive to impacts from development and clearing and was accessed through the online portal (Department of Planning and Environment, 2018). The BV Map is one of the triggers for determining whether the BOS applies to a clearing or development proposal.

### Results

BV Mapping occurs around 50m north of the subject land along the Thredbo River. There is no BV Mapped land in the subject land or development footprint; the proposal will not trigger the BOS on the basis of BV Mapped land.

## Test of Significance

Methods to undertake Tests of Significance involved desktop assessment and field inspection.

### Desktop assessment

A desktop Investigation was undertaken for the subject land in May 2023. The following searches were conducted:

- BioNet species sightings search of threatened flora, fauna and ecological communities listed under the *Biodiversity Conservation Act 2016* (BC Act). The search was conducted on the 11<sup>th</sup> of May 2023.
- Protected Matters Search Tool (PMST) for threatened species and populations listed under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999*. The search was conducted on the 11<sup>th</sup> of May 2023.
- Review of NSW Weedwise to identify priority weeds within the subject land. The search was conducted on the 15<sup>th</sup> of May 2023.

## Field Assessment

The site inspection of the subject land was conducted by an accredited BAM assessor and an ecologist for approximately 1-hour on the 12<sup>th</sup> of May 2023. The site visit involved a walkover of subject land to determine the extent of impacts to native vegetation and threatened species. The external parts of the building were assessed for potential threatened fauna habitat. Vegetation surrounding the building was assessed and the vegetation cover was classified as 'native' or 'exotic'. The Sonnblick building was not inspected internally.

## **Results**

The BioNet Atlas search returned 43 threatened entities with existing records within 10 km of the development footprint. These entities included 13 TECs, five (5) mammals, nine (9) flora species, nine (9) non-migratory birds, two (2) amphibians and two (2) reptile and three (3) migratory birds (Appendix A). The Commonwealth Protected Matters Search (MNES) returned 3 threatened ecological communities (TECs), 50 threatened species (15 flora species, 13 non-migratory birds, six (6) fish, three (3) amphibians, eight (8) mammals and five (5) reptiles) and 11 migratory species with potential to occur within the subject land (Appendix B). 114 priority weeds were identified for the local council areas of the Snowy Monaro Regional. All priority weeds are listed in Appendix F.

Threatened species and communities were evaluated for their potential to occur in the subject land and be impacted by the proposal. This evaluation is presented in Appendix C and has been informed by results of field work and vegetation associations listed in species profiles. Further discussion on the potential for threatened species to occur is given in the following sections.

Following assessment of each threatened entity, if entities are determined to have a moderate or high likelihood of impact, a test of significance (BC Act) and/or assessment of significance (EPBC Act) (depending on their listing) is required to be undertaken to determine the likely significance. If the assessment determines a significant impact, then the BOS is triggered. These assessments are provided in Appendix A.

## Plant Community Types and Threatened Ecological Communities

A field assessment was conducted on the 12<sup>th</sup> of May 2023 with two NGH ecologist assessing the subject land. As already discussed, the subject land is dominated by exotic vegetation (and buildings) with three individual native plants. A Plant Community Type (PCT) is not present in the subject land and therefore there are no threatened ecological communities present either.

## Terrestrial habitat and threatened species

The outside of the building and surrounding grounds was assessed for potential microbat and other threatened species habitat. Minimal suitable habitat was identified on the outside of the building, although an entry hole was seen in the roof which may act as an entry point for microbats. The roof cavity is limited as the internal ceilings are raked; however, it cannot be assumed that microbats are absent. Microbats are an adaptable species which can roost in various habitats, including buildings and roof cavities. The building in question has documented records of the NSW vulnerable Eastern False Pipistrelle within a 10km radius.

## **Assessment of impacts**

The proposal involves building demolition, clearing of exotic grassland and a native tree in a total clearing area of 0.03ha. The likelihood of impacts of the proposed works was assessed for each NSW and Commonwealth threatened entity in a Habitat Evaluation Table, which can be found in Appendix C. The results of the Habitat Evaluation Table indicate that of all the entities assessed, only the BC Act listed Eastern False Pipistrelle has a high likelihood of being impacted by the proposed works through the removal of potential roost sites in the roof of the Lodge. A Test of Significance (ToS) was conducted for the Eastern False Pipistrelle (*Falsistrellus tasmaniensis*) which can be found in Appendix D.

It is unknown whether Sonnblick Lodge is an active roost site for Eastern False Pipistrelle. Destruction of an active roost has potential to affect a colony of bats (the species roosts in colonies of three to 36 individuals); this would be a higher number across multiple generations if the roost were a maternity colony. However, the magnitude of impact would be sufficiently low that the proposal is unlikely to significantly impact the local population.

Notwithstanding, it is desirable to avoid any death of Eastern False Pipistrelles during the demolition. Following consultation with microbat expert Rodney Armistead, it was initially advised that works should be completed in autumn (March-May), preferably late autumn (April-May), with preclearance surveys to be conducted by an ecologist prior to demolition. However, we understand it is preferable to undertake works in the spring/summer season in preparation for the busy winter ski season. Therefore, we recommend pre-clearance inspection to be undertaken the morning demolition is scheduled and a fauna spotter catcher on site during works to remove and relocate any bats found during works. Greater detail can be found below.

In summary, the proposal is unlikely to cause a significant impact upon threatened entities listed under the BC Act or EPBC Act and would not trigger the BOS by this threshold.

### Mitigation measures

A pre-clearance survey and fauna spotter catcher during demolition are recommended to prevent harm to Eastern False Pipistrelle Table 3. Pre-clearance survey can be undertaken by the fauna spotter catcher; and it would be helpful to have someone from the demolition crew present also to assist with removal of external ceiling panelling. The fauna spotter catcher would need to be vaccinated for Australian Bat Lyssavirus (rabies vaccine).

Table 3 Mitigation measures recommended for Sonnblick Lodge demolition to protect biodiversity values

Purpose	Mitigation measure	Timing
Prevent harm to Eastern False Pipistrelle in potential roost	Pre-clearance: Careful inspection of internal raked ceilings and other visible nooks that may provide habitat. Removal of external ceiling panelling near identified entry hole to inspect cavity for signs of microbats.	Morning of demolition, prior to works commencing
Prevent harm to Eastern False Pipistrelle in potential roost	Fauna spotter catcher: Present during roof removal, which is to be undertaken in stages, to intermittently inspect sections of roof and retrieve/relocate any bats found.	During demolition
Document outcome for future assessments	A brief (1 page) letter to be provided to DPE outlining steps taken to prevent harm and any outcomes.	Within 2 weeks following demolition.

### Conclusion

The proposal was evaluation against the BOS triggers set out in the NSW Biodiversity Conservation Regulation 2017 and in accordance with the Commonwealth *Significance impact guidelines 1.1 – matters of national environmental significance* for threatened entities. Methods included desktop assessment, field survey, habitat evaluation and GIS calculations.

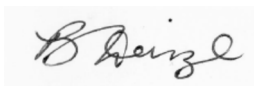
As there is no mapped minimum lot size for Lot 802 DP1119757, the entire lot size is used. For the 0.03ha lot, the threshold for native vegetation clearing is 0.25ha. The proposal clearing of native vegetation is approximately 0.003ha (one tree). Therefore the BOS is not triggered based on this criterion. There is no BV Mapped land in the subject land; therefore the proposal will not trigger the BOS based on this criterion. Following a habitat evaluation for species and communities returned from BioNet and PMST database searches, a Test of Significance was undertaken for Eastern False Pipistrelle. A significant impact is not considered likely to the population as a result of the population, and the proposal does not trigger the BOS on the basis of this criterion. However it was noted that there is potential for harm for a colony of the species should the roof space of the lodge host an active colony. Therefore it is recommended that a pre-clearance survey be undertaken along with a fauna spotter catcher present during demolition to retrieve and relocate any bats if present. A summary of the evaluation outcome is provided in Table 4.

Table 4 Summary of BOS evaluation outcome

	Question	Answer	Result
1	Does the clearing area exceed the offset scheme threshold?	Clearing threshold 0.25ha, proposed native vegetation clearing 0.003ha. Native vegetation clearing will not exceed clearing threshold.	BOS not triggered.
2	Is there any Biodiversity Values Mapping (BVM) over the subject land?	No BVM is found within the subject land. Additionally, no AOBV are present within the subject land.	BOS not triggered.
3	Are threatened entities likely to be significantly impacted by the proposed works	Significant impact to threatened entities considered unlikely.	BOS not triggered.

If you have any questions, please contact me or Leo Mangini on 07 3129 7633 . We would be pleased to discuss any aspect of this project with you further.

Yours sincerely,



**Bianca Heinze**

Technical Lead

02 6492 8351

# Appendix A BioNet Atlas Search

## Appendix A Bionet Atlas Records

V = Vulnerable, E = Endangered, CE = Critically Endangered as listed under the Biodiversity Conservation Act 2016 and Environmental Protection and Biodiversity Conservation Act 1999.

Scientific Name	Common Name	NSW Status	Commonwealth Status	Number of records (10km)
<i>Argyrotegium nitidulum</i>	Shining Cudweed	V	V	26
<i>Calotis pubescens</i>	Max Mueller's Burr-daisy	E	Not listed	7
<i>Carex archeri</i>	Archer's Carex	E	Not listed	3
<i>Carex raleighii</i>	Raleigh Sedge	E	Not listed	3
<i>Pimelea bracteata</i>	Pimelea bracteata	CE	Not listed	1
<i>Pterostylis oreophila</i>	Blue-tongued Greenhood	CE	CE	1
<i>Ranunculus anemoneus</i>	Anemone Buttercup	V	V	869
<i>Rytidosperma pumilum</i>	Feldmark Grass	V	V	69
<i>Rytidosperma vickeryae</i>	Perisher Wallaby-grass	E	Not listed	4
<i>Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions</i>	Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions	E	Not listed	N/A
<i>Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions</i>	Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E	Not listed	N/A
<i>Lowland Grassy Woodland in the South East Corner Bioregion</i>	Lowland Grassy Woodland in the South East Corner Bioregion	E	Not listed	N/A
<i>Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern</i>	Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern	CE	Not listed	N/A



<i>Highlands Bioregion Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions</i>	Highlands Bioregion Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions	E	Not listed	N/A
<i>Natural Temperate Grassland of the South Eastern Highlands</i>	Natural Temperate Grassland of the South Eastern Highlands	Not listed	CE	N/A
<i>Snowpatch Feldmark in the Australian Alps Bioregion</i>	Snowpatch Feldmark in the Australian Alps Bioregion	CE	Not listed	N/A
<i>Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions</i>	Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E	Not listed	N/A
<i>Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions</i>	Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions	E	Not listed	N/A
<i>Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions</i>	Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions	CE	Not listed	N/A
<i>White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland</i>	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	CE	CE	N/A
<i>Windswept Feldmark in the Australian Alps Bioregion</i>	Windswept Feldmark in the	CE	Not listed	N/A

	Australian Alps Bioregion			
<i>Litoria verreauxii alpina</i>	Alpine Tree Frog	E	V	4
<i>Pseudophryne corroboree</i>	Southern Corroboree Frog	CE	CE	1
<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V	Not listed	2
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V	E	60
<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	Not listed	1
<i>Neophema chrysogaster</i>	Orange-bellied Parrot	CE	CE	1
<i>Pachycephala olivacea</i>	Olive Whistler	V	Not listed	86
<i>Petroica boodang</i>	Scarlet Robin	V	Not listed	8
<i>Petroica phoenicea</i>	Flame Robin	V	Not listed	176
<i>Petroica rodinogaster</i>	Pink Robin	V	Not listed	36
<i>Pycnoptilus floccosus</i>	Pilotbird	Not listed	V	8
<i>Apus pacificus</i>	Fork-tailed Swift	Not listed	M	1
<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Not listed	M	12
<i>Hirundapus caudacutus</i>	White-throated Needletail	Not listed	V M	8
<i>Burramys parvus</i>	Mountain Pygmy-possum	E	E	148
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V	E	2

<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V	Not listed	3
<i>Mastacomys fuscus mordicus</i>	Broad-toothed Rat (mainland), Tooarrana	V	V	83
<i>Phascolarctos cinereus</i>	Koala	E	E	1
<i>Cyclodomorphus praealtus</i>	Alpine She-oak Skink	E	E	57
<i>Liopholis guthega</i>	Guthega Skink	Not listed	E	403
<b>Total records within 10km</b>				<b>2084</b>

## **Appendix B Commonwealth Protected Matters Search (MNES)**



Australian Government

Department of Climate Change, Energy,  
the Environment and Water

# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 11-May-2023

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

# Summary

## Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	2
<a href="#">Wetlands of International Importance (Ramsar</a>	8
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	3
<a href="#">Listed Threatened Species:</a>	52
<a href="#">Listed Migratory Species:</a>	11

## Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

<a href="#">Commonwealth Lands:</a>	None
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	17
<a href="#">Whales and Other Cetaceans:</a>	None
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None
<a href="#">Habitat Critical to the Survival of Marine Turtles:</a>	None

## Extra Information

This part of the report provides information that may also be relevant to the area you have

<a href="#">State and Territory Reserves:</a>	1
<a href="#">Regional Forest Agreements:</a>	1
<a href="#">Nationally Important Wetlands:</a>	1
<a href="#">EPBC Act Referrals:</a>	6
<a href="#">Key Ecological Features (Marine):</a>	None
<a href="#">Biologically Important Areas:</a>	None
<a href="#">Bioregional Assessments:</a>	None
<a href="#">Geological and Bioregional Assessments:</a>	None

# Details

## Matters of National Environmental Significance

National Heritage Places

[ Resource Information ]

Name	State	Legal Status	Buffer Status
Historic			
<a href="#">Snowy Mountains Scheme</a>	NSW	Listed place	In feature area
Natural			
<a href="#">Australian Alps National Parks and Reserves</a>	ACT	Listed place	In feature area

Wetlands of International Importance (Ramsar Wetlands)

[ Resource Information ]

Ramsar Site Name	Proximity	Buffer Status
<a href="#">Banrock station wetland complex</a>	700 - 800km upstream from Ramsar site	In buffer area only
<a href="#">Barmah forest</a>	200 - 300km upstream from Ramsar site	In buffer area only
<a href="#">Blue lake</a>	Within Ramsar site	In feature area
<a href="#">Gunbower forest</a>	300 - 400km upstream from Ramsar site	In buffer area only
<a href="#">Hattah-kulkyne lakes</a>	500 - 600km upstream from Ramsar site	In buffer area only
<a href="#">Nsw central murray state forests</a>	200 - 300km upstream from Ramsar site	In buffer area only
<a href="#">Riverland</a>	700 - 800km upstream from Ramsar site	In buffer area only
<a href="#">The coorong, and lakes alexandrina and albert wetland</a>	700 - 800km upstream from Ramsar site	In buffer area only

Listed Threatened Ecological Communities

[ Resource Information ]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
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Community Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Alpine Sphagnum Bogs and Associated Fens</a>	Endangered	Community known to occur within area	In feature area
<a href="#">Natural Temperate Grassland of the South Eastern Highlands</a>	Critically Endangered	Community may occur within area	In feature area
<a href="#">White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland</a>	Critically Endangered	Community may occur within area	In buffer area only

Listed Threatened Species

[ [Resource Information](#) ]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.  
 Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
<a href="#">Anthochaera phrygia</a> Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour may occur within area	In buffer area only
<a href="#">Aphelocephala leucopsis</a> Southern Whiteface [529]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Callocephalon fimbriatum</a> Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Climacteris picumnus victoriae</a> Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Falco hypoleucos</a> Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Grantiella picta</a> Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Hirundapus caudacutus</a> White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Lathamus discolor</a> Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Melanodryas cucullata cucullata</a> South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Neophema chrysostoma</a> Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pycnoptilus floccosus</a> Pilotbird [525]	Vulnerable	Species or species habitat known to occur within area	In feature area
<a href="#">Rostratula australis</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Stagonopleura guttata</a> Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
FISH			
<a href="#">Galaxias supremus</a> Kosciuszko Galaxias [87878]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
<a href="#">Galaxias terenasus</a> Roundsnout Galaxias [87175]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Maccullochella macquariensis</a> Trout Cod [26171]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Maccullochella peelii</a> Murray Cod [66633]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Macquaria australasica</a> Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Prototroctes maraena</a> Australian Grayling [26179]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FROG			
<a href="#">Litoria spenceri</a> Spotted Tree Frog [25959]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Litoria verreauxii alpina</a> Alpine Tree Frog, Verreaux's Alpine Tree Frog [66669]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<a href="#">Pseudophryne corroboree</a> Southern Corroboree Frog [1915]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
MAMMAL			
<a href="#">Burramys parvus</a> Mountain Pygmy-possum [267]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Dasyurus maculatus maculatus (SE mainland population)</a> Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Mastacomys fuscus mordicus</a> Broad-toothed Rat (mainland), Tooarrana [87617]	Vulnerable	Species or species habitat known to occur within area	In feature area
<a href="#">Petauroides volans</a> Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Petaurus australis australis</a> Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)</a> Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Pseudomys fumeus</a> Smoky Mouse, Konoom [88]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Pteropus poliocephalus</a> Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In buffer area only
PLANT			
<a href="#">Argyrotegium nitidulum</a> Shining Cudweed [82043]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<a href="#">Calotis glandulosa</a> Mauve Burr-daisy [7842]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Colobanthus curtisiae</a> Curtis' Colobanth [23961]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Glycine latrobeana</a> Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Haloragis exalata subsp. exalata</a> Wingless Raspwort, Square Raspwort [24636]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Leucochrysum albicans subsp. tricolor</a> Hoary Sunray, Grassland Paper-daisy [89104]	Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pimelea bracteata</a> [8125]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pomaderris pallida</a> Pale Pomaderris [13684]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Prasophyllum bagoense</a> Bago Leek-orchid [84276]	Critically Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Prasophyllum petilum</a> Tarengo Leek Orchid [55144]	Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pterostylis oreophila</a> Blue-tongued Orchid, Kiandra Greenhood [22903]	Critically Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Ranunculus anemoneus</a> Anemone Buttercup [14889]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Rytidosperma pumilum</a> Feldmark Grass [66716]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Thesium australe</a> Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Xerochrysum palustre</a> Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
<a href="#">Aprasia parapulchella</a> Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Cyclodomorphus praealtus</a> Alpine She-oak Skink [64721]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Liopholis guthega</a> Guthega Skink [83079]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Liopholis montana</a> Mountain Skink [87162]	Endangered	Species or species habitat likely to occur within area	In feature area
<a href="#">Pseudemoia cryodroma</a> Alpine Bog Skink, Alpine Bog-skink [84408]	Endangered	Species or species habitat known to occur within area	In feature area
Listed Migratory Species		[ <a href="#">Resource Information</a> ]	

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
<a href="#">Hirundapus caudacutus</a> White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
<a href="#">Motacilla flava</a> Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
<a href="#">Myiagra cyanoleuca</a> Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
<a href="#">Rhipidura rufifrons</a> Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area	In feature area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[ Resource Information ]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Bubulcus ibis as Ardea ibis</a> Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Gallinago hardwickii</a> Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area overfly marine area	In feature area
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
<a href="#">Hirundapus caudacutus</a> White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
<a href="#">Lathamus discolor</a> Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In buffer area only
<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Motacilla flava</a> Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Myiagra cyanoleuca</a> Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
<a href="#">Neophema chrysostoma</a> Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Rhipidura rufifrons</a> Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Rostratula australis as Rostratula benghalensis (sensu lato)</a>			
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area

### Extra Information

State and Territory Reserves			[ <a href="#">Resource Information</a> ]
Protected Area Name	Reserve Type	State	Buffer Status
Kosciuszko	National Park	NSW	In feature area

Regional Forest Agreements	[ <a href="#">Resource Information</a> ]
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Note that all areas with completed RFAs have been included.

RFA Name	State	Buffer Status
<a href="#">Southern RFA</a>	New South Wales	In feature area

Nationally Important Wetlands		[ <a href="#">Resource Information</a> ]
Wetland Name	State	Buffer Status
<a href="#">Blue Lake (Kosciuszko)</a>	NSW	In buffer area only

EPBC Act Referrals			[ <a href="#">Resource Information</a> ]	
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
<a href="#">Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</a>	2015/7522	Not Controlled Action	Completed	In feature area
<a href="#">INDIGO Central Submarine Telecommunications Cable</a>	2017/8127	Not Controlled Action	Completed	In feature area
<a href="#">Snowies Iconic Walk</a>	2019/8558	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
<a href="#">Aerial baiting for wild dog control</a>	2006/2713	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
<a href="#">Aerial dog baiting</a>	2006/2791	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
<a href="#">INDIGO Marine Cable Route Survey (INDIGO)</a>	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area



Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				

# Caveat

## 1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

## 2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

## 3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

## 4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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# Appendix C Habitat Evaluation Table

**Habitat Evaluation Table**

The tables in this appendix present the habitat evaluation for threatened species, ecological communities, and endangered populations listed within 10 km of the proposal area in the Atlas of NSW Wildlife<sup>1</sup> and those identified as potentially occurring in the area according to the Commonwealth EPBC Protected Matters Search Tool (PMST).<sup>2</sup>

The likelihood of occurrence is based on presence of habitat, proximity of nearest records, and mobility of the species (where relevant). The assessment of potential impact is based on the nature of the proposal, the ecology of the species, and its likelihood of occurrence. The following classifications are used:

**Presence of Habitat**

Present:	Potential or known foraging, roosting, nesting, refuge, movement corridor (including movement of genetic material) or other habitat is present within the study area.
Marginal:	Limited habitat with some features that may be used by species within the study area.
Absent:	No potential foraging, roosting, nesting, or other habitat is present within the study area.

**Likelihood of Occurrence**

Low	It is unlikely that the species inhabits the study area and has not been recorded recently in the locality (10 km). It may be an occasional visitor, but habitat similar to the study area is widely distributed in the local area, meaning that the species is not dependent (i.e. for breeding or important life cycle periods such as winter flowering resources) on available habitat. Specific habitat is not present in the study area or the species are a non-cryptic perennial flora species that were specifically targeted by surveys and not recorded.
Moderate	Potential habitat is present in the study area. Species unlikely to maintain sedentary populations, however, may seasonally use resources within the study area opportunistically or during migration. The species is unlikely to be dependent (i.e. for breeding or important life cycle periods such as winter flowering resources) on habitat within the study area, or habitat is in a modified or degraded state. Includes cryptic flowering flora species that were not seasonally targeted by surveys and that have not been recorded.
High	It is highly likely that a species inhabits the study area and is dependent on identified suitable habitat (i.e. for breeding or important life cycle periods such as winter flowering resources), has been recorded recently in the locality (10 km) and is known or likely to maintain resident populations in the study area. Also includes species known or likely to visit the study area during regular seasonal movements or migration.
Recorded	Species was recorded during the field investigations or has recorded previously.

**Potential to be Impacted**

Low	The proposal would not impact this species or its habitats. No Test of Significance (ToS) or Assessment of Significance (AoS) is necessary for this species.
Moderate	The proposal could impact this species or its habitats however the impacts are considered manageable such that no direct or indirect impacts are likely. Test of Significance (ToS) or Assessment of Significance (AoS) may be required for this species.
High	The proposal is likely to impact this species or its habitats. A ToS has been applied to these entities.

**Key:** V = Vulnerable, E = Endangered, CE = Critically Endangered, M = Migratory

<sup>1</sup> The NSW Bionet Atlas is administered by the Department of Planning and Environment (DPE) and is an online database of fauna and flora records that contains over four million recorded sightings.  
<sup>2</sup> This online tool is designed for the public to search for matters protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It is managed by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW).

## A.1 Flora and Threatened Ecological Communities

Species	Listing		Habitat	No. of Records within 10 km	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
Flora (18)								
<i>Argyrotegium nitidulum</i> Shining Cudweed	V	V	The shining cudweed appears to be dependent on damp bare ground for recruitment and persistence. Usually found in herbfield or open heathland, above or close to the treeline. Flowers appear from December to March.	26 (1949-2022)	Absent	Low	Low	No suitable habitat will be impacted.
<i>Calotis pubescens</i> Max Mueller's Burr-daisy	E	-	Grows in subalpine treeless plains in herb-rich grassland (often dominated by <i>Poa hookeri</i> ); not subject to periodic inundation. Its response to disturbance is largely unknown.	7 (2013-2022)	Absent	Low	Low	No suitable habitat will be impacted. Closest record over 9 km away
<i>Carex archeri</i> Archer's Carex	E	-	<i>Carex archeri</i> occurs in the headwaters of streams within the alpine zone of the Kosciuszko area of the southern tablelands of NSW, and in Victoria and Tasmania. Additionally occurs in damp alpine herbfields.	3 (1951-1980)	Absent	Low	Low	No suitable habitat will be impacted. Closest record over 3 km away
<i>Carex raleighii</i> Raleigh Sedge	E	-	Grows in sphagnum bogs and high mountain wetlands, as well as damp grasslands and stream-edges of sub-alpine plains.	3 (1997)	Absent	Low	Low	No suitable habitat will be impacted. Closest record over 7.5 km away
<i>Colobanthus curtisiae</i> Curtis' Colobanth	-	V	Rainfall varies from 530 mm in the Midlands area to 1400 mm on Ben Lomond. The species is most commonly found on soils derived from sandstone as well as clay loams derived from dolerite and basalt. Chiefly in the mountainous and southern regions of South America, New Zealand, & Australia. Australia.	PMST	Marginal	Low	Low	No suitable habitat will be impacted. Not associated with PCT.
<i>Glycine latrobeana</i> Clover Glycine, Purple Clover	CE	V	The Clover Glycine occurs mainly in grassland and grassy woodland habitats, less often in dry forests, and only rarely in heathland. Populations occur from sea level to c. 1,200 m altitude. Soils are usually clay but may also have high loam content.	PMST	Marginal	Low	Low	No suitable habitat will be impacted. Not associated with PCT.
<i>Haloragis exalata subsp. exalata</i> Wingless Raspwort, Square Raspwort	V	V	Square Raspwort appears to require protected and shaded damp situations in riparian habitats. Haloragis exalata subsp. exalata is presently known from a range of vegetation types, all of which appear to have a history of recurrent disturbance. It appears to be a post-disturbance coloniser, based on observations of large numbers of plants on disturbed roadsides, cleared power-line easements, and recently burnt or flooded areas. Habitat critical for survival has not been accurately defined for this species. Flowering specimens in NSW are recorded from November to January.	PMST	Absent	Low	Low	No suitable habitat will be impacted. Not a riparian zone.
<i>Leucochrysum albicans subsp. tricolor</i>	E	E	Occurs in a wide variety of grassland, woodland and forest habitats, generally on relatively heavy soils. Can occur in modified habitats such as semi-urban areas	PMST	Present	Moderate	Moderate	The site is highly disturbed and contains bare ground. Although

Species	Listing		Habitat	No. of Records within 10 km	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
<b>Hoary Sunray, Grassland Paper-daisy</b>			and roadsides. Highly dependent on the presence of bare ground for germination. In some areas, disturbance is required for successful establishment.					no evidence of the species was found during site visit. As such no ToS will be required.
<b><i>Pimelea bracteata</i></b>	CE	-	<i>Pimelea bracteata</i> occurs in wetlands and along waterways and stream edges in high altitude treeless subalpine valleys. It can also occur in wet heathland and closed heath.	1 (2022)	Absent	Low	Low	No suitable habitat will be impacted. Not a wetland area.
<b><i>Pale Pomaderris</i> <i>Pomaderris pallida</i></b>	V	V	This species usually grows in shrub communities surrounded by Brittle Gum ( <i>Eucalyptus mannifera</i> ) and Red Stringybark ( <i>E. macrorhyncha</i> ) or <i>Callitris</i> spp. Woodland.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<b><i>Prasophyllum bagoense</i> Bago Leek-orchid</b>	CE	CE	Bago Leek Orchid is a tuberous ground orchid with leaves that normally regenerate from underground tubers each year in spring. Found in grassy, low heathland dominated by <i>Poa clivicola</i> , <i>Epacris gunnii</i> and <i>E. celata</i> on a subalpine plain bordered by Snow Gum and Mountain Gum.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<b><i>Prasophyllum petilum</i> Tarengo Leek Orchid</b>	E	E	Grows in open sites within Natural Temperate Grassland at the Boorowa and Delegate sites. also grows in grassy woodland in association with River Tussock <i>Poa labillardieri</i> , Black Gum <i>Eucalyptus aggregata</i> and tea-trees <i>Leptospermum</i> spp. near Queanbeyan and within the grassy groundlayer dominated by Kangaroo Grass under Box-Gum Woodland at Ilford	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<b><i>Pterostylis oreophila</i> Blue-tongued Greenhood</b>	CE	CE	Grows along sub-alpine watercourses under more open thickets of Mountain Tea-tree in muddy ground very close to water. Less commonly grows in peaty soils and sphagnum mounds. While more frequently found in low-light conditions it appears to also be able to tolerate full sun.	1 (2013)	Absent	Low	Low	No suitable habitat will be impacted.
<b><i>Ranunculus anemoneus</i> Anemone Buttercup</b>	V	V	The Anemone Buttercup generally occurs in environments with late melting snow; on south to east facing, steep grassy slopes, or rocky crevices, or short alpine herbfields. The species has also been collected along watercourses, in grassland, heathland (below snowpatches) and on roadside batters. Soils at Anemone Buttercup sites include loams (alpine humus soils), peats and decomposing granite.	869 (1890-2021)	Absent	Low	Low	Despite the high number of records in the area no suitable habitat will be impacted. The closest record is over 2kms away from site.
<b><i>Rytidosperma pumilum</i> Feldmark Grass</b>	V	V	Feldmark Grass is limited to a tiny area - about 3ha - of the Main Range of Kosciuszko National Park between Mt Northcote and Mt Lee. Feldmark Grass is found only in the feldmark - the sparse low vegetation of the bare rocky alpine slopes and ridges, one of the harshest environments in Australia	69 (1949-2021)	Absent	Low	Low	Despite the high number of records in the area no suitable habitat will be impacted. The closest record is over 5 km away from site.
<b><i>Rytidosperma vickeryae</i></b>	E	-	<i>Rytidosperma vickeryae</i> occurs in subalpine treeless vegetation, and is mainly recorded from stream-sides,	4	Absent	Low	Low	No suitable habitat will be impacted. The closest



Species	Listing		Habitat	No. of Records within 10 km	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
<b>Perisher Wallaby-grass</b>			the edges of tarns, and in and around bogs; within bogs, it is often found growing in mounds of <i>Sphagnum cristatum</i> . The species appears to be naturally rare and of restricted range and habitat, and is inconspicuous. Commonly grows in Sphagnum moss in montane peatland communities or along stream edges.	(2019-2022)				record is over 5 km away from site.
<b><i>Thesium australe</i></b> <b>Austral Toadflax</b>	V	V	Occurs in grassland on coastal headlands or grassland and grassy woodland away from the coast. Often found in association with Kangaroo Grass ( <i>Themeda australis</i> ). A root parasite that takes water and some nutrient from other plants, especially Kangaroo Grass.	PMST	Absent	Low	Low	No suitable habitat will be impacted. No kangaroo grass present on site.
<b><i>Xerochrysum palustre</i></b> <b>Swamp Everlasting,</b> <b>Swamp Paper Daisy</b>	-	V	Grows in swamps and bogs which are often dominated by heaths. Also grows at the edges of bog margins on peaty soils with a cover of shrubs or grasses. Re-sprouts after fires. Sometimes grows in bogs with <i>Sphagnum</i> .	PMST	Absent	Low	Low	No suitable habitat will be impacted. No records in the locality.
<b>Threatened Ecological Communities (13)</b>								
<b><i>Alpine Sphagnum Bogs and Associated Fens</i></b>	-	E	A common definition of a ‘Sphagnum bog’ ecological community is one where Sphagnum spp. cover more than thirty per cent of the ground (Kirkpatrick, 1997). However, there are some sites in the Alpine Sphagnum Bogs and Associated Fens ecological community that are dominated by shrubs or <i>Restionaceae spp.</i> , a peat substratum is evident. The key to bog formation is a good supply of groundwater and an impeded drainage system that keeps the water table at or near the surface. The ecological community is known to exist at 1200 m asl in Victoria and as low as 1000 m asl in parts of the Australian Capital Territory (ACT) and New South Wales (NSW).	PMST	Absent	Low	Low	No associated PCTs
<b><i>Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions</i></b>	E	-	The most common tree species include Bangalay ( <i>Eucalyptus botryoides</i> ) and Coast Banksia ( <i>Banksia integrifolia</i> subsp. <i>integrifolia</i> ), while Blackbutt ( <i>Eucalyptus pilularis</i> ) and Lilly Pilly ( <i>Acmena smithii</i> ) may occur in more sheltered situations, and Swamp Oak ( <i>Casuarina glauca</i> ) may occur on dunes exposed to salt-bearing sea breezes or where Bangalay Sand Forest adjoins Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner bioregions	Bionet	Absent	Low	Low	No associated PCTs
<b><i>Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions</i></b>	E	-	Species composition varies with elevation and latitude, with Saltmarsh in southern NSW being generally more species-rich than further north. The sediment surface may support a diversity of seaweed species. Species restricted to coastal saltmarshes include <i>Distichlis distichophylla</i> (Endangered), <i>Halosarcia pergranulata</i> subsp. <i>pergranulata</i> , <i>Wilsonia backhousei</i> (Vulnerable) and <i>Wilsonia</i>	Bionet	Absent	Low	Low	No associated PCTs

Species	Listing		Habitat	No. of Records within 10 km	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
			<i>rotundifolia</i> (Endangered).					
<b>Lowland Grassy Woodland in the South East Corner Bioregion</b>	E	-	Lowland Grassy Woodland communities in the South East Corner bioregion are located in rainshadow areas receiving less rainfall than more elevated terrain that partially surrounds them, with mean annual rainfall typically in the range of 700-1100 mm. The community typically occurs in undulating terrain up to 500 m in elevation on granitic substrates (e.g. adamellites, granites, granodiorites, gabbros, etc.) but may also occur on locally steep sites and on acid volcanic, alluvial and fine-grained sedimentary substrates. Contemporary tree-dominated stands of the community are largely relics or regrowth of originally taller forests and woodlands, which are likely to have had scattered shrubs and a largely continuous grassy groundcover. At some sites, mature trees may exceed 40 m, although regrowth stands may be shorter than 10	Bionet	Absent	Low	Low	No associated PCTs
<b>Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands Bioregion</b>	CE	-	The trees may occur as pure stands dominated by Snow Gum, or with other characteristic trees as co-dominant to sub-dominant. Non-characteristic trees may occur as subdominant. The understorey in intact sites is characterised by native grasses and a high diversity of herbs; the most commonly encountered include kangaroo grass ( <i>Themeda australis</i> ) and common snow-grass ( <i>Poa sieberiana</i> ), with others including river tussock ( <i>Poa labillardierei</i> ), weeping grass ( <i>Microlaena stipoides</i> ), tall wheatgrass ( <i>Anthosachne scabra</i> ) and a variety of forbs. Shrubs are generally sparse or absent, though they may be locally common. Sub-shrubs (woody species <0.5 m tall) may be common. The most common shrubs and sub-shrubs include silver wattle ( <i>Acacia dealbata</i> ), red-stemmed wattle ( <i>Acacia rubida</i> ) and poison rice-flower ( <i>Pimelea pauciflora</i> ).	Bionet	Absent	Low	Low	No associated PCTs
<b>Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions</b>	E	-	The Montane Peatlands community is associated with accumulated peaty or organic-mineral sediments on poorly drained flats in the headwaters of streams. It occurs on undulating tablelands and plateaux, above 400-500 m elevation, generally in catchments with basic volcanic or fine-grained sedimentary substrates or, occasionally, granite.	PMST / Bionet	Absent	Low	Low	No associated PCTs
<b>Natural Temperate Grassland of the South Eastern Highlands</b>	-	CE	r1 (Sub-montane moist tussock grassland of the South Eastern Highlands bioregion) is a dense moist tussock grassland dominated by Snow Grass and/or Kangaroo grass in the upper stratum with a variety of forbs. Found in cool, moist, high-altitude sites that rim the Monaro regionr2 ( <i>Poa labillardierei</i> – <i>Themeda australis</i> – <i>Juncus</i> sp. wet tussock grassland of footslopes, drainage lines and flats of the South Eastern Highlands bioregion) is a tall, dense or mid-dense wet tussock grassland dominated by River	Bionet	Absent	Low	Low	No associated PCTs

Species	Listing		Habitat	No. of Records within 10 km	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
			<p>Tussock usually with Kangaroo Grass, the sedge Tall Sedge and rushes in the upper stratum and a variety of grasses and forbs in the intertussock spaces. Occurs in damp flats and drainage lines. r3 (Rytidosperma sp. – Themeda australis – Juncus sp. tussock grassland of occasionally wet sites of the South Eastern Highlands bioregion) is a dense to mid-dense, low to mid-high tussock grassland dominated by wallaby-grasses and/or Kangaroo Grass, with rushes in the upper stratum and a variety of smaller grasses, sedges and forbs. Like r2 it is also found in damp areas but has less River Tussock and a co-occurrence of other grass, rush and forb species. r4 (Lacustrine grass-forbland of the South Eastern Highlands bioregion) is a variable lake-margin and dry lake-bed vegetation type with structure and composition varying in response to lake wetting and drying cycles, with dominant species including Blown Grass, Notched Sedge, rushes and lakebed forbs. Largely confined to the lake beds of Lake George and Lake Bathurst during long droughts (in wet years it transforms to a wetland community). r5 (Rytidosperma sp. – Austrostipa bigeniculata – Chrysocephalum apiculatum tussock grassland of the South Eastern Highlands bioregion) is a mid-dense to dense low to tall tussock grassland dominated by various Wallaby Grasses, Red-leg Grass, Tall Speargrass and Kangaroo Grass along with a variety of forbs including Chrysocephalum apiculatum and Lomandra bracteata. A widespread community found in the moister lowland parts of the outer Monaro region, and also in the upper Shoalhaven River valley and areas around Canberra (ACT).r6 (Dry tussock grassland of the Monaro in the South Eastern Highlands bioregion) is an open to dense, mid-high to tall tussock grassland dominated by one or more of the following in the upper stratum: Snow Grass, Wallaby Grasses, Kangaroo grass, Rough Speargrass, Tall Speargrass and a variety of forbs. It occurs in cold, dry, rainshadow parts of the Monaro. r7 (Themeda australis – Rytidosperma sp. – Poa sieberiana moist tussock grassland of the South Eastern Highlands bioregion) is an open to dense, mid-high to tall tussock grassland with the upper stratum dominated by Kangaroo Grass and with a sub-dominance of Wallaby Grasses, Snow Grass and several palatable forbs. Often occurs in a mosaic with r5. r8 (Themeda australis – Lomandra filiformis – Aristida ramosa dry tussock grassland in the South Eastern Highlands bioregion) is an open to dense, mid to tall tussock grassland with the upper stratum dominated by Kangaroo grass, Purple Wiregrass, Wattle Mat-rush and Brush-tail Speargrass and a range of forbs. Its sampled range is relatively restricted and found on steep, exposed sites in the mid-Murrumbidgee catchment and in the upper Shoalhaven and Goulburn districts.</p>					

Species	Listing		Habitat	No. of Records within 10 km	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
<b><i>Snowpatch Feldmark in the Australian Alps Bioregion</i></b>	CE	-	Snowpatch Feldmark is restricted to steep, sheltered slopes at high elevation that receive abundant snow in winter. The snow in this situation is the last to melt, resulting in a very short growing season for the few species that characterize this community.	Bionet	Absent	Low	Low	No associated PCTs
<b><i>Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions</i></b>	E	-	Associated with humic clay loams and sandy loams, on waterlogged or periodically inundated alluvial flats and drainage lines associated with coastal floodplains. Generally occurs below 20 m (though sometimes up to 50 m) elevation. The composition of the community is primarily determined by the frequency and duration of waterlogging and the texture, salinity nutrient and moisture content of the soil, and latitude. The composition and structure of the understorey is influenced by grazing and fire history, changes to hydrology and soil salinity and other disturbance, and may have a substantial component of exotic grasses, vines and forbs.	Bionet	Absent	Low	Low	The site altitude it too high.
<b><i>Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions</i></b>	E	-	Tableland Basalt Forest typically occurs on loam or clay soils associated with basalt or, less commonly, alluvium, fine-grained sedimentary rocks, granites and similar substrates that produce relatively fertile soils. The species composition of Tableland Basalt Forest varies with average annual rainfall. On basalt or plutonic substrates east of Mittagong and Moss Vale, at the eastern edge of its distribution where average rainfall exceeds 1000-1100 mm per year, the community is replaced by Robertson Basalt Tall Open-forest and Mount Gibraltar Forest. Its distribution spans altitudes from approximately 600 m to 900 m above sea level, usually on undulating or hilly terrain. Mean annual rainfall varies from approximately 750 mm up to 1100 mm across the distribution of the community.	Bionet	Absent	Low	Low	No associated PCTs
<b><i>Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions</i></b>	CE	-	The trees may occur as pure stands dominated by snow Gum, or with candlebark as co-dominant to sub-dominant. Non-characteristic trees may occur as subdominant. The understorey in intact sites is characterised by native grasses and a high diversity of herbs; the most commonly encountered include kangaroo grass ( <i>Themeda australis</i> ) and common snow-grass ( <i>Poa sieberiana</i> ) with others including weeping grass ( <i>Microlaena stipoides</i> ), purple wiregrass ( <i>Aristida ramosa</i> ), tall speargrass ( <i>Austrostipa bigeniculata</i> ), tall wheatgrass ( <i>Anthosachne scabra</i> ) and a variety of forbs. Shrubs are generally sparse or absent, though they may be locally common. Sub-shrubs (woody species <0.5 m tall) may be common. The most common shrubs and sub-shrubs include <i>Pimelia curviflora</i> , native cranberry ( <i>Astroloma humifusum</i> ) and hoary guinea-flower ( <i>Hibbertia obtusifolia</i> ).	Bionet	Absent	Low	Low	No associated PCTs

Species	Listing		Habitat	No. of Records within 10 km	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
<b>White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland</b> / <b>White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner</b>	CE	CE	Characterised by the presence or prior occurrence of White Box, Yellow Box and/or Blakely's Red Gum and a generally grassy understorey. The trees may occur as pure stands, mixtures of the three species or in mixtures with other trees, including wattles. Commonly co-occurring eucalypts include Apple Box ( <i>E. bridgesiana</i> ), Red Box ( <i>E. polyanthemos</i> ), <i>E. macrorhyncha</i> ), Coastal Grey Box ( <i>E. moluccana</i> ), Candlebark ( <i>E. rubida</i> ), Bundy ( <i>E. goniocalyx</i> ), Broad-leaved Stringybark ( <i>E. goniocalyx</i> ), Youman's Stringybark ( <i>E. youmanii</i> ) and others. The understorey in intact sites is characterised by native grasses and a high diversity of herbs; the most commonly encountered include Kangaroo Grass ( <i>Themeda australis</i> ), Poa Tussock ( <i>Poa sieberiana</i> ), wallaby grasses ( <i>Rytidosperma</i> spp.), spear-grasses ( <i>Austrostipa</i> spp.), Common Everlasting ( <i>Chrysocephalum apiculatum</i> ), Scrambled Eggs ( <i>Goodenia pinnatifida</i> ), Small St John's Wort ( <i>Hypericum gramineum</i> ), Narrow-leafed New Holland Daisy ( <i>Vittadinia muelleri</i> ) and blue-bells ( <i>Wahlenbergia</i> spp.)	PMST / Bionet	Absent	Low	Low	No associated PCTs
<b>Windswept Feldmark in the Australian Alps Bioregion</b>	CE	-	Windswept Feldmark occurs on high ridges of the Kosciuszko Main Range from 2010–2150 m a.s.l. The shallow soils and strong winds in this environment result in vegetation cover in Windswept Feldmark being relatively sparse with low plant diversity. The dominant shrub ( <i>Epacris microphylla</i> ) grows in discrete 'halo-like' patches typically less than 1 m <sup>2</sup> in area and accounts for 25–50% cover of this community. It is thought to be important in facilitating regeneration and growth of several species restricted to this community, which include <i>Euphrasia collina</i> subsp. <i>lapidosa</i> , <i>Kelleria dieffenbachia</i> , <i>Luzula australasica</i> subsp. <i>dura</i> , <i>Ranunculus acrophilus</i> , <i>Rytidosperma pumilum</i> and <i>Veronica densifolia</i> .	Bionet	Absent	Low	Low	No associated PCTs



## A.2 Fauna

Species	Listing		Habitat	No. of Records Within 10 km Locality	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
Amphibians (3)								
<i>Litoria spenceri</i> Spotted Tree Frog	CE	E	Occur among boulders or debris along naturally vegetated, rocky fast flowing upland streams and rivers. In summer, during the breeding season, adults bask on large in-stream boulders while juveniles occupy shingle banks. In winter animals are thought to hibernate in vegetation outside of the main stream environment.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Litoria verreauxii alpina</i> Alpine Tree Frog	E	V	Found in a wide variety of habitats including woodland, heath, grassland and herb fields. Breed in natural and artificial wetlands including ponds, bogs, fens, streamside pools, stock dams and drainage channels that are still or slow flowing.	4 (1982-1994)	Absent	Low	Low	No suitable habitat will be impacted.
<i>Pseudophryne corroboree</i> Southern Corroboree Frog	CE	CE	Summer breeding habitat is pools and seepages in sphagnum bogs, wet tussock grasslands and wet heath. Outside the breeding season adults move away from the bogs into the surrounding heath and snowgum woodland to overwinter under litter, logs and dense groundcover.	1 (1900)	Absent	Low	Low	No suitable habitat will be impacted.
Aves (24)								
<i>Anthochaera phrygia</i> Regent Honeyeater	CE	CE	The Regent Honeyeater is a flagship threatened woodland bird whose conservation will benefit a large suite of other threatened and declining woodland fauna. The species inhabits dry open forest and woodland, particularly Box-Ironbark woodland, and riparian forests of River Sheoak. Regent Honeyeaters inhabit woodlands that support a significantly high abundance and species richness of bird species. These woodlands have significantly large numbers of mature trees, high canopy cover and abundance of mistletoes	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Aphelocephala leucopsis</i> Southern Whiteface	-	V	Southern whitefaces live in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both. These areas are usually in habitats dominated by acacias or eucalypts on ranges, foothills and lowlands, and plains.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Artamus cyanopterus cyanopterus</i> Dusky Woodswallow	V	-	Primarily inhabit dry, open eucalypt forests and woodlands, including mallee associations, with an open or sparse understorey of eucalypt saplings, acacias and other shrubs, and ground-cover of grasses or sedges and fallen woody debris. It has also been recorded in shrublands, heathlands and very occasionally in moist forest or rainforest. Also found in farmland, usually at the edges of forest or woodland.	2 (1972-2014)	Absent	High	Low	The species has been recorded in 2014 within 500 metres of the proposed works. The habitat impacted does not contain a sparse or open understory making it unlikely for the species to use the habitat.
<i>Callocephalon fimbriatum</i> Gang-gang Cockatoo	V	E	In spring and summer, generally found in tall mountain forests and woodlands, particularly in heavily timbered and mature wet sclerophyll forests. In autumn and winter, the species often moves to lower altitudes in drier more open eucalypt forests and woodlands, particularly box-gum and box-ironbark assemblages, or in dry forest in coastal areas and often found in urban areas. May also occur in sub-alpine Snow Gum ( <i>Eucalyptus pauciflora</i> ) woodland and occasionally in temperate rainforests. Favours old growth forest and woodland	60 (1980-2018)	Absent	Low	Low	Limited vegetation no suitable habitat will be impacted.

Species	Listing		Habitat	No. of Records Within 10 km Locality	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
			attributes for nesting and roosting. Nests are located in hollows that are 7 cm in diameter or larger in eucalypts and 3 metres or more above the ground.					
<i>Climacteris picumnus victoriae</i> Brown Treecreeper (eastern subspecies)	V	V	Found in eucalypt woodlands (including Box-Gum Woodland) and dry open forest of the inland slopes and plains inland of the Great Dividing Range; mainly inhabits woodlands dominated by stringybarks or other rough-barked eucalypts, usually with an open grassy understorey, sometimes with one or more shrub species; also found in mallee and River Red Gum ( <i>Eucalyptus camaldulensis</i> ) Forest bordering wetlands with an open understorey of acacias, saltbush, lignum, cumbungi and grasses; usually not found in woodlands with a dense shrub layer; fallen timber is an important habitat component for foraging; also recorded, though less commonly, in similar woodland habitats on the coastal ranges and plains.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Daphoenositta chrysoptera</i> Varied Sittella	V	-	Inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and <i>Acacia</i> woodland.	1 (1972)	Absent	Low	Low	No suitable habitat will be impacted. No current records in the area.
<i>Falco hypoleucos</i> Grey Falcon	V	V	Usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast. Also occurs near wetlands where surface water attracts prey.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Grantiella picta</i> Painted Honeyeater	V	V	Inhabits Boree/ Weeping Myall ( <i>Acacia pendula</i> ), Brigalow ( <i>A. harpophylla</i> ) and Box-Gum Woodlands and Box-Ironbark Forests. A specialist feeder on the fruits of mistletoes growing on woodland eucalypts and acacias. Prefers mistletoes of the genus <i>Amyema</i> .	PMST	Absent	Low	Low	No suitable habitat will be impacted. No recent records of species in the area.
<i>Lathamus discolor</i> Swift Parrot	E	CE	Migrates to the Australian south-east mainland between February and October. On the mainland they occur in areas where eucalypts are flowering profusely or where there are abundant lerp (from sap-sucking bugs) infestations. Favoured feed trees include winter flowering species such as Swamp Mahogany <i>Eucalyptus robusta</i> , Spotted Gum <i>Corymbia maculata</i> , Red Bloodwood <i>C. gummifera</i> , Forest Red Gum <i>E. tereticornis</i> , Mugga Ironbark <i>E. sideroxylon</i> , and White Box <i>E. albens</i>	PMST	Marginal	Moderate	Moderate	No suitable habitat will be impacted. No records of species in the area.
<i>Melanodryas cucullata cucullata</i> Hooded Robin (south-eastern form)	V	E	Prefers lightly wooded country, usually open eucalypt woodland, acacia scrub and mallee, often in or near clearings or open areas. Requires structurally diverse habitats featuring mature eucalypts, saplings, some small shrubs and a ground layer of moderately tall native grasses.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Neophema chrysogaster</i> Orange-bellied Parrot	CE	CE	On the mainland, the Orange-bellied Parrot spends winter mostly within 3 km of the coast in sheltered coastal habitats including bays, lagoons, estuaries, coastal dunes and saltmarshes. The species also inhabits small islands and peninsulas and occasionally saltworks and golf courses. Birds forage in low samphire herbland or taller coastal shrubland.	1 (1917)	Absent	Low	Low	No suitable habitat will be impacted. No current records within the locality.
<i>Neophema chrysostoma</i> Blue-winged Parrot		V	Foraging and staging habitats found from coastal, sub-coastal and inland areas, right through to semi-arid zones including grasslands, grassy woodlands, and semi-arid chenopod shrubland with native and introduced grasses, herbs and shrubs. Wetlands both near the coast and in semi-arid zones used for foraging and staging. Eucalypt forests and woodlands within the eastern South Australia and southern Victoria.	PMST	Absent	Low	Low	No suitable habitat will be impacted.

Species	Listing		Habitat	No. of Records Within 10 km Locality	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
<i>Pachycephala olivacea</i> Olive Whistler	V	-	Mostly inhabit wet forests above about 500m. During the winter months they may move to lower altitudes. Forage in trees and shrubs and on the ground, feeding on berries and insects.	86 (1982-2018)	Present	High	High	Despite a large number of records within the locality and recorded within 500 metres of the proposal area. No Suitable habitat present within the proposal area.
<i>Petroica boodang</i> Scarlet Robin	V	-	The Scarlet Robin lives in dry eucalypt forests and woodlands. The understorey is usually open and grassy with few scattered shrubs. This species lives in both mature and regrowth vegetation. It occasionally occurs in mallee or wet forest communities, or in wetlands and tea-tree swamps. Scarlet Robin habitat usually contains abundant logs and fallen timber: these are important components of its habitat.	8 (1972-2018)	Absent	Low	Low	No suitable habitat will be impacted. Understory may be too dense for the species. Closest record is 2.3 km away from the proposal area.
<i>Petroica phoenicea</i> Flame Robin	V	-	Breeds in upland tall moist eucalypt forests and woodlands, often on ridges and slopes. Prefers clearings or areas with open understoreys. The groundlayer of the breeding habitat is dominated by native grasses and the shrub layer may be either sparse or dense. Occasionally occurs in temperate rainforest, and also in herbfields, heathlands, shrublands and sedgeland at high altitudes.	176 (1942-2020)	Present	High	High	Despite a large number of records within the locality and recorded within 500 metres of the proposal area. No Suitable habitat present within the proposal area.
<i>Petroica rodinogaster</i> Pink Robin	V	-	Inhabits rainforest and tall, open eucalypt forest, particularly in densely vegetated gullies.	36 (1972-2017)	Absent	Low	Low	Despite a large number of records within the locality and recorded within 500 metres of the proposal area. No suitable habitat present within the proposal area.
<i>Pycnoptilus floccosus</i> Pilotbird	-	V	wet sclerophyll forests in temperate zones in moist gullies with dense undergrowth). dry sclerophyll forests and woodlands occupying dry slopes and ridges	8 (1972-2017)	Absent	Low	Low	No suitable habitat will be impacted.
<i>Rostratula australis</i> Australian Painted Snipe	E	E	The species inhabits shallow freshwater wetlands, vegetated ephemeral and permanent lakes and swamps, and inundated grasslands. Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber.	PMST	Absent	Low	Low	The impact area does not contain any waterbodies or wetland areas. Hence, no suitable habitat will be impacted.
<i>Stagonopleura guttata</i> Diamond Firetail	V	-	Found in grassy eucalypt woodlands, including Box-Gum Woodlands and Snow Gum <i>Eucalyptus pauciflora</i> Woodlands. Also occurs in open forest, mallee, Natural Temperate Grassland, and in secondary grassland derived from other communities. Often found in riparian areas (rivers and creeks), and sometimes in lightly wooded farmland.	PMST	Absent	Low	Low	No suitable habitat is present in the proposal area. No records within the locality.
Fish (6)								
<i>Galaxias supremus</i> Kosciuszko Galaxias	-	CE	Galaxias supremus have been collected from permanent, cold and clear water in small flowing creeks (0.6–1.1 m average width, 0.1–0.2 m average depth, 0.5–0.6 m max depth) and from Blue Lake (a 16 hectare, 28 m deep cirque lake. The substrate is cobble, pebble, gravel and silt, with fish collected from amongst small cobbles and from within 2 m of the shoreline; fish location and habitat in deeper water is unknown. All sites lack emergent or submerged aquatic vegetation or overhead shading	PMST	Absent	Low	Low	No waterways will be impacted by the proposed works.
<i>Galaxias terenasus</i> Roundsnout Galaxias	-	E	The roundsnout galaxias is found in clear and slow-moderate flowing freshwater creeks and rivers (0.1–0.6 m in depth and 10–12 m in width) at elevations between 250–785 m above sea level (ASL). Habitat includes pools, glides, riffles, and areas of still backwaters with varying degrees of riparian shading. Adults are solitary, preferring deeper pools, while juveniles are found	PMST	Absent	Low	Low	No waterways will be impacted by the proposed works.



Species	Listing		Habitat	No. of Records Within 10 km Locality	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
			in shoals, congregating in shallower water near waterway banks. During periods of no or low flow, fish can be found in remnant pools or in the areas between rocks and cobbles which retain water. Species in the mountain galaxias complex are highly susceptible to changes in water quality, with an upper thermal tolerance of approximately 33 °C, which lowers as dissolved oxygen levels fall. During periods of declining water level and surface water loss, it is suspected that these galaxias species seek refuge by burrowing into the substrate. Instream habitat cover is provided by rock, timber debris, and/or vegetation overhang.					
<b><i>Maccullochella macquariensis</i></b> Trout Cod	-	E	In the Murray River below Yarrawonga Weir, Trout Cod inhabit a large (60—100 m wide), deep (>3 m) flowing river section with a sand, silt and clay substrate that contains abundant snags and woody debris. Trout Cod are often angled from within, under or adjacent to snags, branch piles, and steep clay banks, usually in areas of relatively fast current .Trout Cod were only found in snag piles that were typically opposite sandy beaches or on outside bends. There is a degree of overlap with the habitat requirements of Murray Cod and therefore competition between these two species is likely As a large proportion of the streams that the Trout Cod originally inhabited are now degraded, it is difficult to accurately determine the habitat requirements of the species.	PMST	Absent	Low	Low	No waterways will be impacted by the proposed works.
<b><i>Maccullochella peelii</i></b> Murray Cod	-	V	Murray Cod are frequently found in the main channels of rivers and larger tributaries. The species is, therefore, considered a main-channel specialist. Murray Cod tend to occur in floodplain channels and anabranches when they are inundated but the species' use of these floodplain habitats appears limited. Juveniles less than one year old have been found in main river channels where it appears they settle at a late larval (newly born) stage.	PMST	Absent	Low	Low	No waterways will be impacted by the proposed works.
<b><i>Macquaria australasica</i></b> Macquarie Perch	FM listed	E	In the Murray-Darling Basin, the species was once typically found in the cool, upper reaches of drainage systems located in southern New South Wales, the Australian Capital Territory and northern Victoria. In east coast drainage systems, the species has been recorded naturally occurring in the Hawkesbury/Nepean, Georges and Shoalhaven rivers in New South Wales.	PMST	Absent	Low	Low	No waterways will be impacted by the proposed works.
<b><i>Prototroctes maraena</i></b> Australian Grayling	FM listed	V	The Australian Grayling is endemic to south-eastern Australia, including Victoria, Tasmania and New South Wales. Larvae migrate out to sea for the first 4 – 6 months before migrating back to freshwater. In their freshwater phase they are found in moderate to fast flowing waters, such as glides or runs, during the day and slow-flowing waters at night.	PMST	Absent	Low	Low	No waterways will be impacted by the proposed works.
<b>Migratory (9)</b>								
<b><i>Actitis hypoleucos</i></b> Common Sandpiper	-	M	The species utilises a wide range of coastal wetlands and some inland wetlands, with varying levels of salinity, and is mostly found around muddy margins or rocky shores and rarely on mudflat	PMST	Absent	Low	Low	The impact area does not contain any waterbodies or wetland areas. Hence, no suitable habitat will be impacted.
<b><i>Apus pacificus</i></b> Fork-tailed Swift	-	M	In Australia, they mostly occur over inland plains but sometimes above foothills or in coastal areas. They often occur over cliffs and beaches and also over islands and sometimes well out to sea. They also occur over settled areas, including towns, urban areas and cities. They mostly occur over dry or open habitats, including riparian woodland and tea-tree swamps, low scrub, heathland or saltmarsh. They are also found at treeless grassland and sandplains covered with spinifex, open farmland and inland and coastal sand-	1 (2002)	Absent	Low	Low	No suitable habitat will be impacted.

Species	Listing		Habitat	No. of Records Within 10 km Locality	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
			dunes. The sometimes occur above rainforests, wet sclerophyll forest or open forest or plantations of pine					
<b>Calidris acuminata</b> <b>Sharp-tailed Sandpiper</b>	-	M	In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, salt pans and hypersaline salt lakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgelands and other ephemeral wetlands, but leave when they dry.	PMST	Absent	Low	Low	The impact area does not contain any waterbodies or wetland areas. Hence, no suitable habitat will be impacted.
<b>Calidris ferruginea</b> <b>Curlew Sandpiper</b>	E	CE M	It generally occupies littoral and estuarine habitats, and in New South Wales is mainly found in intertidal mudflats of sheltered coasts. It also occurs in non-tidal swamps, lakes and lagoons on the coast and sometimes inland. It forages in or at the edge of shallow water, occasionally on exposed algal mats or waterweed, or on banks of beach-cast seagrass or seaweed.	PMST	Absent	Low	Low	The proposal site area does not contain any waterbodies or wetland areas. Hence, no suitable habitat will be impacted.
<b>Calidris melanotos</b> <b>Pectoral Sandpiper</b>	-	M	In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands.	PMST	Absent	Low	Low	The proposal site area does not contain any waterbodies or wetland areas. Hence, no suitable habitat will be impacted.
<b>Gallinago hardwickii</b> <b>Latham's Snipe, Japanese Snipe</b>	-	M	In Australia, Latham's Snipe occurs in permanent and ephemeral wetlands up to 2000 m above sea-level. They usually inhabit open, freshwater wetlands with low, dense vegetation (e.g. swamps, flooded grasslands or heathlands, around bogs and other water bodies)	12 (1946-2001)	Marginal	Low	Low	The impact area does not contain any waterbodies or wetland areas. Hence, no suitable habitat will be impacted. Older records over 5 km away from the proposal area. May fly over but unlikely to be dependent on habitat in the proposal area.
<b>Hirundapus caudacutus</b> <b>White-throated Needletail</b>	-	V M	In Australia, they mostly occur above wooded areas, including open forest and rainforest, and may also fly between trees or in clearings, below the canopy, but they are less commonly recorded flying above woodland. They also commonly occur over heathland, but less often over treeless areas, such as grassland or swamp. When flying above farmland, they are more often recorded above partly cleared pasture, plantations or remnant vegetation at the edge of paddocks. In coastal areas, they are sometimes seen flying over sandy beaches or mudflats, and often around coastal cliffs and other areas with prominent updraughts, such as ridges and sand-dunes	8 (1970-1998)	Absent	Low	Low	May fly over but unlikely to be dependent on habitat in the proposal site.
<b>Motacilla flava</b> <b>Yellow Wagtail</b>	-	M	Various landscapes such as lowlands, where forests are located or forest-steppe belts, and it is also attracted by swampy meadows or river valleys. Marshland with grass and rare shrubs is also suitable for it as a habitat.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<b>Myiagra cyanoleuca</b> <b>Satin Flycatcher</b>	-	E M	Satin Flycatchers are mainly recorded in eucalypt forests, especially wet sclerophyll forest, often dominated by eucalypts such as Brown Barrel, <i>Eucalypt fastigata</i> , Mountain Gum, <i>E. dalrympleana</i> , Mountain Grey Gum, Narrow-leaved Peppermint, Messmate or Manna Gum, or occasionally Mountain Ash, <i>E. regnans</i> .	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<b>Numenius madagascariensis</b> <b>Eastern Curlew, Far Eastern Curlew</b>	-	CE M	It generally occupies coastal lakes, inlets, bays and estuarine habitats, and in New South Wales is mainly found in intertidal mudflats and sometimes saltmarsh of sheltered coasts.	PMST	Absent	Low	Low	No suitable habitat will be impacted.

Species	Listing		Habitat	No. of Records Within 10 km Locality	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
<i>Rhipidura rufifrons</i> Rufous Fantail	-	M	In east and south-east Australia, the Rufous Fantail mainly inhabits wet sclerophyll forests, subtropical and temperate rainforests, and drier sclerophyll forests and woodlands.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
Mammals (10)								
<i>Burramys parvus</i> Mountain Pygmy-possum	E	E	Lives on the ground in rocky areas where boulders have accumulated below mountain peaks; frequently associated with alpine heathland shrubs dominated by the Mountain Plum-pine ( <i>Podocarpus lawencei</i> ).	148 (1997-2017)	Absent	Low	Low	Despite a large number of records within the locality and recorded within 2k of the proposal area. No Suitable habitat present within the proposal area.
<i>Dasyurus maculatus</i> Spotted-tailed Quoll	V	E	Recorded across a range of habitat types, including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline	2 (1998-2020)	Absent	Low	Low	No suitable habitat will be impacted.
<i>Falsistrellus tasmaniensis</i> Eastern False Pipistrelle	V	-	Prefers moist habitats, with trees taller than 20 m. Generally, roosts in eucalypt hollows, but has also been found under loose bark on trees or in buildings. Which include areas of high productivity foraging habitat around creeks, rivers and wetlands.	3 (1970-1997)	Marginal	Low	Low	There are no hollows or fissures in the native trees to be removed and. The roof of the Lodge may be used as suitable microbat habitat Hence, a ToS is required.
<i>Mastacomys fuscus mordicus</i> Broad-toothed Rat (mainland), Tooarrana	V	V	The Broad-toothed Rat lives in a complex of runways through the dense vegetation of its wet grass, sedge or heath environment, and under the snow in winter. This relatively warm under-snow space enables it to be active throughout winter. Sheltering nests of grass are built in the understorey or under logs, where two or three young are born in summer. In winter the rats huddle together in nests, for warmth. In NSW the Broad-toothed Rat occurs in two widely separated areas: the wet alpine and subalpine heaths and woodlands in Kosciuszko National Park	83 (1969-2021)	Absent	Low	Low	Despite a large number of records in the area with records within 2 km of the proposal area. No suitable habitat will be impacted
<i>Petauroides Volans</i> Southern Greater Glider	E	E	Feeds exclusively on eucalypt leaves, buds, flowers and mistletoe. Shelter during the day in tree hollows and will use up to 18 hollows in their home range.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Petaurus australis</i> Yellow-bellied Glider	V	V	Occur in tall mature eucalypt forest generally in areas with high rainfall and nutrient rich soils. Forest type preferences vary with latitude and elevation; mixed coastal forests to dry escarpment forests in the north; moist coastal gullies and creek flats to tall montane forests in the south.	PMST	Absent	Low	Low	No suitable habitat will be impacted.
<i>Phascolarctos cinereus</i> Koala	E	E	Inhabit eucalypt woodlands and forests. Feed on the foliage of more than 70 eucalypt species and 30 non-eucalypt species, but in any one area will select preferred browse species.	1 (1900)	Absent	Low	Low	No suitable habitat present. No current records in the area.
<i>Pseudomys fumeus</i> Smoky Mouse, Konoom	CE	E	The Smoky Mouse appears to prefer heath habitat on ridge tops and slopes in sclerophyll forest, heathland and open-forest from the coast (in Victoria) to sub-alpine regions of up to 1800 metres, but sometimes occurs in ferny gullies. In NSW there are 3 records from Kosciuszko National Park and 2 records adjacent to the park in Bondo and Ingbyra State Forests; the remainder are centred around Mt Poole, Nullica State Forest and the adjoining South East Forests National Park.	PMST	Absent	Low	Low	No suitable habitat present. No records in the area.
<i>Pteropus poliocephalus</i>	V	V	Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit	PMST	Marginal	Moderate	Low	Limited bat habitat present in the area. No records in the locality. Pre

Species	Listing		Habitat	No. of Records Within 10 km Locality	Presence of Habitat	Likelihood of Occurrence	Possible Impact	Justification
	BC Act	EPBC						
Grey-headed Flying-fox			crops.					screen of house required.
Reptiles (5)								
<b><i>Aprasia parapulchella</i></b> Pink-tailed Worm-lizard, Pink-tailed Legless Lizard	V	V	Inhabits sloping, open woodland areas with predominantly native grassy groundlayers, particularly those dominated by Kangaroo Grass ( <i>Themeda australis</i> ). Sites are typically well-drained, with rocky outcrops or scattered, partially buried rocks.	PMST	Marginal	Moderate	Low	The habitat is highly treed with limited rocks. The stockpile areas may impact minimal suitable habitat.
<b><i>Cyclodomorphus praealtus</i></b> Alpine She-oak Skink	E	E	The Alpine She-oak Skink has specific habitat requirements, preferring tree-less or very lightly treed areas that contain tussock grasses, low heath or a combination of both. Within this habitat the species shelters beneath litter, rocks, logs and other ground debris, and has been observed basking on grass tussocks. In NSW, Alpine She-oak Skinks have been observed in alpine to sub-alpine grasslands in flat to gently sloping areas.	57 (1981-2022)	Marginal	Low	Low	Despite a large number records within the area, the habitat is highly treed with limited rocks. The closest record is 4 km away from the proposal area. The stockpile areas may impact minimal suitable habitat.
<b><i>Liopholis guthega</i></b> Guthega Skink	-	E	The preferred habitats for the Guthega Skink are usually rocky or have sub-surface boulders hidden beneath soil or thick vegetation. The species utilizes burrows often opening from under boulders or shrubs. The skink is also known to use fallen timber and surface rocks for shelter. Sites are generally covered with snow from approximately June to October and have mild temperatures in summer. During the colder periods, the species is insulated by living in soil burrows combined with deep snow cover. Individuals have been recorded in a range of vegetation types, including open Snow Gum ( <i>Eucalyptus pauciflora</i> ) woodland with grassy or shrubby understoreys, dry tussock grassland, and tall and short heath (Donnellan et al. 2002). The Guthega Skink usually occurs in areas where the topography ranges from flat plains to rolling alpine hills. The geology in known areas of occurrence is often granitic.	403 (2006-2023)	Marginal	Moderate	Moderate	All records are outside of the township and the species is more likely to use native vegetation. Due to this an AoS will not be required.
<b><i>Liopholis montana</i></b> Mountain Skink	-	E	The mountain skink occupies habitats with granite and basalt boulders, rocks, slabs, rock screes or tors and large logs in tall open-forest, woodland, and heathland vegetation in montane and subalpine areas of south-east Australia from 600–1700m above sea level. In the north of its range, the mountain skink occupies montane and subalpine conditions above 1400 m; however, in more southern locations it occupies taller eucalypt forest down to 900 m and down to 630 m in the west of its range.	PMST	Marginal	Low	Low	Potentially suitable habitat may be impacted, although no species records in the locality. Unlikely to be found within the proposal area.
<b><i>Pseudemoia cryodroma</i></b> Alpine Bog Skink, Alpine Bog-skink	-	E	The alpine bog skink occurs primarily in alpine bog, riparian and wet heath areas above 1100 m elevation, and less commonly in alpine and subalpine grassland and dry treeless heath, drainage lines in subalpine meadows, and in snow gum woodland. These areas provide the alpine bog skink with all the resources it requires for its life cycle (i.e. food, water, shelter, and breeding sites). The alpine bog skink usually occurs in wetter areas than the tussock skink and more open areas than the southern grass skink	PMST	Absent	Low	Low	No suitable habitat will be impacted. Not a riparian zone.

## **Appendix D ToS – Eastern False Pippstrelle**



**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?

#### **Habitat Availability and Dispersal**

This Eastern False Pipistrelle (*Falsistrellus tasmaniensis*) is known to prefer moist sclerophyll forests with trees taller than 20m (Blackthorn, 2013; DPE, 2017). Roost sites are generally hollow tree trunks of eucalypt trees but have also been found under loose bark and in buildings (Blackthorn, 2013; DPE, 2017). The proposed works aim to demolish a building within Thredbo Village. The species has been noted within the area three times between 1970-1997. Additionally, the species is known to fly up to 12kms from roosting site for foraging (Blackthorn, 2013; DPE, 2017). Saving Our Species guidelines for the Eastern False Pipistrelle does not outline the need to conserve building as suitable roosting habitat (NSW Government, 2017). It does however state to ensure roosting bats are not present before removing or disturbing the habitats (NSW Government, 2017). Hence, the removal of this habitat is unlikely to place the local species at risk of extinction.

#### **Reproduction and life stages**

The Eastern False Pipistrelle species undergoes torpor in winter, becomes pregnant in spring and early summer, and gives birth to a single offspring in December (Blackthorn, 2013; DPE, 2017). The young bat continues to nurse until the end of February (Blackthorn, 2013). It is crucial that these bats are not disturbed from roosting habitats during their hibernation period. The proposed construction plans will remove such suitable roosting habitats in the form of roof cavities and raked ceiling ledges for this bat species, which could affect their life cycle. Demolition is planned for spring which is close to the breeding period and could negatively impact the bats' ability to reproduce. The impact to the breeding ability of the species would be heightened if the species had a strong roost fidelity. However, despite many bats maintaining familiarity with multiple roost sites within an area, the species is not restricted to an individual roost (DSE, 2003). This is further expressed in Hourigan et al. (2010) study which found no evidence of roost fidelity in urban Townsville (Blackthorn, 2013). Colonies typically range from three to 36 individuals but the presence of colonies or individual Eastern Freetail Bats has not been recorded in the locality for over 20 years (Blackthorn, 2013). Therefore, since the likelihood of an active colony being affected is low and only one potential roost is to be destroyed, the impact to the local Eastern False Pipistrelle population is unlikely to be significant.

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

N/A

**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**

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,

The proposed works will remove potential roosting habitat for the Eastern False Pipistrelle, a lodge at Thredbo. The proposed demolition is located on 10 Bobuck Lane Thredbo. The site consists of an old building with exotic grasses and planted natives around the dwelling. The proposal area is 0.0145ha.

The proposed works will remove one building within the Thredbo Village, there are multiple buildings in the village and the village is surrounded by high quality suitable forest habitat. These other buildings and suitable habitat are likely to provide roosting habitat for the species. Hence, the removal of one building is not likely to fragment or isolate an area of habitat for the species.

The mobile nature of the species allows the Eastern False Pipistrelle to occupy roosting habitats outside of the proposal area. The species is not reliant on critical habitat features such as maternity cave, like other species of bats. Therefore, the single roost habitat removed by the proposed works would not be considered critical to the survival of the species.

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),

No Areas of Outstanding Biodiversity will be impacted either directly or indirectly by the proposed works.

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.

The proposed works will not increase the impact of any key threatening processes.

**Recommended mitigation measures and safeguards for threatened entities:**

Mitigation Measure and Safeguards for threatened entities include:

- Threatened species find protocol; In the event a threatened species is identified breeding on site, works would cease, and further assessment and consultation would be conducted.
- Pre-clearance surveys must be conducted through every stage of the demolition.
- .

**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**

**Conclusion**

The proposal is unlikely to lead to a significant impact to the local Eastern False Pipistrelle population. However, steps are recommended to minimise the risk of harming a colony should the potential roost be active. This would involve a pre-clearance survey and presence of a fauna spotter catcher during demolition.



# Appendix E Sonnblick Site Layout Map

Ref: 230204 Alpine Bobsled bio 20230511 | Sonnblick Site Layout Author: dylan.r Date created: 22.05.2023 © NGH 2023 © NGH 2023 © LPI 2023

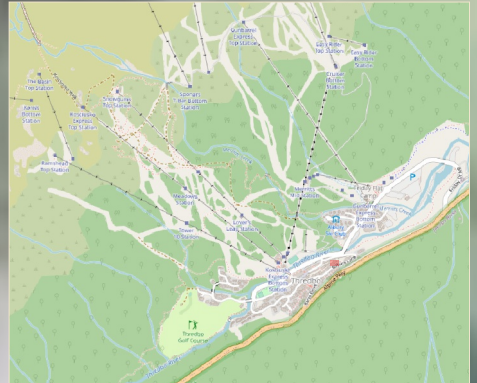
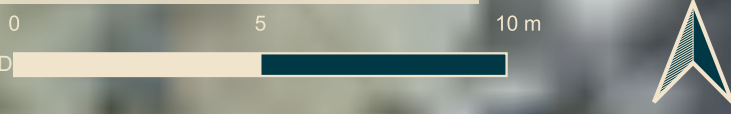


**LEGEND**

- Proposal Area
- Native Trees

Vegetation Mapping

- Exotic Grasses
- Planted Native



# Appendix F NSW WeedWise

# Priority weeds for the South East

**Note:** this region includes the local council areas of Bega Valley, Eurobodalla, Goulburn Mulwaree, Hilltops (eastern), Kiama, Queanbeyan-Palerang Regional, Shellharbour, Shoalhaven, Snowy Monaro Regional, Upper Lachlan, Wingecarribee, Wollongong and Yass Valley.

[Select another region](#)

## Weed

All plants

[Aaron's beard prickly pear](#)

*Opuntia leucotricha*

[African boxthorn](#)

*Lycium ferocissimum*

[Alligator weed](#)

*Alternanthera philoxeroides*

[Alligator weed](#)

*Alternanthera philoxeroides*

## Duty

### General Biosecurity Duty

*All pest plants are regulated with a **general biosecurity duty** to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.*

### Prohibition on certain dealings

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

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*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

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*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

### Biosecurity Zone

The Alligator Weed Biosecurity Zone is established for all land within the state except land in the following regions: Greater Sydney; Hunter (but only in the local government areas of City of Lake Macquarie, City of Maitland, City of Newcastle or Port Stephens).

*Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone*

Anchored water hyacinth

*Eichhornia azurea*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Athel pine

*Tamarix aphylla*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Bellyache bush

*Jatropha gossypifolia*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Bitou bush

*Chrysanthemoides monilifera* subsp.  
*rotundata*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Bitou bush

*Chrysanthemoides monilifera* subsp.  
*rotundata*

**Biosecurity Zone**

The Bitou Bush Biosecurity Zone is established for all land within the State except land within 10 kilometres of the mean high water mark of the Pacific Ocean between Cape Byron in the north and Point Perpendicular in the south.

*Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone*

Black knapweed

*Centaurea x moncktonii*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Black willow

*Salix nigra*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*



Blackberry.

*Rubus fruticosus* species aggregate

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the *Rubus fruticosus* species aggregate have this requirement, except for the varieties Black Satin, Chehalem, Chester Thornless, Dirksen Thornless, Loch Ness, Murrindindi, Silvan, Smooth Stem, and Thornfree**

Blind cactus

*Opuntia rufida*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Boneseed

*Chrysanthemoides monilifera* subsp. *monilifera*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Boneseed

*Chrysanthemoides monilifera* subsp. *monilifera*

**Control Order**

Boneseed Control Zone: Whole of NSW

*Boneseed Control Zone (Whole of NSW): Owners and occupiers of land on which there is boneseed must notify the local control authority of new infestations; immediately destroy the plants; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of boneseed must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant.*

Boxing glove cactus

*Cylindropuntia fulgida* var. *mamillata*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Bridal creeper

*Asparagus asparagoides*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**\*this requirement also applies to the Western Cape form of bridal creeper**

Bridal veil creeper

*Asparagus declinatus*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Broomrapes

*Orobanche* species

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**All species of Orobanche are Prohibited Matter in NSW, except Clover broomrape, Orobanche minor and Australian broomrape, Orobanche cernua var. australiana.**

Bunny ears cactus

*Opuntia microdasys*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Cabomba

*Cabomba caroliniana*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Cane cactus

*Austrocylindropuntia cylindrica*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the Austrocylindropuntia genus have this requirement**

Cape broom

*Genista monspessulana*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Cat's claw creeper

*Dolichandra unguis-cati*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Cat's claw creeper

*Dolichandra unguis-cati*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Chicken dance cactus

*Opuntia schickendantzii*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Chilean needle grass

*Nassella neesiana*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Chinese violet

*Asystasia gangetica* subsp. *micrantha*

**Control Order**

*Owners and occupiers of land on which there is Chinese violet must notify the local control authority for the area if the Chinese violet is part of a new infestation on the land, destroy all Chinese violet on the land ensuring that subsequent generations of Chinese violet are destroyed; and keep the land free of Chinese violet. A person who deals with a carrier of Chinese violet must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant on the land, or on or in a carrier.*

Climbing asparagus

*Asparagus africanus*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Climbing asparagus fern

*Asparagus plumosus*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Common pear

*Opuntia stricta*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Coolatai grass

*Hyparrhenia hirta*

**Regional Recommended Measure**

Containment zone: Goulburn Mulwaree, Shoalhaven, Snowy Monaro, Wingecarribee, Upper Lachlan, Wollongong and Shellharbour Local Government Areas. Exclusion zone: Whole of region except containment zone.

*Whole of region: Land managers mitigate the risk of new weeds being introduced to their land. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant. Notify local control authority if found. Within containment zone: Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value. Land managers should mitigate spread of the plant from their land.*



Coral creeper

*Barleria repens*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Eurasian water milfoil

*Myriophyllum spicatum*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Eve's needle cactus

*Austrocylindropuntia subulata*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the Austrocylindropuntia genus have this requirement**

Fireweed

*Senecio madagascariensis*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Flax-leaf broom

*Genista linifolia*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Foxtail fern

*Asparagus densiflorus*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Frogbit

*Limnobium laevigatum*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**All species of Limnobium are Prohibited Matter**

Gamba grass

*Andropogon gayanus*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Giant devil's fig

*Solanum chrysotrichum*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Gorse

*Ulex europaeus*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Gorse

*Ulex europaeus*

**Regional Recommended Measure**

Containment zone: Goulburn Mulwaree, Queanbeyan-Palerang, Snowy Monaro, Wingecarribee and Yass Valley Local Government Areas. Exclusion zone: Whole of region except containment zone.

*Whole of region: Land managers mitigate the risk of new weeds being introduced to their land. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant. Notify local control authority if found. Within containment zone: Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value. Land managers should mitigate spread of the plant from their land.*

Grey sallow

*Salix cinerea*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Ground asparagus

*Asparagus aethiopicus*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Groundsel bush

*Baccharis halimifolia*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Hawkweeds

*Pilosella* species

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**All species in the genera *Pilosella* and *Hieracium* are Prohibited Matter except for *Hieracium murorum*.**

Holly leaved senecio

*Senecio glastifolius*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Horsetails

*Equisetum* species

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Hudson pear

*Cylindropuntia pallida*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Hydrocotyl

*Hydrocotyle ranunculoides*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Hymenachne

*Hymenachne amplexicaulis* and hybrids

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Karoo acacia

*Vachellia karroo*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Kei apple

*Dovyalis caffra*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Kidney-leaf mud plantain

*Heteranthera reniformis*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Kochia

*Bassia scoparia*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**Excluding the subspecies *trichophylla***

Koster's curse

*Clidemia hirta*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Kudzu

*Pueraria lobata*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Lagarosiphon

*Lagarosiphon major*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Lantana

*Lantana camara*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Lantana

*Lantana camara*

**Regional Recommended Measure**

Containment zone: Eurobodalla, Shoalhaven, Wollongong, Shellharbour and Kiama Local Government Areas. Exclusion zone: Whole of region except containment zone.

*Whole of region: Land managers mitigate the risk of new weeds being introduced to their land. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant. Notify local control authority if found. Within containment zone: Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value. Land managers should mitigate spread of the plant from their land.*

Long-leaf willow primrose

*Ludwigia longifolia*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Ludwigia

*Ludwigia peruviana*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Madeira vine

*Anredera cordifolia*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Mesquite

*Prosopis species*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the genus *Prosopis* have this requirement**

Mexican feather grass

*Nassella tenuissima*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Miconia

*Miconia species*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**All species of *Miconia* are Prohibited Matter in NSW**

Mikania vine

*Mikania micrantha*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**\*all species in the genus *Mikania* are Prohibited Matter in NSW**

Mimosa

*Mimosa pigra*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Ming asparagus fern

*Asparagus macowanii*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Mysore thorn

*Caesalpinia decapetala*

**Regional Recommended Measure**

Containment zone: Wollongong Local Government Area.  
Exclusion zone: Whole of region except containment zone.  
*Whole of region: Land managers mitigate the risk of new weeds being introduced to their land. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant. Notify local control authority if found. Within containment zone: Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value. Land managers should mitigate spread of the plant from their land.*

Parkinsonia

*Parkinsonia aculeata*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Parkinsonia

*Parkinsonia aculeata*

**Control Order**

Parkinsonia Control Zone: Whole of NSW

*Parkinsonia Control Zone (Whole of NSW): Owners and occupiers of land on which there is parkinsonia must notify the local control authority of new infestations; immediately destroy the plants; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of parkinsonia must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant.*

Parthenium weed

*Parthenium hysterophorus*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Parthenium weed

*Parthenium hysterophorus*

**Prohibition on certain dealings**

*The following equipment must not be imported into NSW from Queensland: grain harvesters (including the comb or front), comb trailers (including the comb or front), bins used for holding grain during harvest operations, augers or similar for moving grain, vehicles used to transport grain harvesters, support vehicles driven in paddocks during harvest operations, mineral exploration drilling rigs and vehicles used to transport those rigs, unless set out as an exception in Division 5, Part 2 of the Biosecurity Order (Permitted Activities) 2017*

Pond apple

*Annona glabra*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Prickly acacia

*Vachellia nilotica*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*



Prickly pears - Austrocyllindropuntias

*Austrocyllindropuntia* species

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the *Austrocyllindropuntia* genus have this requirement**

Prickly pears - Cyllindropuntias

*Cyllindropuntia* species

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the *Cyllindropuntia* genus have this requirement**

Prickly pears - Opuntias

*Opuntia* species

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**For all *Opuntia* species except for *Opuntia ficus-indica* (Indian fig).**

Riverina pear

*Opuntia elata*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Rope pear

*Cyllindropuntia imbricata*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the *Cyllindropuntia* genus have this requirement**

Rubber vine

*Cryptostegia grandiflora*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Sagittaria

*Sagittaria platyphylla*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Salvinia

*Salvinia molesta*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Salvinia

*Salvinia molesta*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Scotch broom

*Cytisus scoparius* subsp. *scoparius*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Sea spurge

*Euphorbia paralias*

**Regional Recommended Measure**

Exclusion zone: Wollongong, Shellharbour and Kiama Local Government Areas. Containment zone: Whole of region except Exclusion zone.

*Whole of region: Land managers mitigate the risk of new weeds being introduced to their land. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant. Notify local control authority if found. Within containment zone: Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value. Land managers should mitigate spread of the plant from their land.*

Senegal tea plant

*Gymnocoronis spilanthoides*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Serrated tussock

*Nassella trichotoma*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Siam weed

*Chromolaena odorata*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Sicklethorn

*Asparagus falcatus*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Silverleaf nightshade

*Solanum elaeagnifolium*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Silverleaf nightshade

*Solanum elaeagnifolium*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Smooth tree pear

*Opuntia monacantha*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Snakefeather

*Asparagus scandens*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Spanish heath  
*Erica lusitanica*

### **Regional Recommended Measure**

Containment zone: Queanbeyan-Palerang, Snowy Monaro and Wingecarribee Local Government Areas. Exclusion zone: Whole of region except containment zone.

*Whole of region: Land managers mitigate the risk of new weeds being introduced to their land. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Within exclusion zone: Land managers should eradicate the plant from the land and keep the land free of the plant. Notify local control authority if found. Within containment zone: Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value. Land managers should mitigate spread of the plant from their land.*

Spongeplant  
*Limnobium spongia*

### **Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**All species of *Limnobium* are Prohibited Matter**

Spotted knapweed  
*Centaurea stoebe* subsp. *micranthos*

### **Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Sticky nightshade  
*Solanum sisymbriifolium*  
Regional recommended measure for  
Central Tablelands from February  
2020

### **Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Tiger pear  
*Opuntia aurantiaca*

### **Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Tropical soda apple

*Solanum viarum*

**Control Order**

Tropical Soda Apple Control Zone: Whole of NSW

*Tropical Soda Apple Control Zone (Whole of NSW): Owners and occupiers of land on which there is tropical soda apple must notify the local control authority of new infestations; destroy the plants including the fruit; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of tropical soda apple must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant on the land, or on or in a carrier.*

Velvety tree pear

*Opuntia tomentosa*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Water caltrop

*Trapa species*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**All species in the *Trapa* genus are Prohibited Matter in NSW**

Water hyacinth

*Eichhornia crassipes*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Water hyacinth

*Eichhornia crassipes*

**Biosecurity Zone**

The Water Hyacinth Biosecurity Zone applies to all land within the State, except for the following regions: Greater Sydney or North Coast, North West (but only the local government area of Moree Plains), Hunter (but only in the local government areas of City of Cessnock, City of Lake Macquarie, MidCoast, City of Maitland, City of Newcastle or Port Stephens), South East (but only in the local government areas of Eurobodalla, Kiama, City of Shellharbour, City of Shoalhaven or City of Wollongong).

*Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone*

Water lettuce

*Pistia stratiotes*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Water poppy

*Hydrocleys nymphoides*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Water soldier

*Stratiotes aloides*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

Water star grass

*Heteranthera zosterifolia*

**Regional Recommended Measure**

*Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.*

Wheel cactus

*Opuntia robusta*

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

Willows

*Salix* species

**Prohibition on certain dealings**

*Must not be imported into the state, sold, bartered, exchanged or offered for sale.*

**All species in the *Salix* genus have this requirement, except *Salix babylonica* (weeping willows ), *Salix x calodendron* (pussy willow) and *Salix x reichardtii* (sterile pussy willow)**

Witchweeds

*Striga* species

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

**All species in the *Striga* genus are Prohibited Matter in NSW, except the native *Striga parviflora***

Yellow burrhead

*Limnocharis flava*

**Prohibited Matter**

*A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries*

The content provided here is for information purposes only and is taken from the *Biosecurity Act 2015* and its subordinate legislation, and the Regional Strategic Weed Management Plans (published by each Local Land Services region in NSW). It describes the state and regional priorities for weeds in New South Wales, Australia.



## **Appendix G Provisional Demolition Plan**

## Project 2: Sonnblick Lodge demolition

Sonnblick is a sixteen (16) bed three apartment staff accommodation building on Bobuck Lane in the Eastern precinct of the Thredbo Village. Site photos are provided in **Attachment 2**.

The proposal is for the demolition of the building and associated concrete paths, landings and stairs subject to geotechnical plan requirements for site stability post demolition. Kosciuszko Thredbo (KT) would then advertise the site as a development opportunity with the likely time frame between demolition and activation of any new development being eighteen to thirty months.

A brief summary of the proposal is provided below.

### **Geotechnical Investigation/report and demolition plan**

KT will separately engage a geotechnical engineer to prepare a geotechnical report and recommendation for site stability post demolition. KT will also separately engage an appropriate engineering consult to prepare a demolition plan in accordance with *AS 2601-2001 The demolition of structures*.

### **Machinery and equipment**

Machinery and equipment requirements will be subject to the geotechnical report but will likely include: large excavator, large trucks, mobile crane and standard hand tools.

### **Site management**

Demolition equipment and materials may be located on site but must not affect the single lane (one way) traffic of Bobuck Lane. Contractors will also likely be provided a secured compound area at Friday Flat (contractor to provide fencing etc).

### **Waste**

Demolished material will be recycled where possible and if not will be transported to Jindabyne Landfill.