11 APPENDICES



APPENDIX 1 – EXPERIENCE AND QUALIFICATIONS OF PERSONNEL



Name and Qualifications **Experience** Steve is a highly experienced Consulting Ecologist having **Steve Sass** undertaken hundreds of terrestrial and aquatic ecological surveys B.App.Sci (Env.Sci) (Hons) and assessments across Australia since 1992. He has an in-depth Director / Principal Ecologist / working knowledge of environmental and biodiversity legislation **Project Manager** across all states and territories which allows him to provide detailed and accurate assessments and formulate practical solutions to clients and specific projects on a case-by-case basis. Certified Environmental Previous and current research holds Steve in high regard within Practitioner, EIANZ both the scientific and ecological consultants' community. To date, OEH Biobanking and Steve has published, submitted or has in preparation, twenty-eight **Biocertification Assessor** manuscripts within peer-reviewed scientific journals, most of which Practicing Member, Ecological are related to threatened species survey, monitoring or Consultants Association of management. He is a Council Member of the Ecological NSW (ECA) Consultants Association of NSW and is a member of the working committee for the development of an Ecological Consultants Member, Australian Society of Accreditation Scheme for NSW consultants in collaboration with Herpetologists OEH. Steve was recently invited by OEH to become a sitting member of a team to develop Priority Action Statements for two species listed as Endangered under the NSW Threatened Species Conservation Act 1995 and is currently working with OEH on the Saving our Species Program for a newly identified species of dragon lizard in western NSW (Ctenophorus mirrityana) which Steve collaborated with other scientists to formally describe. Steve has extensive experience in southern NSW. Over the past eight years, he has completed or provided specialist biodiversity advice to more than 600 environmental assessments for projects such as residential and industrial developments, highway upgrades and telecommunications, water, sewerage, energy, mining and electricity network infrastructure projects. Steve is highly conversant with the flora, vegetation communities, fauna and their habitats of the south coast region. His expertise with regard to forest and wetland birds, reptiles, frogs and mammals is well known Steve brings to this project his knowledge of the biodiversity of the NSW south coast, and his extensive scientific background as a past employee of the Ecology and Biodiversity Group within the Institute for Land, Water and Society, a leading research group at Charles Sturt University, Australia's largest regional university and his accreditation as a BioBanking and Biocertification Assessor with OEH, and a Certified Environmental Practitioner by the Environment Institute of Australia and New Zealand. For the REF Steve was the Project manager and carried out some of the fauna surveys. He also was part of the support team for the field personnel and reviewed the REF. **Joshua Wellington** Joshua is a highly experienced Ecologist having undertaken hundreds of biodiversity surveys in woodland and forests in NSW B. Sc (Environmental) and Victoria and has more than 5 years' experience in Senior Project Officer/Botanist Environmental Planning, Assessment and Management. He has extensive major project experience, having just completed a Biodiversity Assessment and Constraints Regional Opportunities Analysis for a proposed 2,500 hectare mining project inalpine and sub-alpine vegetation consistent with that anticipated along the LTVT. This included a detailed Biobanking Assessment



Experience
of the development site and the identification of suitable offset areas in the region. Field surveys were designed by Joshua to ensure compliance with the Biobanking Assessment Methodology (BBAM) and this lead to the completion of more than 100 biobanking/plot transects to ensure adequacy with BBAM.
Joshua has extensive linear infrastructure experience, having prepared REFs, Biodiversity Assessments and Route Options Analysis for electricity, road and pipeline infrastructure. This has included road upgrades in Southern and South-West Region, including for road networks passing through national parks. Josh was also the senior ecologist and primary author of an REF for rehabilitation works along the Thredbo River, confirming his expertise in the region. For this project, Joshua was the primary author of the REF and the senior ecologist for the field survey.
Simone recently joined the EnviroKey team after working with the Australian Research Centre for Urban Ecology at the University of Melbourne. Here, Simone worked on a number of projects including collecting data on the impacts of large infrastructure development, which included the Hume Highway duplication in relation to forest and woodland birds, gliding mammals and microchiropteran bats. For this project, Simone assisted with the fauna survey.
Stephanie has extensive experience in ArcGIS having worked in private industry and government agencies for the past 6 years. She prepared all previous mapping and spatial data for the PBI (including spatial statistics) and for this consultancy. Stephanie produced the shapefiles and maps within the REF.
Linda is an experienced ecologist having conducted flora and fauna surveys across southern NSW for the past 9 years. Her recent projects include Threatened Species Investigations for the Roads & Maritime Services where she completed target threatened reptile, bird and mammal surveys, and target threatened flora searches. During this work, she identified a previously unknown population of the threatened plant Swainsona sericea. Linda has a wide variety of experience working on the NSW south coast, with her recent projects including an REF for proposal adjacent to a SEPP14 wetland north of Bodalla, and Biodiversity Assessments for a 13-lot rural-residential development west of Pambula, Drainage works in Bangalay Sand Forest adjacent to Merimbula Airport and a telecommunications tower at Tura Beach. For this project, Linda conducted an internal review of the REF prior to certification and approval by the Principal Ecologist. Linda



APPENDIX 2 – FLORA LIST



Scientific Name	Common Name	Family	Abundance	
Native Species				
Acacia dealbata	Silver Wattle	Fabaceae	0	
Acacia melanoxylon	Blackwood	Fabaceae	0	
Acacia obliquinervia	Mountain Hickory	Fabaceae	0	
Acacia siculiformis	Dagger Wattle	Fabaceae	С	
Acaena novae-zelandiae	Bidgee-widgee	Rosaceae	С	
Acrothamnus hookeri	Mountain Beard-heath	Ericaceae	0	
Acrotriche serrulata	Honeypots	Ericaceae	U	
Asperula conferta	Common Woodruff	Rubiaceae	С	
Asperula gunnii	Mountain Woodruff	Rubiaceae	U	
Baeckea utilis	Mountain Baeckea	Myrtaceae	С	
Bedfordia arborescens	Blanket Leaf	Asteraceae	U	
Blechnum penna-marina subsp. alpina	Alpine Water Fern	Blechnaceae	U	
Bossiaea foliosa	Leafy Bossiaea	Fabaceae	С	
Callistemon sieberi	River Bottlebrush	Myrtaceae	0	
Carex appressa	Tall Sedge	Cyperaceae	0	
Cassinia aculeata	Common Cassinia	Asteraceae	С	
Cassinia longifolia	Shiny Cassinia	Asteraceae	С	
Clematis aristata	Old Man's Beard	Ranunculaceae	U	
Coprosma hirtella	Coffee-berry	Rubiaceae	0	
Coprosma quadrifida	Prickly Currant Bush	Rubiaceae	U	
Correa lawrenceana var. cordifolia	Mountain Correa	Rutaceae	0	
Cymbonotus preissianus	Austral Bears-ear	Asteraceae	U	
Daviesia mimosoides subsp. mimosoides	Bitter Pea	Fabaceae	С	
Daviesia ulicifolia	Gorse Bitter Pea	Fabaceae	С	
Dianella tasmanica	Tasman Flax-lily	Phormiaceae	U	
Dichondra repens	Kidney Weed	Convolvulaceae	С	
Epacris breviflora	Drumstick Heath	Ericaceae	0	



Scientific Name	Common Name	Family	Abundance
Eucalyptus dalrympleana subsp. dalrympleana	Mountain Gum	Myrtaceae	С
Eucalyptus pauciflora	Snow Gum or White Sally	Myrtaceae	С
Eucalyptus rubidia subsp. rubida	Candlebark	Myrtaceae	С
Eucalyptus stellulata	Black Sally	Myrtaceae	0
Eucalyptus viminalis	Ribbon Gum	Myrtaceae	0
Exocarpos strictus	Pale-fruit Ballart	Santalaceae	0
Glycine clandestina	Variable Glycine	Fabaceae	С
Gonocarpus montanum	Raspwort	Haloragaceae	U
Grevillea lanigera	Woolly Grevillea	Proteaceae	0
Hakea lissosperma	Needle Bush	Proteaceae	0
Hakea microcarpa	Small-fruit Hakea	Proteaceae	0
Hovea linearis	Hovea	Fabaceae	0
Hydrocotyle laxiflora	Stinking Pennywort	Apiaceae	0
Hypericum gramineum	Small St. John's Wort	Clusiaceae	U
Juncus sp.	Rush	Juncaceae	0
Kunzea ericoides	Burgan	Myrtaceae	0
Lagenophora stipitata	Blue Bottle-daisy	Asteraceae	U
Leptospermum grandifolium	Mountain Teatree	Myrtaceae	С
Leptospermum lanigerum	Woolly Teatree	Myrtaceae	С
Lomandra longifolia	Spiny-headed Mat-rush	Lomandraceae	0
Lomatia myricoides	River Lomatia	Proteaceae	0
Malus pumila	Apple	Malaceae	U
Microleana stipoides	Weeping Grass	Poaceae	С
Mirbelia oxylobioides	Mountain mirbelia	Fabaceae	U
Olearia erubescens	Pink-tip Daisy-bush	Asteraceae	0
Olearia megalophylla	Large-leaf Daisy Bush	Asteraceae	0
Olearia phlogopappa	Dusty Daisy-bush	Asteraceae	0
Oreomyrrhis eriopoda	Australian Carraway	Apiaceae	U
Ozothamnus thyrsoideus	Sticky Everlasting	Asteraceae	0



Scientific Name	Common Name	Family	Abundance
Pimelea ligustrina	Tall Rice-flower	Thymelaeaceae	0
Pimelea pauciflora	Poison Rice-flower	Thymelaeaceae	0
Poa helmsii	Broad-leaved Tussock- grass	Poaceae	0
Poa labillardierei	Tussock	Poaceae	С
Poa meionectes		Poaceae	С
Poa sieberiana	Snow Grass	Poaceae	С
Poa sp.	Tussock	Poaceae	С
Podolepis robusta	Mountain Lettuce	Asteraceae	С
Polyscias sambucifolia	Elderberry Panax	Araliaceae	0
Polystichum proliferum	Mother Shield Fern	Dryopteridaceae	0
Prostanthera lasianthos	Victorian Christmas Bush	Lamiaceae	0
Pteridium esculentum	Common Bracken	Dennstaedtiaceae	U
Rubus parvifolius	Native Raspberry	Rosaceae	U
Stellaria pungens	Prickly Starwort	Caryophyllaceae	0
Stylidium graminifolium	Grass Trigger-plant	Stylidiaceae	0
Tasmannia xerophila	Alpine Pepperbush	Winteraceae	0
Themeda australis	Kangaroo Grass	Poaceae	0
Veronica derwentiana subsp. maideniana	Speedwell	Plantaginaceae	С
Viola betonicifolia	Native Violet	Violaceae	0
Viola hederacea	Ivy-leaved Violet	Violaceae	0
Xerochrysum subundulatum	Alpine Everlasting	Asteraceae	U
Introduced Species			
Acetosella vulgaris	Sheeps Sorrel	Poaceae	0
Agrostis capillaris	Browntop Bent	Poaceae	С
Anthoxanthum odoratum	Sweet Vernal Grass	Poaceae	С
Centaurium erythraea	Common Centaury	Gentianaceae	U
Cirsium vulgare	Spear Thistle	Asteraceae	U
Echium sp.	Bugloss	Boraginaceae	U



Scientific Name	Common Name	Family	Abundance	
(?)Lotus sp.	Trefoil	efoil Fabaceae		
Phalaris sp.	Phalaris	Poaceae	U	
Plantago lanceolata	Lamb's Tongues	Plantaginaceae	U	
Rosa rubiginosa	Sweet Briar	Rosaceae	U	
Rubus fruticosa	Blackberry	Rosaceae	U	
Taraxacum officinale	Dandelion	Asteraceae	U	
Verbascum thapsus	Great Mullein	Scrophulariaceae	U	



APPENDIX 3 – FAUNA LIST



Legend

Bird 1 Number of diurnal bird field survey

Herp Species detected during herpetological surveys

Opp Species detected opportunistically during field surveys

Noc Species detected during nocturnal surveys Anabat Species detected by ANABAT recorder

Species detected

Bold = Threatened or migratory species

Bird Species

Taxa	Scientific Name	Common Name	Орр	Noc	Bird 1	Bird 2	Bird 3	Bird 4	Bird 5	Bird 6	Bird 7	Bird 8	Bird 9	Bird 10	Bird 11	Bird 12	Bird 13	Bird 14	Bird 15
Aves	Acanthiza lineata	Striated Thornbill			*					*		*		*					
Aves	Acanthiza pusilla	Brown Thornbill											*						
Aves	Acanthorhynchus tenuirostris	Eastern Spinebill			*					*		*				*	*		*
Aves	Aegotheles cristatus	Australian Owlet-nightjar		*															
Aves	Anthochaera carunculata	Red Wattlebird							*										
Aves	Colluricincla harmonica	Grey Shrike-thrush			*												*		
Aves	Calyptorhynchus funereus	Yellow-tailed Black- Cockatoo												*					
Aves	Cormobates leucophaea	White-throated Treecreeper			*							*	*	*	*	*			
Aves	Corvus coronoides	Australian Raven							*										
Aves	Corvus mellori	Little Raven						*											



Taxa	Scientific Name	Common Name	Орр	Noc	Bird 1	Bird 2	Bird 3	Bird 4	Bird 5	Bird 6	Bird 7	Bird 8	Bird 9	Bird 10	Bird 11	Bird 12	Bird 13	Bird 14	Bird 15
Aves	Cracticus tibicen	Australian Magpie															*		
Aves	Cracticus torquatus	Grey Butcherbird					*												
Aves	Dacelo novaeguineae	Laughing Kookaburra									*						*		
Aves	Eolophus roseicapillus	Galah												*					
Aves	Eopsaltria australis	Eastern Yellow Robin				*				*				*					*
Aves	Hirundo neoxena	Welcome Swallow																	
Aves	Lichenostomus leucotis	White-eared Honeyeater				*								*	*				
Aves	Malurus cyaneus	Superb Fairy-wren							*			*	*	*		*			*
Aves	Melithreptus brevirostris	Brown-headed Honeyeater									*				*		*		
Aves	Neochmia temporalis	Red-browed Finch						*				*							
Aves	Ninox novaeseelandiae	Southern Boobook		*															
Aves	Pachycephala olivacea	Olive Whistler	*																
Aves	Pardalotus punctatus	Spotted Pardalote														*		*	
Aves	Petroica rodinogaster	Pink Robin									*			*					
Aves	Platycercus elegans	Crimson Rosella							*					*	*			*	
Aves	Pycnoptilus floccosus	Pilotbird											*						
Aves	Porphyrio porphyria	Purple Swamphen		*															
Aves	Sericornis frontalis	White-browed Scrubwren								*									*
Aves	Strepera graculina	Pied Currawong												*			*	*	
Aves	Strepera versicolor	Grey Currawong											*						
Aves	Zosterops lateralis	Silvereye													*				



Other Species

Таха	Scientific Name	Common Name	Recorded	
Amphibia	Crinia signifera	Clicking Froglet	Noc	
Amphibia	Pseudophryne bibronii	Brown Broodfrog	Noc	
Mammalia	Cervus timorensis	Rusa Deer	Opp, Noc	
Mammalia	Chalinolobus gouldii	Gould's Wattled Bat	Noc	
Mammalia	Dama dama	Fallow Deer	Opp, Noc	
Mammalia	Equus caballus	Brumby	Орр	
Mammalia	Macropus giganteus	Eastern Grey Kangaroo	Орр	
Mammalia	Macropus rufogriseus	Red-necked Wallaby	Орр	
Mammalia	Ornithorhynchus anatinus	Platypus	Орр	
Mammalia	Oryctolagus cuniculus	Rabbit	Opp, Noc	
Mammalia	Trichosurus cunninghami	Mountain Brushtail Possum	Орр	
Mammalia	Vombatus ursinus	Common Wombat	Орр	
Reptilia	Tiliqua nigrolutea	Blotched Blue-tongued Skink	Herp	



APPENDIX 4 – EPBC ACT PROTECTED MATTERS SEARCH TOOL RESULTS





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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 29/04/15 14:30:34

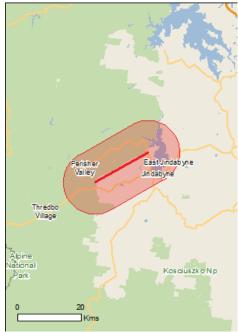
Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

Caveat

<u>Acknowledgements</u>



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
Buffer: 10.0Km



Summary

Matters of National Environmental 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.

World Heritage Properties:	None
National Heritage Places:	1
Wetlands of International Importance:	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	25
Listed Migratory Species:	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 http://www.environment.gov.au/heritage/index.html

A <u>permit</u> 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.

Commonwealth Land:	3
Commonwealth Heritage Places:	None
Listed Marine Species:	12
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine:	None

Extra Information

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

State and Territory Reserves:	2
Regional Forest Agreements:	1
Invasive Species:	31
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

National Heritage Properties		[Resource Information]
Name	State	Status
Natural		
Australian Alps National Parks and Reserves	NSW	Listed place
Wetlands of International Importance (Ramsar)		[Resource Information]
Name		Proximity
Blue lake		Within 10km of Ramsar

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.

France management and management and pro-		
Name	Status	Type of Presence
Alpine Sphagnum Bogs and Associated Fens	Endangered	Community known to occur within area
Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory	Endangered	Community likely to occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area
Listed Threatened Species		[Resource Information]
Name	Status	Type of Presence
Birds		
Anthochaera phrygia		
Regent Honeyeater [82338]	Endangered	Foraging, feeding or related behaviour may occur within area
Botaurus poiciloptilus		
Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
<u>Lathamus discolor</u>		
Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Fish		
Prototroctes maraena		
Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area
Frogs		
<u>Litoria raniformis</u>		
Growling Grass Frog, Southern Bell Frog, Green and Golden Frog, Warty Swamp Frog [1828]	Vulnerable	Species or species habitat may occur within area
Litoria verreauxii alpina		
Alpine Tree Frog, Verreaux's Alpine Tree Frog [66669]	Vulnerable	Species or species habitat known to occur within area
Pseudophryne corroboree		
Southern Corroboree Frog [1915]	Critically Endangered	Species or species

Name	Status	Type of Presence habitat may occur within area
Mammals		
Burramys parvus Mountain Pygmy-possum [267]	Endangered	Species or species habitat likely to occur within area
Dasyurus maculatus maculatus (SE mainland populati Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	ion <u>)</u> Endangered	Species or species habitat known to occur within area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area
Phascolarctos cinereus (combined populations of Qld, Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	NSW and the ACT) Vulnerable	Species or species habitat known to occur within area
Pseudomys fumeus Konoom, Smoky Mouse [88]	Endangered	Species or species habitat likely to occur within area
Plants		
Argyrotegium nitidulum Shining Cudweed [82043]	Vulnerable	Species or species habitat likely to occur within area
Calotis glandulosa Mauve Burr-daisy [7842]	Vulnerable	Species or species habitat likely to occur within area
Glycine latrobeana Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat may occur within area
Haloragis exalata subsp. exalata Wingless Raspwort, Square Raspwort [24636]	Vulnerable	Species or species habitat may occur within area
Pelargonium sp. Striatellum (G.W.Carr 10345) Omeo Stork's-bill [84065]	Endangered	Species or species habitat may occur within area
Prasophyllum bagoense Bago Leek-orchid [84276]	Critically Endangered	Species or species habitat may occur within area
Pterostylis oreophila Blue-tongued Orchid, Kiandra Greenhood [22903]	Critically Endangered	Species or species habitat known to occur within area
Ranunculus anemoneus Anemone Buttercup [14889]	Vulnerable	Species or species habitat likely to occur within area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
Aprasia parapulchella Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat likely to occur within area
Cyclodomorphus praealtus Alpine She-oak Skink [64721]	Endangered	Species or species habitat likely to occur within area
<u>Liopholis guthega</u> Guthega Skink [83079]	Endangered	Species or species habitat known to occur within area

Listed Migratory Species

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name

Threatened

Type of Presence

Migratory Marine Birds

Apus pacificus

Fork-tailed Swift [678] Species or species habitat

likely to occur within area

Migratory Terrestrial Species

Haliaeetus leucogaster

White-bellied Sea-Eagle [943] Species or species habitat

known to occur within area

Hirundapus caudacutus

White-throated Needletail [682] Species or species habitat

known to occur within area

Merops ornatus

Rainbow Bee-eater [670] Species or species habitat

may occur within area

Monarcha melanopsis

Black-faced Monarch [609] Species or species habitat

known to occur within area

Myiagra cyanoleuca

Satin Flycatcher [612] Breeding known to occur

within area

Rhipidura rufifrons

Rufous Fantail [592] Species or species habitat

known to occur within area

Migratory Wetlands Species

Ardea alba

Great Egret, White Egret [59541] Species or species habitat

likely to occur within area

Ardea ibis

Cattle Egret [59542] Species or species habitat

may occur within area

Gallinago hardwickii

Latham's Snipe, Japanese Snipe [863] Species or species habitat

may occur within area

Rostratula benghalensis (sensu lato)

Painted Snipe [889] Endangered* Species or species habitat

likely to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name

Commonwealth Land - Australian & Overseas Telecommunications Corporation

Commonwealth Land - Australian Postal Commission

Commonwealth Land - Australian Telecommunications Commission

Listed Marine Species

[Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name Threatened Type of Presence

Birds

Apus pacificus

Fork-tailed Swift [678]

Species or species habitat likely to occur

Name	Threatened	Type of Presence
Ardea alba		within area
Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
Ardea ibis		
Cattle Egret [59542]		Species or species habitat may occur within area
Gallinago hardwickii		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat
White-bellied Sea-Eagle [945]		known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat
write-tilloated Needletall [002]		known to occur within area
Lathamus discolor		
Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis		Out of the control of the balance
Black-faced Monarch [609]		Species or species habitat known to occur within area
Myiagra cyanoleuca		5
Satin Flycatcher [612]		Breeding known to occur within area
Rhipidura rufifrons		Charles or appaids habitat
Rufous Fantail [592]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato)	F 1	
Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area

likely to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
FMAs in MONARO SOUTH	NSW
Kosciuszko	NSW
Regional Forest Agreements	[Resource Information]
Note that all areas with completed RFAs have been included.	
Name	State
Southern RFA	New South Wales
Invasive Species	[Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Alauda arvensis		
Skylark [656]		Species or species habitat likely to occur within area
Anas platyrhynchos		
Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia		
Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus		
House Sparrow [405]		Species or species habitat likely to occur within area
Streptopelia chinensis		
Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris		
Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula		
Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Mammals		
Bos taurus		
Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris		
Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus		
Goat [2]		Species or species habitat likely to occur within area
Equus caballus		
Horse [5]		Species or species habitat likely to occur within area
Felis catus		Onestas accessos to 1, 100 cm
Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer		One-day constitution
Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Lepus capensis		• • • • • • • • • • • • • • • • • • • •
Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus		
House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus		
Rabbit, European Rabbit [128]		Species or species habitat likely to occur

Name	Status	Type of Presence
Datt a sett a		within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Flor Smilax, Smilax Asparagus [22473]	rist's	Species or species habitat likely to occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Cylindropuntia spp. Prickly Pears [85131]		Species or species habitat likely to occur within area
Cytisus scoparius Broom, English Broom, Scotch Broom, Common Broom, Scottish Broom, Spanish Broom [5934]	า	Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Nassella trichotoma Serrated Tussock, Yass River Tussock, Yass Tu Nassella Tussock (NZ) [18884]	ussock,	Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wild Pine [20780]	ling	Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendror Willows except Weeping Willow, Pussy Willow a Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name		State
Rennex Gap		NSW

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

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.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-36.437272 148.442534,-36.368742 148.591536

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:

- -Department of Environment, Climate Change and Water, New South Wales
- -Department of Sustainability and Environment, Victoria
- -Department of Primary Industries, Parks, Water and Environment, Tasmania
- -Department of Environment and Natural Resources, South Australia
- -Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts
- -Environmental and Resource Management, Queensland
- -Department of Environment and Conservation, Western Australia
- -Department of the Environment, Climate Change, Energy and Water
- -Birds Australia
- -Australian Bird and Bat Banding Scheme
- -Australian National Wildlife Collection
- -Natural history museums of Australia
- -Museum Victoria
- -Australian Museum
- -SA 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, Atherton and Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- -State Forests of NSW
- -Geoscience Australia
- -CSIRO
- -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 5 – THREATENED AND MIGRATORY BIOTA EVALUATION



Legend for Table 13

V = Vulnerable

E = Endangered

CE = Critically Endangered

M = Migratory

POP = Endangered Population

TSC = NSW Threatened Species Conservation Act 1995

EPBC = Commonwealth Environment Protection and Biodiversity Conservation Act 1999

FM = NSW Fisheries Management Act 1994

When evaluating which threatened and migratory biota are likely to occur within the study area, the following factors were taken into consideration:

- The presence of potential habitat
- Condition of and approximate extent of potential habitat
- Species occurrence within study area and wider locality

The following criteria were applied to each entity based on the above to determine the likelihood of species occurrence within the study area:

- No (no suitable habitat within the study area and the species not previously recorded within the locality; <u>or</u> in the case of flora, study area extensively searched during the appropriate time of year for detection and species not present).
- Unlikely (no suitable habitat is present, species has limited dispersal capability but previously recorded within the locality).
- Possible (suitable habitat within the study area and the species known from the locality; or no suitable habitat present but the species is regarded as highly nomadic or has a high dispersal capability).
- Yes (recorded during the field survey).

Biota that are associated with littoral or marine habitats have been excluded from

Table 13: Assessment of the known or predicted threatened and migratory biota known from the Southern Rivers CMA, Monaro (Part C) sub-region and their likelihood of occurrence within the study area.

Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
AMPHIBIANS				
Alpine Tree Frog Litoria verreauxii alpina E TSC V EPBC	Found in a wide variety of habitats including woodland, heath, grassland and herb fields.	No	Yes	Unlikely



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Booroolong Frog Litoria booroolongensis E TSC E EPBC	Live along permanent streams with some fringing vegetation cover such as ferns, sedges or grasses.	No	Yes	Unlikely. David Hunter (OEH frog expert, pers. Com)
Giant Burrowing Frog Heleioporus australiacus V TSC V EPBC	Found in heath, woodland and open dry sclerophyll forest around 2 nd and 3 rd order streams on a variety of soil types except those that are clay based.	No	No	No
Green and Golden Bell Frog <i>Litoria aurea</i> E TSC V EPBC	Inhabits marshes, dams and stream-sides, particularly those containing bulrushes (<i>Typha</i> spp.) or spikerushes (<i>Eleocharis</i> spp.).	No	Yes	No
Southern Bell Frog Litoria raniformis E TSC V EPBC	Found in or around permanent or ephemeral Black Box/Lignum/Nitre Goosefoot swamps, Lignum/Typha swamps and River Red Gum swamps or billabongs along floodplains and river valleys. They are also found in irrigated rice crops, particularly where there is no available natural habitat.	No	No	No
Southern Corroboree Frog Pseudophryne corroboree CE TSC CE EPBC	Summer breeding habitat is pools and seepages in sphagnum bogs, wet tussock grasslands and wet heath.	No	Yes	Unlikely, habitat not present.
Yellow-spotted Tree frog Litoria castanea E TSC E EPBC	Require large permanent ponds or slow flowing streams with plenty of emergent vegetation such as bulrushes.	No	No	No
BATS		T	T	T
Eastern Bentwing- bat	Caves are the primary roosting habitat, but also use derelict mines,	No	No	No



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Miniopterus schreibersii oceanensis V TSC	storm-water tunnels, buildings and other man-made structures.			
Eastern False Pipistrelle Falsistrellus tasmaniensis V TSC	Prefers moist habitats, with trees taller than 20m.	No	Yes	Possible
Grey-headed Flying- fox Pteropus poliocephalus V TSC V EPBC	Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops. Roosting camps are generally located within 20 km of a regular food source and are commonly found in gullies, close to water, in vegetation with a dense canopy.	No	No	Unlikely, highly mobile species
Southern Myotis Myotis macropus V TSC	Generally roost in groups of 10 - 15 close to water in caves, mine shafts, hollow-bearing trees, storm water channels, buildings, under bridges and in dense foliage. Forage over open streams and open pools catching insects and small fish by raking their feet across the water surface.	No	No	Unlikely
AVIFAUNA				
Australasian Bittern Botaurus poiciloptilus E TSC E EPBC	Favours permanent freshwater wetlands with tall, dense vegetation, particularly bullrushes (<i>Typha spp.</i>) and <i>spikerushes</i> (<i>Eleoacharis spp.</i>).	No	No	No
Australian Painted Snipe Rostratula australis E TSC E EPBC	Habitat includes shallow wetlands, swamps and temporary or permanent lakes.	No	No	No



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Barking Owl Ninox connivens V TSC	Inhabits woodland and open forest, including fragmented remnants and partly cleared farmland. Requires very large permanent territories in most habitats due to sparse prey densities. Monogamous pairs hunt over as much as 6000 hectares, with 2000 hectares being more typical in NSW habitats.	No	No	Unlikely
Black-faced Monarch <i>Monarcha</i> <i>melanopsis</i> M EPBC	They are found in rainforests, eucalypt woodlands, coastal scrub and damp gullies. It may be found in more open woodland when migrating.	No	No	Possible
Blue-billed Duck Oxyura australis V TSC	Prefers deep water in large permanent wetlands and swamps with dense aquatic vegetation. The species is completely aquatic, swimming low in the water along the edge of dense cover.	No	No	No
Brown Treecreeper (eastern subspecies) Climacteris picumnus victoriae V TSC	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.	No	Yes	Possible
Cattle Egret Ardea ibis M EPBC	The Cattle Egret is found in grasslands, woodlands and wetlands, and is not common in arid areas. It also uses pastures and croplands, especially where drainage is poor. It will also forage at garbage dumps, and is often seen with cattle and other stock.	No	No	No
Diamond Firetail Stagonopleura guttata V TSC	Found in grassy eucalypt woodlands, including Box-Gum Woodlands and Snow Gum (Eucalyptus pauciflora) Woodlands. Also occurs in open forest, mallee, Natural Temperate Grassland, and in secondary grassland derived from other communities. Often	No	Yes	Possible



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
	found in riparian areas (rivers and creeks), and sometimes in lightly wooded farmland.			
Flame Robin Petroica phoenicea V TSC	This species breeds in upland tall moist eucalypt forests and woodlands though also inhabits clearings or open understorey areas.	No	Yes	Possible
Fork-tailed Swift Apus pacificus M EPBC	Almost exclusively aerial, flying from less than 1 m to at least 300 m above ground and probably much higher. In Australia, they mostly occur over inland plains but sometimes above foothills or in coastal areas.	No	No	No
Gang-gang Cockatoo Callocephalon fimbriatum V TSC	In summer, generally found in tall mountain forests and woodlands, particularly in heavily timbered and mature wet sclerophyll forests. In winter, may occur at lower altitudes in drier more open eucalypt forests and woodlands, and often found in urban areas.	No	Yes	Possible
Glossy Black- Cockatoo Calyptorhynchus lathami V TSC	Inhabits open forest and woodlands of the coast and the Great Dividing Range up to 1000 m in which stands of she-oak species, particularly Black She-oak (Allocasuarina littoralis), Forest She-oak (A. torulosa) or Drooping She-oak (A. verticillata) occur.	No	No	Unlikely
Great Egret Ardea alba M EPBC	Great Egrets prefer shallow water, particularly when flowing, but may be seen on any watered area.	No	No	No
Hooded Robin Melanodryas cucullata cucullata V TSC	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.	No	No	No
Latham's Snipe	Habitat in Australia includes	No	Yes	Unlikely,



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Gallinago hardwickii M EPBC	permanent and ephemeral wetlands.			habitat not present
Little Eagle Hieraaetus morphnoides V TSC	Occupies open eucalypt forest, woodland or open woodland. Sheoak or acacia woodlands and riparian woodlands of interior NSW are also used. Nests in tall living trees within a remnant patch, where pairs build a large stick nest in winter.	No	Yes	Unlikely, no canopy trees to be removed
Little Lorikeet Glossopsitta pusilla V TSC	Forages primarily in the canopy of open Eucalyptus forest and woodland, yet also finds food in Angophoras, Melaleucas and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity.	No	Yes	Possible
Masked Owl Tyto novaehollandiae V TSC	Pairs have a large home-range of 500 to 1000 hectares. Lives in dry eucalypt forests and woodlands from sea level to 1100 m. A forest owl, but often hunts along the edges of forests, including roadsides.	No	No	No
Olive Whistler Pachycephala olivacea V TSC	Mostly inhabit wet forests above about 500m. During the winter months they may move to lower altitudes to dense coastal thickets.	Yes	Yes	Yes
Painted Snipe Rostratula benghalensis (sensu lato) M EPBC E EPBC	In NSW, this species has been recorded at the Paroo wetlands, Lake Cowell, Macquarie Marshes and Hexham Swamp. Most common in the Murray-Darling Basin. Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber.	No	No	No
Pink Robin Petroica rodinogaster V TSC	Inhabits rainforest and tall, open eucalypt forest, particularly in densely vegetated gullies.	Yes	Yes	Yes
Powerful Owl	Inhabits a range of vegetation types, from woodland and open	No	Yes	Possible



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Ninox strenua V TSC	sclerophyll forest to tall open wet forest and rainforest. The Powerful Owl requires large tracts of forest or woodland habitat but can occur in fragmented landscapes as well.			
Rainbow Bee-eater Merops ornatus M EPBC	It is most often found in open forests, woodlands and shrublands, and cleared areas, usually near water. It will be found on farmland with remnant vegetation and in orchards and vineyards. It will use disturbed sites such as quarries, cuttings and mines to build its nesting tunnels.	No	Yes	Possible
Red-necked Stint Calidris ruficollis M EPBC	In Australasia, mostly found in coastal areas, including in sheltered inlets, bays, lagoons and estuaries with intertidal mudflats, often near spits, islets and banks and, sometimes, on protected sandy or coralline shores.	No	Yes	Unlikely, habitat not present
Regent Honeyeater Anthochaera phrygia CE TSC E EPBC	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.	No	No	No
Rufous Fantail Rhipidura rufifrons M EPBC	A rainforest and wet sclerophyll inhabitant.	No	No	Possible
Satin Flycatcher Myiagra cyanoleuca M EPBC	The Satin Flycatcher is found in tall forests, preferring wetter habitats such as heavily forested gullies, but not rainforests.	No	No	Possible
Scarlet Robin Petroica Boodang V TSC	Inhabits dry eucalypt forests and woodlands with open understorey.	No	Yes	Possible
Speckled Warbler Chthonicola sagittata V TSC	The Speckled Warbler lives in a wide range of Eucalyptus dominated communities that have a grassy understorey, often on rocky ridges or in gullies.	No	No	Unlikely



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Spotted Harrier Circus assimilis V TCS	Occurs in grassy open woodland including Acacia and mallee remnants, inland riparian woodland, grassland and shrub steppe.	No	No	No
Square-tailed Kite Lophoictinia isura V TSC	Found in a variety of timbered habitats including dry woodlands and open forests. Shows a particular preference for timbered watercourses.	No	No	Unlikely
Swift Parrot Lathamus discolor E TSC E EPBC	Migrates to the Australian southeast mainland between March and October. On the mainland they occur in areas where eucalypts are flowering profusely or where there are abundant lerp (from sapsucking bugs) infestations. Favoured feed trees include winter flowering species such as Swamp Mahogany (Eucalyptus robusta), Spotted Gum (Corymbia maculata), Red Bloodwood (Corymbia Gummifera), Mugga Ironbark (E. Sideroxylon), and White Box (E. Albens).	No	No	No
Turquoise Parrot Neophema pulchella V TSC	Lives on the edges of eucalypt woodland adjoining clearings, timbered ridges and creeks in farmland.	No	No	No
Varied Sittella Daphoenositta chrysoptera V TSC	This species is sedentary and known to inhabit most forest/woodland habitats.	No	Yes	Possible
White-bellied Sea- eagle Haliaeetus leucogaster M EPBC	The species is normally seen perched high in a tree, or soaring over waterways and adjacent land, particularly along coastlines, lakes and rivers.	No	Yes	Unlikely
White-fronted Chat Epthianura albifrons V TSC	Habitat includes open grassy ground in wetland areas.	No	Yes	Unlikely, habitat not present
White-throated Needletail	For a time it was commonly believed that they did not land while in Australia. It has now been	No	Yes	No



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Hirundapus caudacutus M EPBC	observed that birds will roost in trees, and radio-tracking has since confirmed that this is a regular activity.			
FISH				
Australian Grayling Prototroctes maraena V EPBC	Diadromous, spending part of its lifecycle in freshwater and at least part of the larval and/or juvenile stages in coastal seas.	No	No	Unlikely
MAMMALS (excl. Ba	ts)			
Broad-toothed Rat Mastacomys fuscus V TSC	Lives in a complex of runways through the dense vegetation of its wet grass, sedge or heath environment, and under the snow in winter.	No	Yes	Possible
Brush-tailed Phascogale Phascogale tapoatafa V TSC	Occurs in dry sclerophyll open forest, with a sparse ground cover of herbs, grasses, shrubs or leaf litter and dependent on presence of large numbers of HBT (>40) within their home range.	No	No	Unlikely, no HBT to be removed
Brush-tailed Rock-wallaby Petrogale penicillata E TSC V EPBC	Occupy rocky escarpments, outcrops and cliffs with a preference for complex structures with fissures, caves and ledges, often facing north.	No	No	No
Eastern Pygmy- possum Cercartetus nanus V TSC	Found in a broad range of habitats from rainforest through sclerophyll (including Box-Ironbark) forest and woodland to heath, but in most areas woodlands and heath appear to be preferred.	No	Yes	Unlikely
Eastern Quoll Dasyurus viverrinus E TSC	Occurs in dry sclerophyll forest, scrub, heathland and cultivated land.	No	Yes	Unlikely
Koala Phascolarctos cinereus V TSC V EPBC	Inhabit eucalypt woodlands and forests. Home range size varies with quality of habitat, ranging from less than two ha to several hundred hectares in size.	No	Yes	Unlikely, no large potential foraging trees to be removed



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Mountain Pygmy- possum Burramys parvus E EPBC E TSC	Distribution is limited to alpine and subalpine regions where there is a continuous period of snow cover for up to six months. High quality habitat for this species is characterised by deep, extensive boulderfields, high elevations, abundant Bogong Moths, and a nearby seed source.	No	Yes	Unlikely, habitat not present
Smoky Mouse Pseudomys fumeus CE TSC E EPBC	Occurs in a variety of vegetation communities, ranging from coastal heath to dry ridgeline forest, subalpine heath and, occasionally, wetter gullies. Known only from Bondo and Ingbyra State Forest, Mt Poole, Nullica State Forest and the adjoining South East Forests National Park	No	No	No
Spotted-tailed Quoll Dasyurus maculatus V TSC E EPBC	Recorded across a range of habitat types, including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the subalpine zone to the coastline.	No	Yes	Possible
Squirrel Glider Petaurus norfolcensis V TSC	Inhabits mature or old growth Box, Box-Ironbark woodlands and River Red Gum forest west of the Great Dividing Range and Blackbutt- Bloodwood forest with heath understorey in coastal areas. Prefers mixed species stands with a shrub or Acacia midstorey.	No	No	No
Yellow-bellied Glider Petaurus australis V TSC	Occur in tall mature eucalypt forest generally in areas with high rainfall and nutrient rich soils.	No	No	Unlikely
REPTILES				
Alpine She-oak Skink Cyclodomorphus praealtus E TSC E EPBC	In NSW, the species has only been observed in tussock grassland within the Kosciuszko region.	No	Yes	Unlikely, habitat not present



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Grassland Earless Dragon Tympanocryptis pinguicolla E TSC E EPBC	Restricted to a small number of Natural Temperate Grassland sites dominated by wallaby grasses (Nothodanthonia spp.), spear grasses (Austrostipa spp.), Poa Tussock (Poa sieberiana), Red Grass (Bothriochloa macra), and occasionally Kangaroo Grass (Themeda australis).	No	No	No
Guthega Skink Liopholis guthega E EPBC	Prefers rocky or have sub-surface boulders hidden beneath soil or thick vegetation. The species utilizes burrows often opening from under boulders or shrubs.	No	Yes	Unlikely, known and existing locations above 1600 metres elevation
Little Whip Snake Suta flagellum V TSC	Occurs in Natural Temperate Grasslands and grassy woodlands, including those dominated by Snow Gum Eucalyptus pauciflora or Yellow Box E. melliodora. Also occurs in secondary grasslands derived from clearing of woodlands.	No	No	No
Pink-tailed Worm- lizard Aprasia parapulchella V TSC V EPBC	Inhabits sloping, open woodland areas with predominantly native grassy groundlayers, particularly those dominated by Kangaroo Grass (<i>Themeda australis</i>).	No	No	No
Rosenberg's Goanna <i>Varanus rosenbergi</i> V TSC	Found in heath, open forest and woodland. Associated with termites, the mounds of which this species nests in; termite mounds are a critical habitat component.	No	No	Unlikely, no termite mounds present
Striped Legless Lizard <i>Delma impar</i> V TSC V EPBC	Found mainly in Natural Temperate Grassland but has also been captured in grasslands that have a high exotic component. Also found in secondary grassland near Natural Temperate Grassland and occasionally in open Box-Gum Woodland.	No	No	No



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
FLORA				
Anemone Buttercup Ranunculus anemoneus V EPBC V TSC	Generally occurs in environments with late melting snow; on south to east facing, steep grassy slopes, or rocky crevices, or short alpine herbfields.	No	No	No
Austral Toadflax Thesium australe V TSC V EPBC	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>).	No	No	No
Bago Leek-orchid Prasophyllum bagoense CE TSC CE EPBC	Prefers sub-alpine treeless plain at an elevation of approximately 1200 m above sea level. Occurs in wet grassland dominated by Tussock Grass (<i>Poa labillardierei</i>), Fineleaved Snow Grass (<i>Poa clivicola</i>) and Snow Grass (<i>Poa sieberiana</i>)	No	No	No
Baeuerlen's Gentian Gentiana baeuerlenii E TSC E EPBC	In Namadgi National Park the species grows as an inter-tussock herb of grassland and sedgeland (Poa labillardieri and Carex gaudichaudii) in a moist area on the lower slope of a broad valley.	No	No	No
Blue-tongued Greenhood Pterostylis oreophila CE TSC CE EPBC	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.	No	Yes	Possible
Clover Glycine Glycine latrobeana V EPBC	Found across south-eastern Australia in native grasslands, dry sclerophyll forests, woodlands and low open woodlands with a grassy ground layer.	No	No	Possible
Creeping Hop-bush Dodonaea procumbens V TSC V EPBC	Grows in Natural Temperate Grassland or fringing eucalypt woodland of Snow Gum (Eucalyptus pauciflora).	No	No	No



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Hoary Sunray Leucochrysum albicans var. tricolor E EPBC	Occurs in a wide variety of grassland, woodland and forest habitats, generally on relatively heavy soils. Plants can be found in natural or semi-natural vegetation and grazed or ungrazed habitat.	No	Yes	Possible
Kydra Dampiera Dampiera fusca E TSC Recorded in montane heath, also amongst rock platform and tors interspersed with closed heath. Habitat in the Canberra area is generally restricted to granite ridgetops and plateaux on very shallow soils supporting heath, scrub and heathy snow gum and/or mallee woodland.		No	No	No
Kydra Westringia Westringia kydrensis E TSC E EPBC	Occurs in heathland with larger shrubs of Allocasuarina nana and Banksia canei. Grows on shallow rocky granite or quartzite soils.	No	No	No
Leafy Anchor Plant Discaria nitida V TSC	Generally occurs on or close to stream banks and on rocky areas near small waterfalls.	No	Yes	Possible
Mauve Burr-daisy Calotis glandulosa V TSC V EPBC	Found in montane and subalpine grasslands in the Australian Alps. Found in subalpine grassland (dominated by Poa spp.), and montane or natural temperate grassland dominated by Kangaroo Grass (<i>Themeda australis</i>) and Snow Gum (<i>Eucalyptus pauciflora</i>) Woodlands on the Monaro and Shoalhaven area.	No	Yes	Possible
Omeo Stork's-bill Pelargonium sp. Striatellum E TSC E EPBC	Known to occur in habitat usually located just above the high water level of irregularly inundated or ephemeral lakes. During dry periods, the species is known to colonise exposed lake beds.	No	No	No
Perisher Wallaby- grass Rytidosperma vickeryae E TSC	Commonly grows in Sphagnum moss in montane peatland communities or along stream edges.	No	Yes	Unlikely, habitat not present



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Rough Eyebright Euphrasia scabra E TSC	Euphrasia scabra swampy grassland or in sphagnum		Yes	Unlikely, habitat not present
Shining Cudweed Euchiton nitidulus V TSC V EPBC	Shining Cudweed Euchiton nitidulus V TSC Usually found in herbfield or open heathland, above or close to the treeline.		No	No
Small Snake Orchid Diuris pedunculata E TSC E EPBC	The Small Snake Orchid grows on grassy slopes or flats. Often on peaty soils in moist areas. Also on shale and trap soils, on fine granite, and among boulders.	No	Yes	Unlikely
Square Raspwort Haloragis exalata subsp. exalata V TSC V EPBC	Appears to require protected and shaded damp situations in riparian habitats. Flowering specimens in NSW are recorded from November to January.	No	No	Unlikely
Tarengo Leek Orchid <i>Prasophyllum</i> <i>petilum</i> E TSC E EPBC	Grows in open sites within Natural Temperate Grassland at the Boorowa and Delegate sites. Also grows in grassy woodland in association with River Tussock (Poa labillardieri), Black Gum (Eucalyptus aggregata) and teatrees (Leptospermum spp.) at Captains Flat and within the grassy groundlayer dominated by Kanagroo Grass under Box-Gum Woodland at Ilford (and Hall, ACT).	No	No	No
Majors Creek Leek Orchid Prasophyllum sp. Majors Creek CE TSC	Grows in the groundlayer of grassy woodland dominated by Swamp Gum (<i>Eucalyptus ovata</i>). Grows within Kangaroo Grass (<i>Themeda australis</i>) and poa tussocks (<i>Poa spp.</i>). Currently only known from one site at Majors Creek south of Braidwood.	No	No	No
THREATENED ECOL	OGICAL COMMUNITIES			
Alpine Sphagnum Bogs and	The Alpine Sphagnum Bogs and Associated Fens ecological	No	Yes	No



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Associated Fens (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 TSC E EPBC	community is usually defined by the presence or absence of Sphagnum spp. on a peat substratum. Sphagnum is not always a major floristic component, and there are some sites in the community where Sphagnum has become depleted or been lost as a result of disturbance.			
Endangered Ecological Community of the Snowy River Catchment in NSW E FM	The aquatic ecological community in the catchment of the Snowy River in NSW includes all native fish and aquatic invertebrates within all rivers, creeks and streams. The listing includes Snowy River, Eucumbene River, Thredbo (or Crackenback River), Gungarlin River, Mowamba River, Bombala River, McLaughlin River, Delegate River, Pinch River, Jacobs River and the River bed channel inundated by Jindabyne, Eucumbene, Island Bend and Guthega Dams.	Yes	Yes	Possible
Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory E EPBC	The community is dominated by moderately tall (25-50 cm) to tall (50 cm-1 m), dense to open tussock grasses with up to 70% of species being forbs. The community may be treeless or contain up to 10% cover of trees, shrubs or sedges. In the Southern Tablelands natural temperate grasslands are located at altitudes between 560 and 1200 metres in valleys influenced by cold air drainage and in broad plains.	No	No	No
Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern	Tablelands Snow Gum Grassy Woodland occurs in the South Eastern Highlands Bioregion; part of this region is the 'Southern Tablelands' and the northern section of the bioregion is the	Yes	Yes	Yes



Species Scientific Name Legal Status	Habitat	Recorded during site analysis	Recorded previously in locality	Potential to be impacted by the proposal
Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions E TSC	'Central Tablelands. There are outlying occurrences of this community in the Sydney Basin, South East Corner and NSW South Western Slopes Bioregions, where suitable habitat exists. Characterised by the presence or prior occurrence of Snow Gum, Candlebark, Ribbon Gum and/or Black Sallee trees. The trees may occur as pure stands, mixtures of the four species or in mixtures with other trees, including wattles.			
Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions. E TSC		Yes	Yes	Yes
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland E TSC CE EPBC	Box – Gum Grassy Woodlands and Derived Grasslands are characterised by a species-rich understorey of native tussock grasses, herbs and scattered shrubs, and the dominance, or prior dominance, of White Box, Yellow Box or Blakely's Red Gum trees. In the Nandewar Bioregion, Grey Box (Eucalyptus macrocarpa or E. moluccana) may also be dominant or co-dominant.	No	No	No



APPENDIX 6 – ASSESSMENT OF SIGNIFICANCE (TSC ACT)



The EP&A Act includes in Section 5A, seven factors which are to be considered when determining if a proposed development or activity 'is likely to have a significant effect on the threatened species, populations or ecological communities, or their habitats'. These seven factors must be taken into account by consent or determining authorities when considering a development proposal or development application. This enables a decision to be made as to whether there is likely to be a significant effect on the species and hence if a Species Impact Statement is required (DECC 2007).

Table 13 (**Appendix 5**) found that 15 threatened biota were known to, or have the potential to occur within the study area based on the evaluation completed. The 15 biota considered for the Assessment of Significance are:

- Eastern False Pipistrelle
- Brown Treecreeper
- Diamond Firetail
- Flame Robin
- Gang-gang Cockatoo
- Little Lorikeet
- Olive Whistler
- Pink Robin
- Powerful Owl
- Scarlet Robin
- Varied Sittella
- Broad-toothed Rat
- Spotted-tailed Quoll
- Blue-tongued Greenhood
- Leafy Anchor Plant
- Mauve Burr-daisy
- Aquatic Endangered Ecological Community of the Snowy River Catchment in NSW
- .Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions
- Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions.

(a) in the case of a threatened species, whether the action proposed 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,

Eastern False Pipistrelle



Eastern False Pipistrelle generally roosts in hollows however they are also found under loose bark and in buildings. This species has been recorded several about nine kilometres north of the proposal.

OEH (2015) identify that the main threats to this species are:

- Disturbance to winter roosting and breeding sites
- Loss of roosting habitat, primarily hollow-bearing eucalypts
- Loss and fragmentation of foraging habitat, particularly extensive areas of continuous forest and areas of high productivity

Of these, the third threats are of potential relevance when considering the impacts of the proposed activity. The proposal would result in the removal of approximately 4.016 ha of vegetation which may form foraging habitat. Given that the vegetation removed would be shrubs, saplings and groundcover vegetation, and given that microchiropteran bats are regarded as highly mobile fauna that extend their foraging ranges over tens of kilometres (Barclay *et al.* 2000; Pavey 1998; Pavey and Burwell 2004; Pennay and Freeman 2005), the loss of 4.016 ha is considered negligible. This is more evident in the context of the adjoining vegetation present in the Kosciuszko NP. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of the Eastern False Pippistrelle such that a viable local population is likely to be placed at risk of extinction.

Brown Treecreeper

The Brown Treecreeper has also declined or disappeared from most remaining remnants that are smaller than 300 hectares, at least partly because females disperse from these areas or die preferentially and are not replaced (Cooper and Walters 2002; Cooper *et al.* 2002). Once lost from a remnant, re-colonisation is unlikely without assistance. Despite field surveys carried out for this REF, no Brown Treecreeper were detected in the study area. It has been recorded within the locality.

OEH (2015) identify the following threats to Brown Treecreeper:

- Historical loss of woodland, forest and mallee habitats as a result of agriculture, forestry, mining and residential development.
- Fragmentation of woodland and forest remnants which isolates populations and causes local extinctions.
- Ongoing degradation of habitat, particularly the loss of tree hollows and fallen timber from firewood collection and overgrazing.
- Lack of regeneration of eucalypt overstorey in woodland due to overgrazing and toofrequent fires.
- Loss of ground litter from compaction and overgrazing.



Inappropriate forestry management practices.

Of these threats, the first and third are of relevance to this proposal. The proposal would result in the removal of approximately 4.016 ha of vegetation, though only about 0.786 ha of potential woodland habitat. This includes a similar area of potential ground habitat would be impacted through removal of fallen timber which may form potential habitat. However, the loss of this vegetation is considered relatively minor in the context of the remaining areas of native vegetation in KNP. Recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Brown Treecreeper, such that a viable local population (should one occur there) is likely to be placed at risk of extinction.

Diamond Firetail

Diamond Firetail is widely distributed in NSW, with a concentration of records from the Northern, Central and Southern Tablelands, the Northern, Central and South-western Slopes and the North-west Plains and Riverina (Morcombe 2004; OEH 2015). Although they are not commonly found in coastal districts, there are records from near Sydney, the Hunter Valley and the Bega Valley (OEH 2015). They are considered relatively sedentary; however, many populations are known to disperse, especially during drought periods. They are known to build bottle-shaped nests in trees and bushes and preferentially choose mistletoe as a nest site (Cooney and Watson 2005). It has declined in numbers in many areas and has disappeared from parts of its former range with Reid (1999) identifying it as a 'decliner' in a review of bird species' status in the NSW sheep-wheatbelt. Field surveys did not detect Diamond Firetail within the vicinity of the proposal; however one record exists for this species adjacent to the Skitube station at the western end of the track alignment.

OEH (2015) identify the following threats to Diamond Firetail:

- Clearing and fragmentation of woodland, open forest, grassland and mallee habitat for agriculture and residential development, and firewood collection.
- Poor regeneration of open forest and woodland habitats.
- Invasion of weeds, resulting in the loss of important food plants.
- Modification and destruction of ground- and shrub layers within habitat through: removal of native plants, litter and fallen timber; introduction of exotic pasture grasses; heavy grazing and compaction by stock; and frequent fire.
- Predation of eggs and nestlings by increased populations of native predators such as the Pied Currawong (Strepera graculina).
- Risk of local extinction due to small, isolated populations.

Of these threats, the first and fourth threats are of relevance to this proposal. The proposal would result in the removal of approximately 4.016 ha of vegetation, predominately within the ground and shrub layer and a similar area of structural complexity would be impacted



through removal of fallen timber and other microhabitat structures on the ground. However, the loss of 4.016 ha is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP and that the area to be impacted is largely forested which would be considered marginal habitat for this species. Also any microhabitat structures such as logs would only be impacted directly within the footprint of the vegetation removal and all structures would be moved to a new location outside of the impact area. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Diamond Firetail such that a viable local population is likely to be placed at risk of extinction.

Flame Robin

In NSW, the Flame Robin breeds in upland, moist eucalypt forests and woodlands spending winter in more open lowland habitats such as grassland with scattered trees and open woodland on the inland slopes and plains (OEH 2015). They often occurs in recently burnt areas, however habitat becomes unsuitable as vegetation closes up following regeneration (OEH 2015). No Flame Robin were detected during the field surveys for this proposal however it has been recorded numerous times in the locality.

OEH (2015) identify the following threats to this species:

- Clearing and degradation of breeding habitat.
- Degradation of wintering habitat.
- Degradation and simplification of habitat by overgrazing and removal of standing dead timber, logs and coarse woody debris.
- Nest predation by native and exotic predators, including artificially large populations of Pied Currawong (*Strepera graculina*) in some areas.
- Habitat for this species may become unsuitable if dense regeneration occurs after bushfires or other disturbances.

Of these threats, the first and third threats are of relevance to this proposal. The proposal would result in the removal of approximately 4.016 hectares of vegetation and a similar area of structural complexity would be impacted through removal of fallen timber and other microhabitat structures on the ground. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Additionally, any structural complexity components such as dead wood and logs would only be moved to a location outside of the direct impact footprint which would minimise this potential impact. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Flame Robin such that a viable local population is likely to be placed at risk of extinction.



Gang-gang Cockatoo

The Gang-gang Cockatoo is distributed from southern Victoria through south and central-eastern New South Wales (Morcombe 2004). In New South Wales they have been recorded from the south-east coast to the Hunter region, and inland to the Central Tablelands and South-west slopes (OEH 2015). In summer, this species is generally found in tall mountain forests, showing a preference for more mature wet sclerophyll forests. However, in winter, the species often occurs at lower altitudes in drier more open eucalypt forests, where some pairs remain for the spring, breeding in the forests of the coastal plains, which appears to be common in the Eurobodalla and Bega Valley LGA (pers.obs). This species is reliant on the presence of nest sites – medium sized hollows high in trees, suitable foraging habitat and it is known to favour old growth attributes for nesting and roosting. This species was not detected during field surveys however it has been recorded numerous times in the locality.

OEH (2015) identify the following threats to this species:

- Clearing of vegetation and degradation of habitat may reduce the abundance of optimal foraging and roosting habitat;
- Individual pairs show high fidelity to selected nesting trees (choosing nesting hollows
 of particular shape, position and structure), with clearing and frequent fire posing a
 threat to continued successful breeding;
- Climate change may alter the extent and nature of its preferred habitat (cool termperate vegetation); and
- Susceptible to Psittacine cirovirus disease (PCD) which is spread through contaminated nest chambers. PCD is known to have increased near Bowral in the southern highlands of New South Wales over the past decade and constitutes a further threat to the species.

Of these, the first threat is of potential relevance when considering the impacts of the proposed activity. The proposal would result in the removal of approximately 4.016 hectares of vegetation which may form potential foraging habitat. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Additionally no other important potential habitat features such as hollows would be impacted. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Gang-gang Cockatoo, such that a viable local population is likely to be placed at risk of extinction.

Little Lorikeet

The Little Lorikeet is distributed widely across the coastal and Great Divide regions of eastern Australia from Cape York to South Australia (OEH 2015). NSW provides a large portion of the species' core habitat, with lorikeets found westward as far as Dubbo and Albury. Nomadic movements are common, influenced by season and food availability,



although some areas retain residents for much of the year and 'locally nomadic' movements are suspected of breeding pairs.

Little Lorikeets are gregarious, usually foraging in small flocks, often with other species of lorikeet. They feed primarily on nectar and pollen in the tree canopy, particularly on profusely-flowering eucalypts, but also on a variety of other species including paperbarks and mistletoes. Little Lorikeets nest in hollow-bearing trees typically of smooth-barked eucalypts but also they also nest in proximity to feeding areas if possible, most typically selecting hollows in the limb or trunk of smooth-barked Eucalypts and in riparian trees, species such as *Allocasuarina* spp. are used. No individuals of Little Lorikeet were detected during the field surveys for this proposal.

OEH (2014c) identify the following threats to Little Lorikeet:

- Given that large old Eucalyptus trees on fertile soils produce more nectar, the
 extensive clearing of woodlands for agriculture has significantly decreased food for
 the lorikeet, thus reducing survival and reproduction. Small scale clearing, such as
 during roadworks and fence construction, continues to destroy habitat and it would be
 decades before revegetated areas supply adequate forage sites
- The loss of old hollow bearing trees has reduced nest sites, and increased competition with other native and exotic species that need large hollows with small entrances to avoid predation. Felling of hollow trees for firewood collection or other human demands increases this competition
- Competition with the introduced Honeybee for both nectar and hollows exacerbates these resource limitations.

Of these, the first threat is of potential relevance when considering the impacts of the proposed activity. The proposal would result in the removal of approximately 4.016 hectares of vegetation which may form potential foraging habitat. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Additionally no other important potential habitat features such as hollows would be impacted. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Little Lorikeet, such that a viable local population is likely to be placed at risk of extinction.

Olive Whistler

The Olive Whistler inhabits the wet forests on the ranges of the east coast. It mostly inhabits wet forests above about 500m however, in winter months they may move to lower altitudes. This species forages in trees and shrubs and on the ground, feeding on berries and insects. This species was recorded during the field surveys and has also been recorded several times in the locality.



OEH (2015) identify the following threats to this species:

- Clearing and fragmentation of habitat.
- Fire that is too intense, widespread or frequent resulting in changed vegetation structure and composition.
- Predation by foxes and cats.

Of these threats, the first is of potential relevance when considering the impacts of the proposed activity. The proposal would result in the removal of approximately 4.016 hectares of vegetation in the shrub and ground layer which may form potential foraging habitat for this species. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Olive Whistler, such that a viable local population is likely to be placed at risk of extinction.

Pink Robin

This species inhabits rainforest and tall, open eucalypt forest, particularly in densely vegetated gullies. The Pink Robin is found in Tasmania and the uplands of eastern Victoria and far south-eastern NSW, almost as far north as Bombala. On the mainland, the species disperses north and west and into more open habitats in winter, regularly as far north as the ACT area, and sometimes being found as far north as the central coast of NSW. Foraging more on the ground where insects and spiders are the main dietary items. This species was recorded during field surveys and has also been recorded several times in the locality.

OEH (2015) identify the following threats to this species:

- Clearing of rainforest and tall, wet forest habitat, particularly near gullies.
- The impact of fire on this species is unknown, but regular fires are assumed to not be beneficial.

Of these threats, the first is of potential relevance when considering the impacts of the proposed activity. The proposal would result in the removal of approximately 4.016 hectares of vegetation in the shrub and ground layer which may form potential foraging habitat for this species. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

Powerful Owl

This species frequents eucalypt forests, and at the western extremity of its range, within woodlands of south-eastern Australia (DECC 2006; OEH 2015). Main prey species are



medium-sized arboreal mammals such as the Common Ringtail Possum and Sugar Glider, but it also takes roosting birds and a variety of other mammals including flying foxes (Cooke et al. 2006). Territories are thought to be large, estimates varying from 400 to >1000 ha, and the species shows high fidelity to a nesting site, pairs having been recorded nesting in the one tree for many years (DECC 2006; Law 2008). In south-east NSW nest trees are often located in gullies and individuals generally roost in dense vegetation in the understorey, such as densely foliaged wattles (Kavanagh and Bamkin 1995). Habitat essential for the maintenance of this species therefore includes forest capable of supporting a high density of arboreal mammals, containing suitable understorey for roosting sites and large old trees containing large hollows for nesting.

OEH (2015) identify the following threats to Powerful Owl:

- Historical loss and fragmentation of suitable forest and woodland habitat from land clearing for residential and agricultural development. This loss also affects the populations of arboreal prey species, particularly the Greater Glider which reduces food availability for the Powerful Owl.
- Inappropriate forest harvesting practices that have changed forest structure and removed old growth hollow-bearing trees. Loss of hollow-bearing trees reduces the availability of suitable nest sites and prey habitat.
- Can be extremely sensitive to disturbance around the nest site, particularly during pre-laying, laying and downy chick stages. Disturbance during the breeding period may affect breeding success.
- High frequency hazard reduction burning may also reduce the longevity of individuals by affecting prey availability.
- Road kills.
- Secondary poisoning.
- Predation of fledglings by foxes, dogs and cats.

Of these, only the first threat is of potential relevance with consideration of the proposed activity as no evidence of a nest tree was noted during the field survey. The proposal would result in the removal of approximately 4.016 hectares of native vegetation. However, the loss of 4.016 hectares ha is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Also no HBTs would be removed as part of the proposal and no individuals responded to call playback nor was any prey species (such as possums) recorded during spotlight surveys. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Powerful Owl such that a viable local population is likely to be placed at risk of extinction.

Scarlet Robin



In NSW, the Scarlet Robin occurs in open forests and woodlands from the coast to the inland slopes and in winter, dispersing birds are known to appear in the east of the inland plains (OEH 2012b). The Scarlet Robin is considered sensitive to habitat fragmentation and the reductions of structural complexity of habitat and native ground covers (Barrett *et al.* 2007; Watson *et al.* 2001). No Scarlet Robin were detected during the field surveys for this proposal however it has been recorded in the locality.

OEH (2015) identify the following threats to Scarlet Robin:

- Historical habitat clearing and degradation.
- Habitat modification due to overgrazing.
- Reduction of size of remnant patches.
- Reduction in the structural complexity of habitat, including reductions in canopy cover, shrub cover, ground cover, logs, fallen branches and leaf litter.
- Reduction of the native ground cover in favour of exotic grasses.
- Loss of nest sites, food sources and foraging sites, such as standing dead timber, logs and coarse woody debris from depletion by grazing, firewood collection and 'tidying up' of rough pasture.
- Predation by over-abundant populations of Pied Currawong (Strepera graculina)
 which are supported by planted exotic berry-producing shrubs; this pressure, is
 addition to that from other native and exotic predators, may be a potentially severe
 threat to the breeding success of Scarlet Robin populations.
- Predation by feral cats (Felis catus).
- Robbing of nests and predation of fledglings by rats.
- Isolation of patches of habitat, particularly where these patches are smaller than 30
 ha, and in landscapes where clearing has been heavy or where remnants are
 surrounded by cropping or stock grazing.
- Habitat for the Scarlet Robin may become unsuitable if dense regeneration occurs after bushfires or other disturbances.

Of these threats, the first, fourth and sixth are of relevance to this proposal. The proposal would result in the removal of approximately 4.016 hectares of vegetation and a similar area of structural complexity would be impacted through removal of fallen timber and other microhabitat structures on the ground. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Additionally, any structural complexity components such as dead wood and logs would only be moved to a location outside of the direct impact footprint which would minimise this potential impact. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Scarlet Robin such that a viable local population is likely to be placed at risk of extinction.

Varied Sittella



The Varied Sittella is sedentary and inhabits most of mainland Australia except the treeless deserts and open grasslands. Distribution in NSW is nearly continuous from the coast to the far west. The Varied Sittella's population size in NSW is uncertain but is believed to have undergone a moderate reduction over the past several decades. It inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland. No Varied Sittella were recorded during field surveys though it has been recorded in the locality.

OEH (2015) identify the following threats to Varied Sittella:

- Apparent decline has been attributed to declining habitat. The sedentary nature of the Varied Sittella makes cleared land a potential barrier to movement.
- The Varied Sittella is also adversely affected by the dominance of Noisy Miners in woodland patches
- Threats include habitat degradation through small-scale clearing for fencelines and road verges, rural tree decline, loss of paddock trees and connectivity, 'tidying up' on farms, and firewood collection.

Of these threats, the first and third are of relevance to this proposal. The proposal would result in the removal of approximately 4.016 hectares of vegetation and a similar area of potential ground habitat would be impacted through removal of fallen timber which may form potential habitat. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Additionally, any structural complexity components such as dead wood and logs would only be moved to a location outside of the direct impact footprint which would minimise this potential impact. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Varied Sittella, such that a viable local population (should one occur there) is likely to be placed at risk of extinction.

Broad-toothed Rat

In NSW the Broad-toothed Rat occurs in two widely separated areas: the wet alpine and subalpine heaths and woodlands in Kosciuszko National Park, adjacent Nature Reserves (Bimberi and Scabby NR) and State Forest (Buccleuch SF) in the south of the State, and on the Barrington Tops, north-west of Newcastle. 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. This species was not recorded during the field surveys, nor were any signs of their occupation observed. However it has been recorded numerous times in the locality, mostly on the main range near Perisher.

OEH (2015) identify the following threats to this species:



- Predation by feral cats, especially around ski resorts where cat densities are high.
- Habitat loss, fragmentation and degradation from roads, ski runs and buildings.
- Broad-toothed Rats may be mistaken for vermin when they enter ski lodges and other buildings.
- Catastrophic fire events, hazard reduction burning can cause and localised extinction.
- Grazing by stock, rabbits and hares may eliminates grass cover and trampling by stock can destroy nests. Rabbits attract predators to areas of habitat.
- Invasion of habitat by exotic weeds.
- Global warming causing loss of snow cover will result in increased exposure to foxes
 and cats in alpine areas. Competition with other rodent species may also increase.
 Populations at lower altitudes have already suffered local extinction.
- Wild horses degrade habitat / cover and disturb the species.
- Direct degradation of suitable habitat / cover as well as competition for food.
- Predation by European red foxes causes high mortality and restricts population growth.

Of these threats, the second and ninth threats are of relevance to this proposal. The proposal would result in the removal of approximately 4.016 hectares of vegetation and a similar area of potential ground habitat would be impacted through removal of microhabitat structures such as groundcover vegetation. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Additionally, the habitat that would be traversed by the proposed track would be considered marginal for this species as it is predominately forested without a significant grassy understorey component that could be used to create the runway system used by this species. There are areas in close proximity to the track alignment that would be considered potential habitat however these would not be directly impacted. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

Spotted-tailed Quoll

The Spotted-tailed Quoll can be found along the east coast of NSW where it has been recorded in a variety of habitat types including coastal heath, forests, woodlands and rainforests where it uses fallen logs and rocky outcrops as den sites (Menkhorst and Knight 2010; OEH 2015; Ruibal *et al.* 2010). The species is largely nocturnal and solitary, foraging through areas characterised by dense vegetation and substantial layers of ground litter. Females are known to occupy home ranges up to 750 hectares while males as large as 3,500 hectares (OEH 2015). No Spotted-tailed Quoll were recorded during the field surveys however there are three records about seven kilometres to the east of the site.

OEH (2015) identify the following threats to this species:

Loss, fragmentation and degradation of habitat.



- Accidental poisoning during wild dog and fox control programs. Deliberate poisoning, shooting and trapping may also be an issue.
- Competition with introduced predators such as cats and foxes.

Of these threats, the first threat is of relevance to this proposal. The proposal would result in the removal of approximately 4.016 hectares of vegetation and a similar area of potential habitat through removal of fallen timber and other microhabitat structures on the ground. However, the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Additionally, any structural complexity components such as dead wood and logs would only be moved to a location outside of the direct impact footprint which would minimise this potential impact. Nonetheless, recommendations detailed within Chapter 7 provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of these factors, it is *unlikely* that the proposed activity could have an adverse effect on the life cycle of Spotted-tailed Quoll such that a viable local population is likely to be placed at risk of extinction.

Blue Tongued Greenhood

In New South Wales, the Blue-tongued Greenhood is known from a few small populations within Kosciuszko NP and a population of about 40 plants (possibly now extinct) in Bago State Forest and adjoining Crown Leases south of Tumut (OEH 2015). The known distribution includes parts of the Snowy River, Tumbarumba and possibly Tumut Local Government Areas, also known from the Australian Capital Territory (Brindabella Range) and in montane areas of far north-eastern Victoria (OEH 2015). This species grows along sub-alpine watercourses under more open thickets of Mountain Tea-tree in muddy ground very close to water (OEH 2015). Blue-tongued Greenhood was not recorded during field surveys however it has been recorded less than one kilometre to the north of the proposal.

OEH (2015) identify the following threats to this species:

- Rooting by feral pigs.
- Mineral fossicking at some sites.
- Threats from environmental and demographic stochasticity due to the narrow areas of occupancy, small population sizes, and dispersed distribution of populations.
- Altered hydrology due to adjacent land uses
- Altered hydrology due to climate change.
- Logging leading to sedimentation and drying out of sites.
- Inappropriate fire regimes.
- Possible illegal collection.

None of these threats is of potential relevance with consideration of the proposed activity. However due to the proximity to Thredbo River and the presence of Mountain Tea-tree along the alignment, the study area is considered potential habitat for this species. The area of direct impact was calculated to be about 4.016 hectares however considering the distance



from Thredbo River of the track alignment; the direct impact on potential habitat would be considerably less. Though the existing record is to the north of the track alignment, this is most likely due to inaccuracy of GPS mapping with the record more likely to the south of the alignment, adjacent to Thredbo River. Nonetheless, recommendations detailed within Chapter 7, including pre-clearance surveys along the track route during the time suited to detecting this species, provide a framework for minimising potential direct and indirect impacts.

With consideration of all of these factors, the proposed activity is *unlikely* to have an adverse effect on the life cycle of the Blue-tongued Greenhood such that a viable local population is *likely* to be placed at risk of extinction.

Leafy Anchor Plant

The Leafy Anchor Plant is confined to the far south of the Southern Tablelands of NSW and the north-east highlands of Victoria. In NSW the Leafy Anchor Plant grows mostly within Kosciuszko National Park, south from the Blue Water Holes - Yarrangobilly Caves area to south-west of Jindabyne, at altitudes above 900 metres (OEH 2015). Generally occurs on or close to stream banks and on rocky areas near small waterfalls. The species occurs in both woodland with heathy riparian vegetation and on treeless grassy sub-alpine plains; most populations survive in sites that appear to be rarely burnt (OEH 2015). The Leafy Anchor Plant was not recorded during field surveys however it has been recorded several times in the locality, including adjacent to the eastern end of the proposal near the Thredbo River Picnic Area.

OEH (2015) identify the following threats to this species:

- Fire is a threat to the species as plants are generally killed by even low intensity fires, and post fire recruitment has been observed to be very low.
- Major flooding events since 2010 have caused significant stream bank erosion and the consequent loss of numerous plants at some sites.
- Competition from weeds (especially woody weeds such as blackberry, briar rose and willows).
- Grazing by domestic stock has the potential to impact those populations on private land.
- Clearing of habitat on private land is a potential threat.
- Feral deer have recently been observed at sites supporting *Discaria nitida* and browsing damage, including breakage of major stems of plants, has also been observed.

Of these, the threat Competition from weeds (especially woody weeds such as blackberry, briar rose and willows) is of potential direct relevance with consideration of the proposed activity. This is due to the presence of Blackberry and Briar Rose onsite and the proposal would result in vegetation and soil disturbance that would be conducive to the spread of these weeds. Additionally, numerous sightings of Deer scats and tracks indicate there is a significant population of these species that could pose a threat to this species. Nonetheless,



recommendations detailed within Chapter 7, including pre-construction surveys along the track route, provide a framework for minimising potential direct and indirect impacts to this species.

With consideration of all of these factors, the proposed activity is unlikely to have an adverse effect on the life cycle of the Leafy Anchor Plant such that a viable local population is likely to be placed at risk of extinction.

Mauve Burr-daisy

The distribution of the Mauve Burr-daisy is centred on the Monaro and Kosciuszko regions. There are three known sites in the upper Shoalhaven catchment. Found in montane and subalpine grasslands in the Australian Alps, found in subalpine grassland (dominated by *Poa spp.*), and montane or natural temperate grassland dominated by Kangaroo Grass (*Themeda australis*) and Snow Gum (*Eucalyptus pauciflora*) Woodlands on the Monaro and Shoalhaven area (OEH 2015). This species was not observed during field surveys however several records for this species exist within 10km of the site, mostly along the main range and to the north of Perisher Village.

OEH (2015) identify the following threats to this species:

- Loss and degradation of habitat and/or populations from road works (particularly widening or re-routing).
- Loss and degradation of habitat and/or populations by clearing of habitat for residential and agricultural developments.
- Loss and degradation of habitat and/or populations by intensification of grazing regimes.
- Loss and degradation of habitat and/or populations by invasion of weeds.
- Loss and degradation of local habitat and/or populations in Kosciuszko National Park by horses and roadworks.
- Potential encrochment and competition from Kunzea ericoides and Kunzea parvifolia
- Pigs digging up individuals.
- Grazing by cattle and sheep is a threat to plants while the plants are actively growing, flowering or in fruit.

Of these, the first three threats, all of which are a form of loss and degradation of habitat and/or populations are of potential direct relevance with consideration of the proposed activity. The area of the direct impact was calculated to be 4.016 hectares however a large propostion of this would be considered marginal as it is mostly forested, with only small woodland patches at either end of the study area. Also the loss of 4.016 hectares is considered relatively minor in the context of the remaining areas of native vegetation in the Kosciuszko NP. Nonetheless, recommendations detailed within Chapter 7, including preconstruction surveys along the track route, provide a framework for minimising potential direct and indirect impacts to this species.



With consideration of all of these factors, the proposed activity is unlikely to have an adverse effect on the life cycle of the Mauve Burr-daisy such that a viable local population is likely to be placed at risk of extinction.

(b) in the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction,

There are no endangered populations as listed by the TSC Act found in the Snowy River LGA.

- (c) in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:
 - (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,

The threatened ecological community (TEC), Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions, as listed by the TSC Act occurs within the study area. The area of direct impact to this community was calculated to be 0.784 ha. No mature trees would be removed and 18.36 hectares of the TEC would remain in the study area along with any areas outside of the study area. Additional mitigation measures would be put in place (see **Chapter 7**) for direct and indirect impacts to minimisation potential impact to this TEC.

The threatened ecological community (TEC), *Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions*, as listed by the TSC Act occurs within the study area. The area of direct impact to this community was calculated to be 2.892 ha. No mature trees would be removed and about 67.53 hectares of the TEC would remain in the study area along with any areas outside of the study area. Additional mitigation measures would be put in place (see **Chapter 7**) for direct and indirect impacts to minimisation potential impact to this TEC.

The TEC, aquatic ecological community in the catchment of the Snowy River in NSW includes all native fish and aquatic invertebrates within all rivers, creeks and streams. The listing includes Snowy River, Eucambene River, Thredbo (or Crackenback River), Gungarlin River, Mowamba River, Bombala River, McLaughlin River, Delegate River, Pinch River,



Jacobs River and the River bed channel inundated by Jindabyne, Eucumbene, Island Bend and Guthega Dams. This community varies within these water bodies however they are all interconnected. The threats this community are also varied however they include the introduction of dams and weirs reducing natural flow and in turn affecting water quality, thermal pollution, introduced fish species, degradation of riparian vegetation and increased rates or erosion and sedimentation. The last threat is the most relevant threat to this community in relation to the proposed activity. A series of mitigation measures have been recommended in this REF to minimise the potential for sedimentation to impact on this community in the long term including the use of sediment fencing, consultation with current erosion and sedimentation manuals and sediment controls left insitu until revegetation is complete (see **Chapter 7**).

The proposed activity would therefore:

- (i) be unlikely 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) be unlikely 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.
- (d) in relation to the habitat of a threatened species, population or ecological community:
 - (i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, 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 action, and
 - (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality,
 - i. The proposal would result in the removal of approximately 4.016 ha of native vegetation consisting of forest habitat within the study area.
 - ii. The proposed activity will not isolate or fragment other areas of habitats given the relatively minor nature of proposed vegetation removal surrounded by intact vegetation.
 - iii. While the vegetation and habitats of the study area are considered to be in good condition, and also provide habitat, potential habitat or foraging for a number of threatened species, it would not be considered highly important due to the minimal amount of vegetation removed. Only 4.016 hectares or 4.196 percent would be removed while 91.904 hectares or 95.804 percent would remain along with the remaining vegetation in the Kosciusko NP.



(e) whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly),

No critical habitat has been declared in the Snowy River LGA under TSC Act.

(f) whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan,

At the time of writing there were no specific recovery or threat abatement plans however the Diamond Firetail, Flame Robin, Gang-gang Cockatoo, Olive Whistler, Scarlet Robin, Varied Sittella and Spotted-tailed Quoll have been assigned to the Species Action Statement landscape-managed species stream by OEH under the Saving our Species program. This action statement aims to ensure that the species is secure in the wild in NSW and that it's NSW geographic range is extended or maintained. Under these action statements a set of specific management objectives are set out for each animal.

At the time of writing there were no specific recovery or threat abatement plans however the Broad-toothed Rat, Leafy Anchor Plant and Mauve Burr-daisy have been assigned to the Species Action Statement Site-managed Species stream by OEH under the Saving our Species program. The conservation project aims to secure the species in the wild for 100 years and maintain its conservation status under the TSC Act. Under these action statements a set of specific sites are set out for specific conservation activities for each animal. The proposal is not located within the specific sites for the Glossy Black Cockatoo.

At the time of writing there were no specific recovery or threat abatement plans however the Pink Robin have been assigned to the Species Action Statement Partnership Species stream by OEH under the Saving our Species program. These species have less than 10% of their distribution in NSW. Some are common in other states or territories. Species that are threatened nationally and have important populations in NSW will have species conservation projects developed for them in the future.

There are currently no recovery plans or threatened abatement plans listed for the Eastern False Pipistrelle. However, the document, *The Action Plan for Australian Bats* (EA 1999) outlines what is required to conserve Australian Bats in their natural habitat. Threatening processes identified include habitat loss and roost disturbance with recommendations to minimise threatening processes including funding for habitat creation programs to mitigate effects of habitat clearance, increased survey and research and protection of roosting sites. The proposal is considered to be consistent with this plan, in that targeted surveys were conducted and the small area of potential foraging habitat to be removed is minimal in the context of the large areas of habitat that will remain in the area and the hollows onsite would not be removed.



At the time of writing there were no specific recovery or threat abatement plans however the Blue-tongued Greenhood has been assigned to the Species Action Statement Data-deficient Species stream by OEH under the Saving our Species program. There is insufficient information on these species to allocate them to another management stream. Species action statements have been prepared outlining research and survey actions to be undertaken before an appropriate management approach can be developed. Research organisations such as universities, museums and field naturalist groups may wish to use this information to guide their research work. Once detailed information is available, an expert panel will consider which management stream each species should be placed in.

(g) whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

While the proposed activity – track construction – is not recognised as a key threatening process (KTP) under schedule 3 of the TSC Act or the FM Act, the *Clearing of native vegetation*, *Bushrock Removal*, *Removal of dead wood and dead trees*, *Degradaton of native riparian vegetation along NSW watercourses* and *Increased sedimentation and erosion during construction* are listed KTP's.

'Bushrock removal' is the removal of natural surface deposits of rock from rock outcrops or from areas of native vegetation. Bushrock serves many purposes in the natural environment. It provides habitat for many plants and animals, some of which are threatened. Many animals use rocks and rock environments for shelter, to hide from predators, find food, avoid extreme weather conditions and escape bushfires. Bushrock is also known to provide egglaying sites for reptiles. There are several significant rock outcrop areas that are traversed by the proposed track alignment. In these areas some bushrock would be moved by hand to another location within the rock outcrop to create a flat path for the track. This would minimise the potential loss of habitat and also injury to animals sheltering underneath the rocks. It is also likely that some bushrock would be used to armour the track in some locations.

The 'clearing of native vegetation' is recognised as a major factor contributing to the loss of biodiversity. Clearing of any area of native vegetation, may lead to impacts on biological diversity such as habitat fragmentation limiting gene flow between small isolated populations, which may result in a reduction in the potential for biodiversity to adapt to environmental change. The proposal would result in the removal of 4.016 hectares of native vegetation which is considered negligible in the context of the remaining areas of native vegetation in the Kosciuszko NP which will remain unaffected by the proposal.

The 'removal of dead wood and dead trees' includes the removal of fallen branches and litter as general tidying up and the removal of standing dead trees. Dead wood and dead trees provide essential habitat for a wide variety of native animals. It is acknowledged that some



dead wood may be relocated from the track alignment. However, in areas of retained vegetation, no dead wood will be removed by the proposed activity.

'Degradation of native riparian vegetation along NSW watercourses' is a key threatening process because of its negative impacts on threatened species, populations and ecological communities. Riparian vegetation (found alongside creeks and rivers, areas around lakes, wetlands and on river floodplains) is part of a healthy functioning ecosystem and has numerous ecological benefits. The proposal would result in the removal of a small area of vegetation considered to be riparian vegetation adjacent to Thredbo River. This would be minimal in the context of the remaining vegetation along Thredbo River and mitigation measures designed to minimise potential impacts.

With consideration of these factors, the proposed activity is unlikely to result in the operation of, or increase the impact of, a key threatening process.

Conclusion

This Assessment of Significance has determined that the proposed activity is 'unlikely' to have a 'significant effect' on threatened species, populations, communities or their habitats provided safeguards are adopted and fully implemented. Therefore, the proposed activity will not require a Species Impact Statement.



APPENDIX 7 – ASSESSMENT OF SIGNIFICANCE (EPBC ACT)



Migratory Species

No species as listed under the EPBC Act were detected during the field surveys in the study area. The following migratory species were identified as those with the potential to be impacted by the proposal:

- Black-faced Monarch
- Rainbow Bee-eater
- Rufous Fantail
- Satin Flycatcher

Protected under several international agreements to which Australia is a signatory, Migratory species are considered Matters of National Environmental Significance under the EPBC Act.

Under the EPBC Act, an action is likely to have a significant impact on a migratory species if it substantially modifies, destroys or isolated an area of 'important habitat' for the species (DotE 2013). For these species, the study area is not considered to comprise 'important habitat' as it does not contain:

- Habitat used by a migratory species occasionally or periodically within a region that supports an ecological significant proportion of the population of the species.
- Habitat that is of critical importance to the species at particular life-cycle stages.
- Habitat used by a migratory species that is at the limit of the species' range.
- Habitat within an area where the species is declining.

Given this, the impacts of the proposal are not likely to be regarded as significant and are therefore not considered further.

Threatened Species

The following affected subject species were identified and subject to further assessment: Spotted-tailed QuoII (Endangered)

Endangered Species (Spotted-tailed Quoll, Hoary Sunray)

Will the action lead to a long-term decrease in the size of a population of a species?

No. There is no evidence to suggest that a population even occurs within the study area. Nonetheless, the proposed action would result in the direct impact to or removal of 4.016 hectares of native vegetation. There are large areas of existing native vegetation in the area including the Kosciuszko NP which will remain unaffected by the proposal and would continue to provide habitat for these species in the locality. Amelioration measures designed to mitigate any negative impacts would be implemented. Given this, it is unlikely that the proposed action would lead to a long-term decrease in the size of a population of these species (should one even occur there).

Will the action reduce the area of occupancy of the species?



No. While there is no evidence to suggest that a population even occurs within the study area. Nonetheless, the proposed action would result in the direct impact to or removal of 4.016 hectares of native vegetation. There are large areas of existing native vegetation in the area including the Kosciuszko NP which will remain unaffected by the proposal and would continue to provide habitat for these species in the locality. Amelioration measures designed to mitigate any negative impacts would be implemented. Given this, it is unlikely that the proposed action would reduce the area of occupancy of an important population of these species.

Will the action fragment an existing population into two or more populations?

No population would be fragmented into two or more populations by the current design of the action.

Will the action adversely affect habitat critical to the survival of a species?

No. The habitat located adjacent to the proposal is not considered critical to these species for their survival.

Will the action disrupt the breeding cycle of a population?

No. There is no evidence of breeding of a population within the vicinity of the proposal. Therefore, the breeding cycle of a population will not be disrupted

Will the action modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?

No. The availability of habitat in the locality indicates that the proposed action is unlikely to impact potential habitat to the extent these species are likely to decline.

Will the action result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat?

The proposed action has the potential to increase the ability of environmental weeds to become established through site disturbance. Recommendations within Section 7 provide a framework to minimise the risk of weed species and feral animals invading adjoining habitats.

Will the action introduce disease that may cause the species to decline?

No. Recommendations within Section 7 provide a framework for managing potential risks to biodiversity.

Will the action interfere with the recovery of the species?

No. Given the relatively minor nature of the proposed action, the extent of similar or higher quality habitats in the locality, and the adoption of the recommendations details within



Section 7, it is unlikely that the proposed action would have an impact on the recovery of these species.



APPENDIX 8 – AUSTRALIAN HERITAGE PLACES INVENTORY SEARCH



Search Results

38 results found.

Adaminaby Saleyards Travelling Stock Reserve Grassland Snowy Mountains Hwy	Adaminaby, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Adaminaby Travelling Stock Reserve Grassland Bolaro Rd	Adaminaby, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Australian Alps National Parks and Reserves The Alpine Way	Thredbo Village, NSW, Australia	(<u>Listed place</u>) National Heritage List
Beloka Cemetery Grassland	Beloka, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Berridale Public School Oliver St	Berridale, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Black - Allan Line Border Cairns	Tubbut, VIC, Australia	(Interim List) Register of the National Estate (Non-statutory archive)
Bondo Travelling Stock Reserve Grassland	Cooma, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Buckleys Crossing Bridge Paupong Rd	Dalgety, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Bundian Way Area Monaro Hwy	Bombala, NSW, Australia	(Nomination now ineligible for PPAL) National Heritage List
Byadbo Wilderness	Jindabyne, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Cootapatamba Hut	Thredbo, NSW, Australia	(<u>Registered</u>) Register of the National Estate

(Non-statutory archive) Eucumbene, NSW, (Registered) Daveys Hut Australia Register of the National Estate (Non-statutory archive) Eucumbene, NSW, (Registered) Eucumbene Dam and Pondage Australia Register of the National Estate (Non-statutory archive) Four Mile Hut Kiandra Road Cabramurra, NSW, (Registered) Australia Register of the National Estate (Non-statutory archive) Grey Mare Hut and Mining Precinct Grey Mare Fire Trail Khancoban, NSW, (Registered) Australia Register of the National Estate (Non-statutory archive) Illawong Lodge Guthega, NSW, (Registered) Australia Register of the National Estate (Non-statutory archive) Kiandra Courthouse/Chalet Snowy mountains Highway Kiandra, NSW, (Registered) Australia Register of the National Estate (Non-statutory archive) Kiandra, NSW, Kiandra Mining Area Snowy Mountains Hwy (Registered) Australia Register of the National Estate (Non-statutory archive) Jindabyne, NSW, (Registered) Kosciuszko Alpine Area Australia Register of the National Estate (Non-statutory archive) Kosciuszko National Park Snowy Mountains Hwy Tumut, NSW, (Nomination now ineligible for Australia PPAL) National Heritage List Tumut, NSW, Kosciuszko National Park (1981 boundary) Snowy Mountains Hwy (Registered) Australia Register of the National Estate (Non-statutory archive) Jindabyne, NSW, (Registered) Lake Jindabyne Australia Register of the National Estate

)	Australian Hentage Da	tabase	
			(Non-statutory archive)
	Mount Kosciuszko Glaciated Area Summit Rd	Charlottes Pass, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
	North Brother Travelling Stock Reserve Grassland Cooma Dalgety Rd	Cooma, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
	Pilot Wilderness Alpine Way	Thredbo Village, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
	Ravensworth Travelling Stock Reserve Grassland Cooma Dalgety Rd	Cooma, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
	Round Plain Travelling Stock Reserve Grassland Rocky Plains Rd	Berridale, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
	Round Plain Uniting Church Grounds Grassland Rocky Plains Rd	Berridale, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
	Scotchies Yards The Barry Way	Jindabyne, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
	Seamans Hut	Charlottes Pass, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
	Snowy Mountains Scheme Snowy Mountains Hwy	Cabramurra, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
	Snowy Mountains Scheme Snowy Mountains Hwy	Cabramurra, NSW, Australia	(<u>Nominated place</u>) National Heritage List
	Snowy River	Jindabyne, NSW, Australia	(<u>Place rejected for Emergency</u> <u>Listing</u>) National Heritage List
	Snowy River (New South Wales)	Jindabyne, NSW,	(Removed from Register or
۸	POVIDOMENT GOV SU/CGI_DIN/SDGD/SESTCD DI		

Australia IL)

Register of the National Estate (Non-statutory

archive)

Delegate, VIC, The Black-Allan Line Border Cairns (Nomination now ineligible for

Australia

PPAL)

National Heritage

List

Thredbo Village Conservation Area The Alpine Way Rd Thredbo, NSW, (Registered)

Australia

Register of the National Estate

(Non-statutory archive)

Canberra, NSW, (Registered) Upper Murrumbidgee River

Australia

Register of the

National Estate (Non-statutory archive)

Wollondibby Homestead Complex Alpine Way Jindabyne, NSW,

Australia

(Indicative Place) Register of the

National Estate (Non-statutory

archive)

Report Produced: Tue May 19 11:11:08 2015

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APPENDIX 9 - NSW HERITAGE OFFICE DATABASE SEARCH





<u>Home</u> > <u>Heritage sites</u> > <u>Searches and directories</u> > NSW heritage search

Search for NSW heritage

Return to search	page where y	ou can refine/bro	<u>aden your</u>	search
ItemName	0			

Statutory listed items

Information and items listed in the State Heritage Inventory come from a number of sources. This means that there may be several entries for the same heritage item in the database. For clarity, the search results have been divided into two sections.

- Section 1. contains items listed by the heritage council under the NSW
 Heritage Act. This includes listing on the state heritage register, an interim
 heritage order or protected under section 136 of the NSW Heritage Act. This
 information is provided by the Heritage Branch.
- Section 2. contains items listed by local councils & shires and state government agencies. This section may also contain additional information on some of the items listed in the first section.

Section 1. Items listed under the NSW Heritage Act.

Your search returned 3 records.

Item name	Address	Suburb	LGA	SHR
Kiandra Courthouse/Chalet		Kiandra, Kosciuszko National Park	Snowy River	00994
Matthews Cottage		Kiandra, Kosciuszko National Park	Snowy River	00998
Old Adaminaby and Lake Eucumbene, including relics and movable objects		Eucumbene	Snowy River	01794

ItemName	0	
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Section 2. Items listed by Local Government and State Agencies.

Your search returned 210 records.

Item name	Address	Suburb	LGA	Information source
Adaminaby Conservation Area	Snowy Mountains Highway	Adaminaby	Snowy River	LGOV
Adaminaby Memorial Hall	22 York Street	Adaminaby	Snowy River	LGOV
Adaminaby Methodist Church	Lucas Street	Old Adaminaby	Snowy River	LGOV
Adaminaby Police Station	23 Denison Street	Adaminaby	Snowy River	LGOV
Adaminaby Public School	11 Cosgrove Street	Adaminaby	Snowy River	LGOV
Adaminaby Racecourse	153 Bobeyan Road	Adaminaby	Snowy River	LGOV
Adaminaby	Denison Street	Adaminaby	Snowy	LGOV

9/2015		Search for INSVV	neritage	NSW Environmen
Shopping Centre			River	
<u>Aitchison Cottage</u>	2 Myack Street	Berridale	Snowy River	LGOV
All Saints Anglican Church	9 Myack Street	Berridale	Snowy River	LGOV
Alpine Uniting Church	2160 Rocky Plain Road	Rocky Plain	Snowy River	LGOV
<u>Ashfield</u>	290 Alpine Way	Crackenback	Snowy River	LGOV
<u>Avonside</u>	538 Avonside Road	Avonside	Snowy River	LGOV
<u>Bakery</u>	62 Jindabyne Road	Berridale	Snowy River	LGOV
Ballantrae House	16 Myack Street	Berridale	Snowy River	LGOV
Bark Hut, The	0 Tin Mine Track	Grosses Plain	Snowy River	LGOV
<u>Barrymore</u>	280 West Lynne Road	Moonbah	Snowy River	LGOV
<u>Beaureden</u>	38 Hobbs Lane	Moonbah	Snowy River	LGOV
<u>Beloco</u>	6378 The Snowy River Way	Beloka	Snowy River	LGOV
Berridale Inn	66 Jindabyne Road	Berridale	Snowy River	LGOV
Berridale Police Station and Residence	23 Mackay Street	Berridale	Snowy River	LGOV
Berridale Public School	28 Oliver Street	Berridale	Snowy River	LGOV
Big Trout	Baker Street	Adaminaby	Snowy River	LGOV
<u>Bobundara</u>	3061 Maffra Road	Bobundara	Snowy River	LGOV
<u>Bocconnoc</u>	386 Buckenderra Road	Buckenderra	Snowy River	LGOV
Bolaira View	4016 Lett Street	Adaminaby	Snowy River	LGOV
Bolaira View Outrider Cottage	4016 Lett Street	Adaminaby	Snowy River	LGOV
Bolaro Shearing Area	411 Bobeyan Road	Adaminaby	Snowy River	LGOV
<u>Boloco</u>	210 Paupong Road	Beloka	Snowy River	LGOV
Boloco Cemetery	6286 The Snowy River Way	Beloka	Snowy River	LGOV
Boloco South	6458 The Snowy River Way	Beloka	Snowy River	LGOV
<u>Boonara</u>	290 Dalgety Road	Berridale	Snowy River	LGOV
<u>Briardale</u>	145 Old Adaminaby Road	Adaminaby	Snowy River	LGOV
Brier Ho	30 Mackay Street	Berridale	Snowy River	LGOV
Buckleys Crossing Hotel	1 Brierly Street	Dalgety	Snowy River	LGOV

19/2015		Search for NSW	heritage	NSW Environmen
Bulmanns Hut	Nimmo Road	Snowy Plain	Snowy River	LGOV
Bus Shed	17 Campbell Street	Dalgety	Snowy River	LGOV
Bush Hall	1264 Middlingbank Road	Cootralantra	Snowy River	LGOV
Bush Nurses' Home	5 Hamilton Street	Dalgety	Snowy River	LGOV
Bushy Park	5111 Kosciuszko Road	East Jindabyne	Snowy River	LGOV
<u>Caravan Park</u>	0 Lucas Street	Old Adaminaby	Snowy River	LGOV
Carinya Alpine Village Recreational Hall	82 Carinya Lane	Jindabyne	Snowy River	LGOV
<u>Cemetery - Christ</u> <u>Church Maneroo</u>	153 Maffra Road	Cooma	Snowy River	LGOV
Cherry Tree	1834 Maffra Road	The Brothers	Snowy River	LGOV
Christ Church Maneroo	151 Maffra Road	Cooma	Snowy River	LGOV
Coachman's Corner	1 Boundary Street	Berridale	Snowy River	LGOV
<u>Cobbin</u>	504 Barry Way	Moonbah	Snowy River	LGOV
Coolamatong	471 Coolamatong Road	Berridale	Snowy River	LGOV
Coolringdon	1432 Kosciuszko Road	Coolringdon	Snowy River	LGOV
Coolringdon Chalet	Island Bend Firetrail	Snowy Plain	Snowy River	LGOV
Coonghoongbula	786 Jimenbuen Road	Dalgety	Snowy River	LGOV
Coonghoongbula Shearing Complex	781 Jimenbuen Road	Dalgety	Snowy River	LGOV
Council Chambers	2 Myack Street	Berridale	Snowy River	LGOV
<u>Crackenback</u> <u>Cottage</u>	902 Alpine Way	Crackenback	Snowy River	LGOV
<u>Crackenback Farm</u>	914 Alpine Way	Crackenback	Snowy River	LGOV
<u>Crookshanks</u>	1227 Dry Plains Road	Wambrook	Snowy River	LGOV
<u>Cultural Streetscape</u>	Jindabyne Road	Berridale	Snowy River	LGOV
CWA Hall	7 Myack Street	Berridale	Snowy River	LGOV
<u>Dalgety Bridge</u>	The Snowy River Way	Dalgety	Snowy River	LGOV
Dalgety Bridge Over Snowy River	Jindabyne - Dalgety Road	Dalgety	Snowy River	SGOV
<u>Dalgety</u> <u>Conservation Area</u>		Dalgety	Snowy River	LGOV
<u>Dalgety General</u> <u>Store</u>	9 Hamilton Street	Dalgety	Snowy River	LGOV
<u>Dalgety Memorial</u> <u>Hall</u>	13 Campbell Street	Dalgety	Snowy River	LGOV

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Dalgety Public School	19 Hamilton Street	Dalgety	Snowy River	LGOV
<u>Dalgety</u> <u>Showground</u>	Campbell Street	Dalgety	Snowy River	LGOV
<u>Denison Cottage</u>	8 Denison Street	Old Adaminaby	Snowy River	LGOV
Denison Street Cultural Landscape	Denison Street	Adaminaby	Snowy River	LGOV
<u>Diggers Creek</u> <u>Bridge</u>	Summit Road	Near Jindabyne	Snowy River	SGOV
<u>Emohruo</u>	249 Paupong Road	Beloka	Snowy River	LGOV
<u>Fairview</u>	16 Brierly Street	Dalgety	Snowy River	LGOV
<u>Fairview</u>	35 Bugtown Road	Adaminaby	Snowy River	LGOV
Flanagan's Hut	Snowy Plain Firetrail	Snowy Plain	Snowy River	LGOV
<u>Fontenoy</u>	3206 Yaouk Road	Adaminaby	Snowy River	LGOV
Former Springwell Shearing Complex	1601 Maffra Road	The Brothers	Snowy River	LGOV
<u>Gabramatta</u>	2164 Yaouk Road	Yaouk	Snowy River	LGOV
Gaden Trout Hatchery	224 Gaden Road	Jindabyne	Snowy River	LGOV
Garnet, The	53 Kiah Lake Road	Berridale	Snowy River	LGOV
Gegedzerick Cemetery	222 Gegedzerick Road	Berridale	Snowy River	LGOV
Glen Miln	7707 The Snowy River Way	Jindabyne	Snowy River	LGOV
Glenrock Homestead	7932 The Snowy River Way	Jindabyne	Snowy River	LGOV
Golden Age Mine Ruins	0 Barry Fire Trail	Grosses Plain	Snowy River	LGOV
Golden Fleece Service Station	20 Campbell Street	Dalgety	Snowy River	LGOV
Grave and Hut	0 Tin Mine Track	Grosses Plain	Snowy River	LGOV
Guthries Creek Bridge	Main Road 286 Via Jindabyne	Jindabyne	Snowy River	SGOV
Happy Valley	185 Bushrangers Hill Road	Adaminaby	Snowy River	LGOV
<u>Hazeldean</u>	1410 Maffra Road	The Brothers	Snowy River	LGOV
<u>Hazelwood</u>	212 Old Cemetery Road	Adaminaby	Snowy River	LGOV
<u>Heatherbrae</u>	2475 Yaouk Road	Yaouk	Snowy River	LGOV
<u>Hilltop</u>	292 Eucumbene Road	Hill Top	Snowy River	LGOV
<u>House</u>	10 Cosgrove Street	Adaminaby	Snowy River	LGOV
House	6 York Street	Adaminaby	Snowy River	LGOV

House	38 York Street	Adaminaby	Snowy River	LGOV
House	23 Campbell Street	Dalgety	Snowy River	LGOV
<u>House</u>	21 Campbell Street	Dalgety	Snowy River	LGOV
<u>House</u>	17 Campbell Street	Dalgety	Snowy River	LGOV
<u>House</u>	18 Hamilton Street	Dalgety	Snowy River	LGOV
<u>House</u>	22 Campbell Street	Dalgety	Snowy River	LGOV
<u>House</u>	8 Barnes Street	Dalgety	Snowy River	LGOV
<u>House</u>	35 Hamilton Street	Dalgety	Snowy River	LGOV
<u>House</u>	3 Park Street	Berridale	Snowy River	LGOV
<u>House</u>	1 Creek Street	Berridale	Snowy River	LGOV
<u>House</u>	43 James Street	Berridale	Snowy River	LGOV
<u>House</u>	1 Mackay Street	Berridale	Snowy River	LGOV
<u>House</u>	16 Florence Street	Berridale	Snowy River	LGOV
<u>House</u>	32 Mary Street	Berridale	Snowy River	LGOV
<u>House</u>	46 Jindabyne Road	Berridale	Snowy River	LGOV
<u>House</u>	48 Jindabyne Road	Berridale	Snowy River	LGOV
<u>House</u>	60 Myack Street	Berridale	Snowy River	LGOV
<u>House</u>	18 Denison Street	Adaminaby	Snowy River	LGOV
<u>House</u>	20 Denison Street	Adaminaby	Snowy River	LGOV
<u>House</u>	8 Druitt Street	Adaminaby	Snowy River	LGOV
<u>House</u>	9 Druitt Street	Adaminaby	Snowy River	LGOV
<u>House</u>	11 Druitt Street	Adaminaby	Snowy River	LGOV
<u>Iona Cafe</u>	2 Barnes Street	Dalgety	Snowy River	LGOV
<u>Ironmungie</u>	1158 Ironmungie Road	Ironmungy	Snowy River	LGOV
<u>Jimenbuen</u>	2830 Jimenbuen Road	Jimenbuen	Snowy River	LGOV
Jimenbuen Shearing Complex	2830 Jimenbuen Road	Jimenbuen	Snowy River	LGOV
Jimmys Hut	Snowy Plain Fire Trail	Snowy Plain	Snowy River	LGOV
Jindabyne Cemetery	Barry Way	Jindabyne	Snowy River	LGOV

9/2015		Search for NSVV	nerriage	NSW Environmen
<u>Jindabyne Foreshore</u> <u>Park</u>	0 Banjo Paterson Park, Kosciuszko Road	Jindabyne	Snowy River	LGOV
Jindabyne Winter Sports Academy	207 Barry Way	Jindabyne	Snowy River	LGOV
<u>Kara</u>	4485 Kosciuszko Road	Avonside	Snowy River	LGOV
Kelly's Hut	Rocky Plain Road	Cootralantra	Snowy River	LGOV
Kelton Plain	708 Myalla Road	The Brothers	Snowy River	LGOV
<u>Keval</u>	4 Druitt Street	Adaminaby	Snowy River	LGOV
Kiah Lake Homestead & Shearing Shed	304 Kiah Lake Road	Berridale	Snowy River	LGOV
Kiah Lodge	181 Stoney Creek Road	Berridale	Snowy River	LGOV
Knightsdale	1115 Eucumbene Road	Rocky Plain	Snowy River	LGOV
<u>Koolaroo</u>	25 Myalla Road	Cooma	Snowy River	LGOV
Lake Eucumbene			Snowy River	LGOV
Lake Jindabyne		Jindabyne	Snowy River	LGOV
<u>Lakeview</u>	870 Matong Road	Jimenbuen	Snowy River	LGOV
<u>Lawarra</u>	1014 Snowy Mountains Highway	Coolringdon	Snowy River	LGOV
Leesville Hotel	218 Barry Way	Jindabyne	Snowy River	LGOV
<u>Lined Avenue</u>	The Snowy River Way	Dalgety	Snowy River	LGOV
Mandalong	622 Myalla Road	The Brothers	Snowy River	LGOV
Matong	312 Matong Road	Numbla Vale	Snowy River	LGOV
Matthews cottage		Kiandra	Snowy River	LGOV
Memorial Hall	45 Kosciuszko Road	Jindabyne	Snowy River	LGOV
Milroy	3502 Yaouk Road	Adaminaby	Snowy River	LGOV
Miners Hut	0 Tin Mine Track	Grosses Plain	Snowy River	LGOV
<u>Moonbah</u>	0 Barry Way	Moonbah	Snowy River	LGOV
Mt Gilead	7365 The Snowy River Way	Jindabyne	Snowy River	LGOV
Mt Pleasant Cemetery	4288 The Snowy River Way	Dalgety	Snowy River	LGOV
<u>Murlingbung</u> <u>Cottage</u>	1613 Middlingbank Road	Middlingbank	Snowy River	LGOV
<u>Murranumbla</u>	646 Blackburn Creek Road	Numbla Vale	Snowy River	LGOV

19/2015		Search for NSW	heritage	NSW Environmen
Myalla	1410 Maffra Road	The Brothers	Snowy River	LGOV
Narelle's Hut	1218 Dry Plains Road	Wambrook	Snowy River	LGOV
Neriwa	785 Wainui Road	Buckenderra	Snowy River	LGOV
Nimmo Bridge	Nimmo Road	Nimmo	Snowy River	LGOV
Nioka	43 Arable Road	Coolringdon	Snowy River	LGOV
Numbla Vale	1647 Jimenbuen Road	Numbla Vale	Snowy River	LGOV
Old Adaminaby Cemetery	0 Old Cemetery Road	Adaminaby	Snowy River	LGOV
Old Glenmore	137 Gullies Road	Moonbah	Snowy River	LGOV
Old Gold Dredge	Gungarlin River, Island Bend Firetrail	Snowy Plain	Snowy River	LGOV
Old Oliver House (The)	11 Bent Street	Berridale	Snowy River	LGOV
Old Parsonage, The	5 Bobundara Road	Berridale	Snowy River	LGOV
Our Daily Bread	22 Myack Street	Berridale	Snowy River	LGOV
Our Lady Star of The Sea	Cooma Street	Dalgety	Snowy River	LGOV
Outstation On Hazeldean	1410 Maffra Road	The Brothers	Snowy River	LGOV
Park, The	169 West Lynne Road	Moonbah	Snowy River	LGOV
Past Times	583 Snowy Mountains Highway	Pine Valley	Snowy River	LGOV
Picture Theatre (Former)	36 Jindabyne Road	Berridale	Snowy River	LGOV
<u>Pleasant Valley</u>	1769 Eucumbene Road	Rocky Plain	Snowy River	LGOV
Pleasant View	162 Mugridge Road	Moonbah	Snowy River	LGOV
Police Station (Former)	1 Wyndeyer Street	Dalgety	Snowy River	LGOV
Polygon	3669 Snowy Mountains Highway	Adaminaby	Snowy River	LGOV
Post Office (Former)	12 Myack Street	Berridale	Snowy River	LGOV
Ravensworth	2179 Maffra Road	Bobundara	Snowy River	LGOV
Rockwell	1510 Rockwell Road	Dalgety	Snowy River	LGOV
Rocky Plains Public School	1690 Eucumbene Road	Rocky Plain	Snowy River	LGOV
Roman Catholic Convent (Former)	9 Cosgrove Street	Adaminaby	Snowy River	LGOV
Roman Catholic School (Former)	44 York Street	Adaminaby	Snowy River	LGOV
Rossmore	38 Jindabyne Road	Berridale	Snowy River	LGOV

13/2013		Ocal cirioi 140VV	normage	NOW Environmen
Rural Buildings	1647 Dalgety Road	Dalgety	Snowy River	LGOV
School Residence	12 Barnes Street	Dalgety	Snowy River	LGOV
Schoolhouse	62 Matong Road	Numbla Vale	Snowy River	LGOV
<u>Severn Park</u>	579 Black Range Road	Bobundara	Snowy River	LGOV
Snowy Mountains Highway	Snowy Mountains Highway	Adaminaby	Snowy River	LGOV
Spencers Creek Bridge	Main Road 286 Via Jindabyne	Jindabyne	Snowy River	SGOV
<u>Springwell</u>	1551 Maffra Road	The Brothers	Snowy River	LGOV
St Andrews Anglican Church	3 Park Road	Jindabyne	Snowy River	LGOV
St Andrews Uniting Church	19 Gippsland Street	Jindabyne	Snowy River	LGOV
St Columbkilles Church and Hall	24 Kosciuszko Road	Jindabyne	Snowy River	LGOV
St James Anglican Boloco Church	6286 The Snowy River Way	Beloka	Snowy River	LGOV
St Johns Anglican Church	13 Stoke Street	Adaminaby	Snowy River	LGOV
St Josephs Catholic Church	15 Mary Street	Berridale	Snowy River	LGOV
St Mary The Virgin Anglican Church	222 Gegedzerick Road	Berridale	Snowy River	LGOV
St Marys Catholic Church	44 York Street	Adaminaby	Snowy River	LGOV
St Peters Anglican Church	10 Brierly Street	Dalgety	Snowy River	LGOV
St Stephens Uniting Church	19 Florence Street	Berridale	Snowy River	LGOV
St Thomas Anglican Church	2327 Slacks Creek Road	Middlingbank	Snowy River	LGOV
St Thomas Church	1202 Barry Way	Moonbah	Snowy River	LGOV
Stone House (The)	3133 Barry Way	Ingebirah	Snowy River	LGOV
Stratford	1510 Arable Road	Berridale	Snowy River	LGOV
<u>Strzelecki</u> <u>Monument</u>	0 Banjo Paterson Park, Kosciuszko Road	Jindabyne	Snowy River	LGOV
<u>Sunnyside</u>	775 Dalgety Road	Berridale	Snowy River	LGOV
<u>Tallawa</u>	6031 The Snowy River Way	Dalgety	Snowy River	LGOV
The Pines	31 Hamilton Street	Dalgety	Snowy River	LGOV
The Potato Pit No.2	1180 Barry Way	Moonbah	Snowy River	LGOV
The Top Place	632 Big Yard Road	Moonbah	Snowy River	LGOV
Uniting Church	1 Stoke Street	Adaminaby	Snowy	LGOV

			River	
<u>Viola</u>	128 Dalgety Road	Berridale	Snowy River	LGOV
War Memorial and Reserve	Jindabyne Road	Berridale	Snowy River	LGOV
Wee Wah	375 Eucumbene Road	Hill Top	Snowy River	LGOV
West Lynne Shearing Complex	167 West Lynne Road	Moonbah	Snowy River	LGOV
Wheathill	471 Rockwell Road	Berridale	Snowy River	LGOV
Willow Grove	522 Myalla Road	Cooma	Snowy River	LGOV
Wollondibby Cottage	785 Alpine Way	Crackenback	Snowy River	LGOV
Wollondibby Mill Site	Big Yard Road	Moonbah	Snowy River	LGOV
<u>Wullwye</u>	817 Bobundara Road	Berridale	Snowy River	LGOV

There was a total of 213 records matching your search criteria.

Key:

LGA = Local Government Area

GAZ= NSW Government Gazette (statutory listings prior to 1997), HGA = Heritage Grant Application, HS = Heritage Study, LGOV = Local Government, SGOV = State Government Agency.

Note: The Heritage Branch seeks to keep the State Heritage Inventory (SHI) up to date, however the latest listings in Local and Regional Evironmental Plans (LEPs and REPs) may not yet be included. Always check with the relevant local council or shire for the most recent listings.