



Figure 3.8 – Vegetation Mapping Point 5 to Point 8 (east)



Figure 3.9 – Vegetation Mapping Point 5 – Point 8 (west)



Figure 3.10 – Vegetation Mapping Point 8 to Point 10



Figure 3.11– Vegetation Mapping Point 10 to Point 11



Figure 3.12 – Vegetation Mapping Point 11 to Point 12

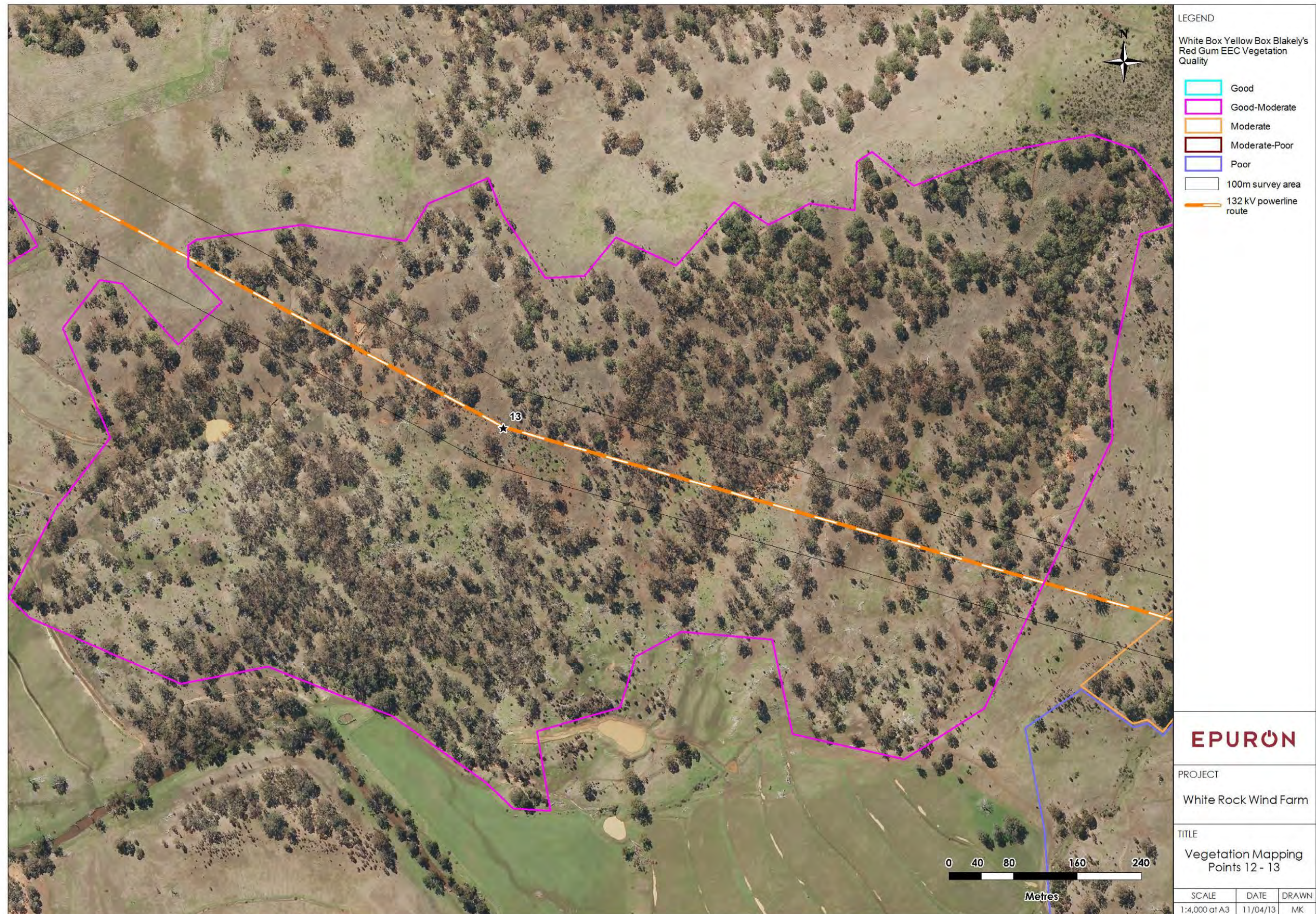


Figure 3.13 – Vegetation Mapping Point 12 to Point 13



Figure 3.14 – Vegetation Mapping Point 13 to Point 15



Figure 3-15 Vegetation Mapping Point 15 to Point 16

Issue 6: Flora & fauna habitats and their importance are not adequately addressed.

Recommendation: That the proponent provides a detailed assessment of habitat features of remnant vegetation across the study area for threatened flora and fauna. This should include the number of hollow-bearing trees within the study area and the number of hollow-bearing trees that will be removed within the context of the general density of hollow-bearing trees within local remnants.

Response:

The habitat importance of Points 1-2 (Section 7) to threatened species within the study area is limited due to the considerable disturbance to this area from previous and existing land-use practices. The majority of this area has been cleared however there is a narrow band of relatively well-structured trees and a moderately developed understorey with rocky outcrops and some tree hollows present. Species that may utilise this area include the Spotted-tailed Quoll, Brush-tailed Rock Wallaby, Little Pied Bat, Large-eared Pied Bat, Eastern False Pipistrelle, Yellow-bellied Sheath-tailed Bat and the Eastern Bent-wing Bat.

It is considered that significant impacts to each of the above threatened species are highly unlikely to occur due to the ability of each species to display avoidance behaviour during construction and the relatively low level of impacts associated with the installation of a powerline. As the disturbance to this location will be of short duration with minimal residual impacts, it is considered that all impacts can be managed.

The habitat importance of Points 12-14 (Section 2) to threatened species within the study area is considered to be moderate due to the relatively large size and condition of this remnant. Several threatened species may utilise this area but would be largely limited to avians and possibly microbats including: the Diamond Firetail (finch), Speckled warbler, Varied Sittella, Little Lorikeet, Greater Broad-nosed Bat, Eastern False Pipistrelle, Large-eared Pied Bat and the Eastern Bent-wing Bat. However, similar to the area located in Points 1-2 (Section 7), significant impacts on all of the above threatened species are highly unlikely to occur due to the timeframe and nature of the construction impacts.

See also response to Issue 7 in the following section.

Hollow Bearing Trees

Only a few tree hollows (an estimate of <5) are present within Section 7 (Points 1-2). No hollows were observed within Section 2 (Points 12-14) however, small hollows which are difficult to ascertain from the ground are considered likely to be present. The numbers of small hollows is estimated to be < 5.

Impacts on all tree hollows within both Section 2 and Section 7 can be avoided by micro-siting powerpoles.

Issue 7: Mitigation measures are not clear

Recommendation: The proponent considers the broader implications of impact and proposes realistic mitigation measures to reduce any adverse effects.

Response:

The mitigation measures proposed in the existing ecology related Statement of Commitments from page 190 of the EA are intended to apply to the alternative 132kV powerline as well as to the rest of the wind farm site. These Statement of Commitments are repeated below for clarity:

SoC	Issue	Impact	Objective	Mitigation tasks	Project phase	Auditing
17	Ecology	Loss or modification of habitat	Avoid, minimise, offset	Site all infrastructure entirely within the development envelope assessed in the Ecology Assessment. Where this is not possible, undertake additional assessment and seek any necessary additional approvals.	Detailed design	CEMP DoP
18	Ecology	Loss or modification of habitat	Avoid, minimise, offset	Where areas of native vegetation cannot be avoided, microsite infrastructure to minimise impacts (includes road widening and transmission easement).	Detailed design	CEMP
19	Ecology	Loss or modification of habitat	Mitigate impact	Align roads and cabling along existing tracks where possible to minimise vegetation removal and loss of hollow-bearing trees, number of easements and the spread of weeds.	Detailed design	CEMP
20	Ecology	Loss or modification of habitat	Mitigate impact	Construct powerlines underground and along road infrastructure where possible to minimise the number of easements and the potential for avian collisions	Detailed design	CEMP
21	Ecology	Loss or modification of habitat	Avoid, minimise, offset	Prepare and implement an Offset Plan, to offset the quantum and condition of native vegetation to be removed, in order to achieve a positive net environmental outcome for the project. Offset areas would reflect the actual footprint of the development (i.e. footing areas and new tracks) not the maximum impact areas (which include easements and existing tracks). The Offset Plan would be prepared in consultation with DECCW, prior to construction. The offset areas will be provided and maintained in perpetuity.	Prior to construction	CEMP
22	Ecology	Loss or modification of	Avoid, minimise,	Implement a post-construction bird and bat monitoring program to determine the impacts of the project on bird and bat populations	Prior to construction	OEMP

SoC	Issue	Impact	Objective	Mitigation tasks	Project phase	Auditing
		habitat	offset			
23	Ecology	Weed Control	Avoid Impacts	The CEMP would include appropriate weed control protocols such as washing machinery after entering affected areas and spraying road ways to ensure the spread of weeds is restricted during construction and throughout the ongoing operation of the project.	Construction	CEMP
40	Hydrology	Deterioration of water quality (Surface Water)	Minimise Impact	Prepare a Sediment & Erosion Control Plan as part of the Construction Environment Management Plan. Soil and water management practices would be developed as set out in <i>Soils and Construction Vol. 1 (Landcom 2004)</i>	Construction	CEMP

Further mitigation measures identified during the ecology assessment for the alternative 132kV powerline that have been captured in the additional Statement of Commitments included in section 5.3 of the Supporting Document (January 2013) and repeated below for clarity:

SoC	Issue	Impact	Objective	Mitigation tasks	Project phase	Auditing
67	Ecology	Loss or modification of habitat	Avoid, minimise impacts	Prior to the commencement of detailed design, an ecologist should locate and clearly mark Blackbutt Candlebark so that a buffer zone should be implemented to ensure that those trees to be avoided are not impacted	Detailed design & construction	CEMP
68	Ecology	Loss or disturbance of habitat	Avoid, minimise impacts	The CEMP should include mapping and on-ground markers to identify a buffer zone around riparian vegetation extending to 50m from the creek bank of Swan Brook as identified in Section 6 of the Supplementary Biodiversity Assessment.	Detailed design & construction	CEMP
69	Ecology	Loss or modification of habitat	Avoid, minimise impacts	Prepare and implement an Offset Plan to offset the quantum and condition of native vegetation to be removed, in order to achieve a positive net environmental outcome for the powerline. Offset areas would reflect the actual footprint of the powerline. (This SOC can be part of SOC 21 for the White Rock Wind Farm) The offset plan would be prepared in consultation with OEH prior to construction.	Prior to construction	CEMP
70	Ecology	Loss or modification of	Avoid, minimise	An ecologist would be present during any tree clearing operations to capture and relocate any fauna present within the tree hollows as well as salvaging and	Prior to construction	CEMP

SoC	Issue	Impact	Objective	Mitigation tasks	Project phase	Auditing
		habitat	impacts	translocating tree hollows. Micro-bat roost boxes would replace the loss of any tree hollows at a ratio of 2:1 and be established outside the powerline easement.		
71	Ecology	Loss or modification of habitat	Avoid, minimise impacts	An ecologist would be present to locate and mark the extent of any wetland area (not classified as Upland Wetland of the Drainage Divide of the New England Tableland Bioregion EEC) located at elevations below 900m and ensure appropriate micro-siting of the powerline and any temporary access tracks to avoid any impacts to the wetland area.	Prior to construction	CEMP

Issue 8: The potential occurrence of a number of threatened species and the impact of the development on these species appears to be underestimated.

Recommendation: OEH suggests that a map of the threatened flora and fauna records is necessary on the basis of providing context.

Further assessment of the likelihood of occurrence of threatened species is required. Clear statements regarding the rationale to further consider, or not consider, these threatened species is also required. These decisions must be soundly based on the species habitat requirements, ecology and the presence of known records in the district.

Response:

See updated map in Figure 3.1 on page 12 showing the location of threatened flora and fauna records identified during the field survey.

Further assessment on the potential impact on the threatened species has been carried out by updating Table 1 and Table 2 from the Ecology Assessment (page 16 and page 18) to include additional columns which indicate the potential habitat within the study area and the potential of occurrence within the study area and hence the potential risk to the species. This risk assessment based approach was then used to determine the requirement for further assessment (application of seven part test of significance) where required.

Table 3.4 - Threatened Species of Flora

VERNACULAR NAME	SCIENTIFIC NAME & TSC ACT CODING	SPECIES RECORDED DURING FIELD SURVEYS	POTENTIAL OF HABITAT WITHIN THE STUDY AREA	POTENTIAL OF OCCURRENCE WITHIN THE STUDY AREA	DEGREE OF RISK TO THE THREATENED SPECIES & RATIONAL FOR APPLICATION OF SEVEN PART TESTS OF SIGNIFICANCE
Cloak Fern	<i>Cheilanthes sieberi</i> ssp. <i>pseudovella</i> E1	No	Nil	Unlikely	Very low risk

VERNACULAR NAME	SCIENTIFIC NAME & TSC ACT CODING	SPECIES RECORDED DURING FIELD SURVEYS	POTENTIAL OF HABITAT WITHIN THE STUDY AREA	POTENTIAL OF OCCURRENCE WITHIN THE STUDY AREA	DEGREE OF RISK TO THE THREATENED SPECIES & RATIONAL FOR APPLICATION OF SEVEN PART TESTS OF SIGNIFICANCE
Rod's Star Hair	<i>Astrotricha roddii</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Hawkweed	<i>Picris evae</i> V	No	Sporadic suboptimal habitat	Unlikely	Low risk
Heath Wrinklewort	<i>Rutidosia heterogama</i> V	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Aromatic Peppercress	<i>Lepidium hyssopifolium</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Desert Cow Vine	<i>Ipomea diamantinensis</i> E1	No	Nil	Unlikely	Very low risk
Pygmy Cypress Pine	<i>Callitrus oblonga</i> V	No	Restricted suboptimal habitat (Swan Brook)	Unlikely	Very low risk
Waterwheel Plant	<i>Aldrovanda vesiculosa</i> E1	No	Nil	Unlikely	Very low risk
Large-leaved Monotaxis	<i>Monotaxis macrophylla</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Torrington Pea	<i>Almaleea cambagei</i> E1	No	Nil	Unlikely	Very low risk
Bailey's Indigo	<i>Indigofera baileyi</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Silky Swainson Pea	<i>Swainsona sericea</i> V	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Pindari Wattle	<i>Acacia acrionastes</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
MacNutt's Wattle	<i>Acacia macnuttiana</i> V	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Lancewood	<i>Acacia petraea</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk

VERNACULAR NAME	SCIENTIFIC NAME & TSC ACT CODING	SPECIES RECORDED DURING FIELD SURVEYS	POTENTIAL OF HABITAT WITHIN THE STUDY AREA	POTENTIAL OF OCCURRENCE WITHIN THE STUDY AREA	DEGREE OF RISK TO THE THREATENED SPECIES & RATIONAL FOR APPLICATION OF SEVEN PART TESTS OF SIGNIFICANCE
Velvet Wattle	<i>Acacia pubifolia</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Bolivia Wattle	<i>Acacia pycnostachya</i> V	No	Unlikely habitat	Unlikely	Very low risk
Bolivia Stringybark	<i>Eucalyptus boliviana</i> V	No	Unlikely habitat	Unlikely	Very low risk
Ovenden's Ironbark	<i>Eucalyptus caleyi</i> ssp. <i>ovendenii</i> V	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Warra Broad-leaved Sally	<i>Eucalyptus camphora</i> ssp. <i>relicta</i> E1	No	Unlikely habitat	Unlikely	Very low risk
Northern Blue Box	<i>Eucalyptus magnificata</i> E1	No	Nil	Unlikely	Very low risk
McKies Stringybark	<i>Eucalyptus mckieana</i> V	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Narrow-leaved Peppermint	<i>Eucalyptus nicholii</i> V	No	Unlikely habitat	Unlikely	Very low risk
Blackbutt Candlebark	<i>Eucalyptus rubida</i> ssp. <i>barbigerorum</i> V	Yes, species provisionally recorded within the study area	Sporadic potential habitat exists	Provisionally identified (RBG)	Low risk Seven Part Test applied due to the provisional status of the species present within the study area
Crescent-leaved Homoranthus	<i>Homoranthus lunatus</i> V	No	Unlikely habitat	Unlikely	Very low risk
Granite Homoranthus	<i>Homoranthus prolixus</i> V	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Grove's Paperbark	<i>Melaleuca</i>	No	Nil	Unlikely	Very low risk

VERNACULAR NAME	SCIENTIFIC NAME & TSC ACT CODING	SPECIES RECORDED DURING FIELD SURVEYS	POTENTIAL OF HABITAT WITHIN THE STUDY AREA	POTENTIAL OF OCCURRENCE WITHIN THE STUDY AREA	DEGREE OF RISK TO THE THREATENED SPECIES & RATIONAL FOR APPLICATION OF SEVEN PART TESTS OF SIGNIFICANCE
	<i>groveana</i> V				
Severn River Heath-myrtle	<i>Micromyrtus grandis</i> E1	No	Nil	Unlikely	Very low risk
Barrington Tops Ant Orchid	<i>Chiloglottis platyptera</i> V	No	Nil	Unlikely	Very low risk
Small Snake Orchid	<i>Diuris pedunculata</i> E1	No	Sporadic suboptimal habitat	Unlikely	Low risk
Hairy Jointgrass	<i>Arthraxon hispidus</i> V	No	Nil	Unlikely	Very low risk
Bluegrass	<i>Dichanthium setosum</i> V	No	Sporadic suboptimal habitat	Unlikely	Low risk Seven Part Test applied due to being a species of particular concern previously raised by OEH
Finger Panic Grass	<i>Digitaria porrecta</i> E1	No	Sporadic suboptimal habitat	Unlikely	Low risk
Native Milkweed	<i>Polygala linariifolia</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Backwater Grevillea	<i>Grevillea scortechinii</i> ssp. <i>sarmentosa</i> V	No	Minor suboptimal habitat in Section 7	Unlikely	Very low risk
Scant Pomaderris	<i>Pomaderris queenslandica</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Cameron's Tarennia	<i>Triflorensia cameronii</i> E1	No	Nil	Unlikely	Very low risk
Granite Boronia	<i>Boronia granitica</i> V	No	Sporadic suboptimal habitat	Unlikely	Very low risk

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Leionema	<i>Leionema lachnaeoides</i> E1	No	Nil	Unlikely	Very low risk
Rusty Desert Phebalium	<i>Phebalium glandulosum</i> ssp. <i>eglandulosum</i> E1	No	Sporadic suboptimal habitat	Unlikely	Very low risk
Keith's Zieria	<i>Zieria ingramii</i> E1	No	Nil	Unlikely	Very low risk
Austral Toadflax	<i>Thesium australe</i> V	No	Sporadic suboptimal habitat	Unlikely	Low risk Seven Part Test applied due to being a species of particular concern previously raised by OEH
Hop Bush	<i>Dodonaea stenophylla</i> E4	No	Unlikely (species deemed extinct)	Unlikely	Very low risk
Polblue Eyebright	<i>Euphrasia ciliolate</i> V	No	Potential suboptimal habitat present in drainage line traversing Sections 4-5	Unlikely	Low risk
Tentfield Eyebright	<i>Euphrasia orthocheila</i> ssp. <i>peraspera</i> E1	No	Potential suboptimal habitat present in drainage line traversing Sections 4-5	Unlikely	Low risk
Bolivia Hill Pimelia	<i>Pimelia venosa</i> E1	No	Unlikely habitat	Unlikely	Very low risk
Inverell Cycad	<i>Macrozamia humilis</i> E1	No	Nil	Nil	Very low risk

Bold type indicates that a Seven Part Test of Significance has been applied.

'V' denotesvulnerable under the *NSW Threatened Species Conservation Act, 1995*

'E1' denotesendangered under the *NSW Threatened Species Conservation Act, 1995*

'E4' denotesextinct under the *NSW Threatened Species Conservation Act, 1995*

Table 3.5 - Threatened Species of Fauna

VERNACULAR NAME	SCIENTIFIC NAME & TSC ACT CODINGS	SPECIES RECORDED DURING FIELD SURVEYS	POTENTIAL OF HABITAT WITHIN THE STUDY AREA	POTENTIAL OF OCCURRENCE WITHIN THE STUDY AREA	DEGREE OF RISK TO THE THREATENED SPECIES
Zigzag Gecko	<i>Oedura rhombifer</i> E1	No	Possible suboptimal habitat may occur in upper slope of Section 7	Low	Very low risk
Border Thick-tailed Gecko	<i>Underwoodisaurus sphrurus</i> V	No	Possible suboptimal habitat may occur in upper slope of Section 7	Low	Very low risk
Yellow-spotted Tree Frog	<i>Litoria castanea</i> E4 A	No	Unlikely	Very low	Very low risk
Australian Painted Snipe	<i>Rostratula australis</i> E1	No	Possible suboptimal habitat in drainage line/ marsh habitat in Sections 4-5 (new route deviation)	Low	Very low risk
Magpie Goose	<i>Anseranas semipalmata</i> V	No	Unlikely	Low	Very low risk
Blue-billed Duck	<i>Oxyura australis</i> V	No	Unlikely	Low	Very low risk
Black-necked Stork	<i>Xenorhynchus asiaticus</i> E1	No	Unlikely	Very low	Very low risk
Black Bittern	<i>Ixobrychus flavicollis</i> V	No	Possible suboptimal habitat present along Swan Brook and to a lesser degree the drainage line in Sections 4-5 (new route deviation)	Low	Very low risk Possible additional suitable habitat in adjacent areas along Swan Brook and species may venture into the study area at any time, Seven Part Test applied as a precautionary measure
Square-tailed Kite	<i>Lophoictinia isura</i> V	No	Potential foraging & breeding habitat present throughout study area	High	Very low risk The species habitat broadly overlaps the habitat of the Little

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					Eagle which was recorded within the study area. Therefore the rationale to apply a Seven Part Test of Significance is warranted
Squatter Pigeon	<i>Petrophassa scripta</i> E1	No	Sporadic suboptimal foraging habitat	Low	Very low risk
Comb-crested Jacana	<i>Jacana gallinacea</i> V	No	Unlikely	Very low	Very low risk
Hooded Robin	<i>Melanodryas cucullata</i> V	No	Possible sporadic suboptimal marginal habitat	Moderate	Low risk Seven Part Test of Significance was applied as a precautionary measure as the species is considered as a moderate potential of occurrence
Scarlet Robin	<i>Petroica multicolour</i> V	No	Possible sporadic suboptimal marginal habitat	Moderate	Low risk Seven Part Test of Significance was applied as a precautionary measure as the species is considered as a moderate potential of occurrence
Diamond Firetail	<i>Stagonopleura guttata</i> V	Yes	Species recorded within a larger remnant area adjacent to Section 4 within the study area.	High-species recorded	Low risk Species recorded, therefore a Seven Part Test of Significance was applied
Black-throated Finch	<i>Poephila cincta</i> E1	No	Very rare in area. Unlikely to occur	Very low	Very low risk
Speckled Warbler	<i>Pyrrholaemus sagittatus</i> V	No	Species is likely to occur, but would not be significantly affected by the	Moderate	Low risk Seven Part Test of Significance

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			proposal		was applied as a precautionary measure as the species is considered as a moderate potential of occurrence
Little Eagle	<i>Hieraaetus morphnoides</i> V	Yes	Species recorded within Section 1 of the study area	High-species recorded	Low risk Species recorded, therefore a Seven Part Test of Significance was applied
Glossy Black Cockatoo	<i>Calyptorhynchus lathami</i> V	No	Unlikely	No food plants present and suitable tree hollows very limited within the study area	Very low risk The application of the Seven Part Test of Significance is considered warranted as the species is likely to pass over the study area on an ad hoc basis to other foraging destinations even though the study area would be inconsequential to the species <i>per se</i>
Turquoise Parrot	<i>Neophema pulchella</i> V	No	Possible sporadic suboptimal marginal habitat, but doubtful due to the sparse and limited occurrence of an indigenous understorey	Very low	Very low risk
Swift Parrot	<i>Lathamus discolor</i> E1	No	Potential food plants plentiful throughout locality	Possible	Very low risk Seven Part Test was applied as one of the species winter food plants (White Box <i>Eucalyptus albens</i>) is prolific throughout the study area

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Little Lorikeet	<i>Glossopsitta pusilla</i> V	Yes	Species recorded within Section 3	High-species recorded	Very low risk Species recorded, therefore a Seven Part Test of Significance was applied
Brown Treecreeper	<i>Climacteris picumnus victoriae</i> V	No	Possible suboptimal habitat present in lower slopes of Section 6 and the Swan Brook riparian area generally	Low	Very low risk Seven Part Test of Significance applied as a precautionary measure as the species could colonise the riparian area in time if land management practices were improved. It is also possible that the species may occur in nearby areas outside of the study area especially from areas to the north and south where the Swan Brook and the powerline easement intersect
Regent Honeyeater	<i>Anthochaera phrygia</i> E1	No	Possible sporadic suboptimal marginal foraging habitat present	Low	Very low risk Seven Part Test applied as “loose” flocks of the species could forage within the study area at any time to forage on flowering eucalypts
Black-chinned Honeyeater	<i>Melithreptus gularis</i> V	No	Possible sporadic suboptimal marginal habitat	Very low	Very low risk
Varied Sittella	<i>Daphoenositta chrysoptera</i> V	No	Potential habitat present in nearby larger remnants as well as Section 2 and 6	Moderate	Very low risk Seven Part Test of Significance was applied as a precautionary measure as the species is

VERNACULAR NAME	SCIENTIFIC NAME & TSC ACT CODINGS	SPECIES RECORDED DURING FIELD SURVEYS	POTENTIAL OF HABITAT WITHIN THE STUDY AREA	POTENTIAL OF OCCURRENCE WITHIN THE STUDY AREA	DEGREE OF RISK TO THE THREATENED SPECIES
					considered as a moderate potential of occurrence
Grey-crowned Babbler	<i>Pomatostomus temporalis temporalis</i> V	No	Possible sporadic suboptimal habitat. No birds or highly conspicuous nest sites were observed	Low	Very low risk Seven Part Test of Significance was applied as the species could colonise parts of the study area at any time
Powerful Owl	<i>Ninox strenua</i> V	No	Potential foraging and roosting habitat present along Swan Brook in Section 6	Low-moderate	Very low risk Seven Part Test of Significance was applied as the species is considered to have a low to moderate chance of occurring within the study area especially within the Swan Brook precinct
Barking Owl	<i>Ninox connivens</i> V	No	Potential foraging and roosting habitat present along Swan Brook in Section 6	Low-moderate	Very low risk Seven Part Test of Significance was applied as the species is considered to have a low to moderate chance of occurring within the study area especially within the Swan Brook precinct
Masked Owl	<i>Tyto novaehollandiae</i> V	No	Potential foraging habitat in Section 2 and possible roosting habitat present along Swan Brook in Section 6	Low-moderate	Very low risk Seven Part Test of Significance was applied as the species is considered to have a low to moderate chance of occurring within the study area namely within the Swan Brook precinct and Section 2

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Spotted-tailed Quoll	<i>Dasyurus maculatus</i> V	No	Potential habitat present in Sections 2 & upper slope of Section 6 and White Rock Mountain	Low	Very low risk Seven Part Test of Significance was applied as a precautionary measure due to the possibility of the species occurring even if considered to be low
Koala	<i>Phascolarctos cinereus</i> V	No	Potential habitat & food plants present (White Box <i>Eucalyptus albens</i>)	Very low	Very low risk Seven Part Test of Significance was applied as a precautionary measure due to the abundance of one of the Koala's primary food trees being present viz: White Box <i>Eucalyptus albens</i>
Yellow-bellied Glider	<i>Petaurus australis</i> V	No	No significant habitat present within powerline route, but may occur within the Swan Brook vicinity and upper slope of Section 6 and 7	Very low	Very low risk
Squirrel Glider	<i>Petaurus norfolkensis</i> V	No	No significant habitat present within powerline route, but may occur within the Swan Brook vicinity and upper slope of Section 6 and 7 as well as Section 2	Very low	Very low risk
Large-eared Pied Bat	<i>Chalinolobus dwyeri</i> V	No	Potential foraging habitat present throughout the study area and environs. Tree hollows very limited within powerline route	Moderate	Very low risk
Greater Broad-nosed Bat	<i>Scoteanax rueppellii</i> V	No	Potential habitat present along Swan Brook and major drainage lines and open dams. However tree	High	Very low risk Seven Part Test of Significance

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			hollows for roosting sites for microbats are very limited		was applied as a precautionary measure due to the presence of potential foraging habitat being Swan Brook
Greater Long-eared Bat	<i>Nyctophilus timoriensis</i> V	No	Potential foraging habitat present throughout the study area and environs. However tree hollows for roosting are very limited	Moderate	Very low risk
Hoary Wattle Bat	<i>Chalinolobus nigrogriseus</i> V	No	Potential foraging habitat present throughout the study area and environs. However tree hollows for roosting are very limited	Moderate	Very low risk
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i> V	No	Potential foraging habitat present throughout the study area and environs. However tree hollows for roosting are very limited	High	Very low risk Seven Part Test of Significance was applied as a precautionary measure due to the high probability of occurrence of the species
Yellow-bellied Sheath-tailed Bat	<i>Saccolaimus flaviventris</i> V	No	Potential foraging habitat present throughout the study area and environs. However tree hollows are very limited	High	Very low risk Seven Part Test of Significance was applied as a precautionary measure due to the high probability of occurrence of the species
Eastern Bent-wing Bat	<i>Miniopterus schreibersii</i> V	No	Potential foraging habitat present throughout the study area and environs. Caves, rock shelters and other shelter sites suitable for this species are absent from most	High	Very low risk Seven Part Test of Significance was applied as a precautionary measure due to the high probability of occurrence of the

VERNACULAR NAME	SCIENTIFIC NAME & TSC ACT CODINGS	SPECIES RECORDED DURING FIELD SURVEYS	POTENTIAL OF HABITAT WITHIN THE STUDY AREA	POTENTIAL OF OCCURRENCE WITHIN THE STUDY AREA	DEGREE OF RISK TO THE THREATENED SPECIES
			sections of the study area. However these may be present in adjacent locales to Section 7's escarpment area.		species as the species was recorded within the nearby Wind Farm site
Grey-headed Flying Fox	<i>Pteropus poliocephalus</i> V	No	Potential foraging habitat present throughout the study area and environs. There are no suitable roosting sites for the species anywhere within the study area	High	Very low risk Seven Part Test of Significance was applied as a precautionary measure due to the abundance the species food trees being present viz: the nectar resources of the White Box, Yellow Box, Blakely's Red Gum etc and all other species of eucalypts present throughout the study area
Brush-tailed Rock Wallaby	<i>Petrogale penicillata</i> E1	No	Possible habitat present on and below White Rock Mountain and far upper slope of Section 6	Low	Very low risk Precautionary measure due to the possibility of habitat within the White Rock Mountain vicinity

Bold type indicates that a Seven Part Test of Significance has been applied.

'V' denotesvulnerable under the *NSW Threatened Species Conservation Act, 1995*

'E1' denotesendangered under the *NSW Threatened Species Conservation Act, 1995*

E4 A denotes..... critically endangered under the *NSW Threatened Species Conservation Act, 1995*

Issue 9: The EA does not include a detailed offset proposal. Offset commitments should be demonstrated prior to the approval of the impact.

Recommendation: A detailed Biodiversity Offset Plan is required prior to consent so that its likely effectiveness in maintaining or improving biodiversity can be analysed. The offset plan should propose an offset which is supported by a suitable metric and addresses the Department's 'Principles for Biodiversity Offsets in the NSW'.

Response:

The environmental assessment (Supporting Document and Attached Biodiversity Assessment January 2013) doesn't include a detailed offset proposal, but it does demonstrate the availability of suitable potential offset areas that could be used once a detailed offset plan has been developed.

The impact of the alternative powerline route and alternative substation location, including the quantum, biometric vegetation type and condition, has been determined which will allow the alternative powerline to be included in the detailed Offset Plan for the approved wind farm project to be developed in consultation with OEH prior to construction. Two suitable potential offset areas have been identified to offset the White Box Yellow Box Blakely's Red Gum Woodland EEC that will be impacted by the construction of the alternative powerline.

The wind farm project, which has now been approved, followed a similar strategy with regards to an offset proposal. The accepted strategy included identifying the details of the impacts of the proposal together with demonstrating the availability of suitable potential offset areas. A commitment was made (Refer SoC 21 on page 191 of the EA) to develop the detailed Biodiversity Offset Plan in consultation with OEH prior to the commencement of construction.

Aboriginal Cultural Heritage

Issue1: Documentation in relation to the requirements of the 2005 Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation

Recommendation: The proponent needs to demonstrate that they have complied with stage 3 of the 2005 Aboriginal community consultation requirements.

Response:

Step 3 of the *Interim Community Consultation Requirements for Applicants* (December 2004) that are referenced in the *Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (July 2005) require the proponent to provide notice of the availability of the report and to seek comments from the stakeholders identified in the consultation process and to incorporate any of these comments into the final assessment.

As noted in the Supporting Document (January 2013) a copy of the draft Supplementary Heritage Assessment for the Alternative 132kV Powerline was provided to each of the Aboriginal stakeholders. Follow up consultation was carried out to seek comments on the assessment and incorporate the feedback in the final version of the report.

Date	Name	Stakeholder	Comments Received
25 Feb 13	Vicky Duncan	Edgerton-Kwiembal Environmental Heritage Cultural Aboriginal Corp	No comments on draft report
25 Feb 13	Hilda Connors	Kwieambal Traditional Owner	No comments on draft report
26 Feb 13	Cedric Talbot	Kwiembal Elders Indigenous Corporation	No issues with draft report
13 Mar 13	Greg Livermore	Anaiwan Local Aboriginal Land Council	No issues with draft report, but noted recommendation included in the Anaiwan LALC report which recommended completing survey of inaccessible part of the powerline route prior to construction.

Similar to the approach for ecology, a further mitigation measure has been included in an additional Statement of Commitment (refer to section 5.3 of the Supporting Document) to ensure that those parts of the powerline route that were not accessible during the initial field survey will be inspected prior to any construction.

SoC	Issue	Impact	Objective	Mitigation tasks	Project phase	Auditing
71	Heritage	Disturbance of heritage sites or objects	Avoid impact	Field inspection of sections of easement not already inspected during site assessment between points 8 and 9.	Prior to construction	CEMP

3.8 Glen Innes Severn Council

Comment	Response
Council has no further issues it wishes to raise from its original submission in relation to the project	Noted

3.9 Department of Defence

Comment	Response
Defence advises that the White Rock wind farm would not adversely affect military aircraft operations or interfere with Defence communications and radar.	Noted. The existing SoC 27 (page 191 of the EA) requires the proponent to notify all relevant authorities, including the Department of Defence, of the location and height details once the final locations of the wind turbines have been determined and before construction commences.

4 Conclusion

Epuron believes this Submissions Report has adequately addressed all of the issues raised in the nine submissions received to enable the NSW Department of Planning & Infrastructure to complete its assessment and determination of this modification to the approved wind farm proposal.

The proposed modification which consists of an alternative 132kV powerline route from the wind farm to the TransGrid transmission network and an alternative location for a switchyard/substation to enable connection to the network will have a lower level of environmental impact as the original approved 132kV powerline route and switchyard.