

Appendix B

Flora and Fauna Assessment

ECOLOGICAL ASSESSMENT MODIFICATION TO APPROVED TARALGA WIND FARM

Prepared for: KMH Environmental, Newcastle.

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15 December 2013

1. INTRODUCTION

This report concerns the proposal to relocate cable routes within the approved Taralga Wind farm. The proposal arises as the cables need to be as straight as possible and so cannot always follow the access roads, which was the original proposal. There are also a few other sites that are associated with the cable routes that were inspected.

Surveys were undertaken along the new routes the cables to record the grassland type and periodically survey the grassland using plot-based sampling. Some information is available from the recent report on the Meteorological Masts, which sampled grassland along some of these routes (KMA 2013); this information is used where appropriate. None of the routes or sites involved treed areas.

2. THE SURVEY

The cable routes were visited on 7 November 2013 and plant surveys were completed at selected sites along the routes to demonstrate the type of grassland being traversed; other sampling took place on 14 October 2013. No treed areas are involved in these modifications. The cable routes were identified in the field by an officer from the contractor Downer Australia who accompanied the consultant.

At each selected sampling location, all native and exotic plant species were recorded in an area of 33 metres by 33 metres (0.1 hectare); this is the size of the area to be surveyed under the Commonwealth guidelines (Dept. Environment and Heritage 2006; updated by DECCW NSW 2010). A GPS point was recorded at the centre of each plot. A percentage cover score was assigned to each plant species on each plot; see survey sheets at **Appendix 1** for range of scores. The grassland along the cable routes was survey by traversing the alignment in a vehicle and stopping from time to time to check the grassland. Digital photographs were taken of all survey plots and to illustrate the landscape being traversed. The approximate location of each plot is shown on **Figure 1**.

3. RESULTS

The results of the grassland surveys along the cable routes were recorded on *pro forma* survey sheets developed by the consultant for such surveys; these survey sheets are provided in **Appendix 1**.

One problem with the surveys was that the paddocks were so heavily grazed by sheep and cattle and the previous two months were very dry so that individual species of grass and probably other species were difficult to identify with certainty. Given the definition quoted by OE&H in their previous submission to this project and that used in KMA (2013), this is not critical in identifying native grassland or the condition of that grassland. Many paddocks support a good cover of native grasses; it is the presence of a reasonable number of non-grass native plant species (forbs) that determine its quality and whether it meets the criteria for an EEC, in this case Tablelands Basalt Forest.

The results of 16 plot surveys located on and adjacent to the cable routes are summarised in **Table 1**. These provide an appreciation of the grassland in the study area. The grassland is almost entirely exotic, and most paddocks have been pasture improved (i.e. sown with fodder species and fertilized); some paddocks have been ploughed. None of the areas traversed by the cable routes meet the minimum criteria for derived native grassland as defined by the Commonwealth and thus the minimum criteria for the endangered ecological community.

Table 1
Summary of Plant Surveys

No. ¹	No. natives		No. Exotics	Grassland Type	Original Community	EEC
	forbs	total				
CR01	7	9	11+	exotic grassland	Tablelands Basalt Forest	no
CR02	0	1	9	exotic grassland	Tablelands Basalt Forest	no
CR03	1	1	8+	exotic grassland	Tablelands Basalt Forest	no
CR04	0	2	5+	exotic grassland	Tablelands Basalt Forest	no
CR05	5	7	11	exotic grassland	Tablelands Basalt Forest	no
CR06	2	4	7+	exotic grassland	Tablelands Basalt Forest	no
CR07	3	7	10+	exotic grassland	Tablelands Basalt Forest	no
CR09	2	5	17	exotic grassland	Tablelands Basalt Forest	no
CR08	0	2+	13+	exotic grassland	Tablelands Basalt Forest	no
CR10	1	1	11	exotic grassland	Tablelands Basalt Forest	no
CR11	3	6	15+	exotic grassland	Tablelands Basalt Forest	no
CR12	2	3+	15+	exotic grassland	Tablelands Basalt Forest	no
CR13	1	3	14+	exotic grassland	Snow Gum Woodland	no
CR14	2	4	7	native pasture ²	Tablelands Basalt Forest	no
CR15	0	0	12	exotic grassland	Tablelands Basalt Forest	no
CR16	3	5	11	native pasture ²	Tablelands Basalt Forest	no

1. Depending upon the definition used, this could be native grassland or native pasture.

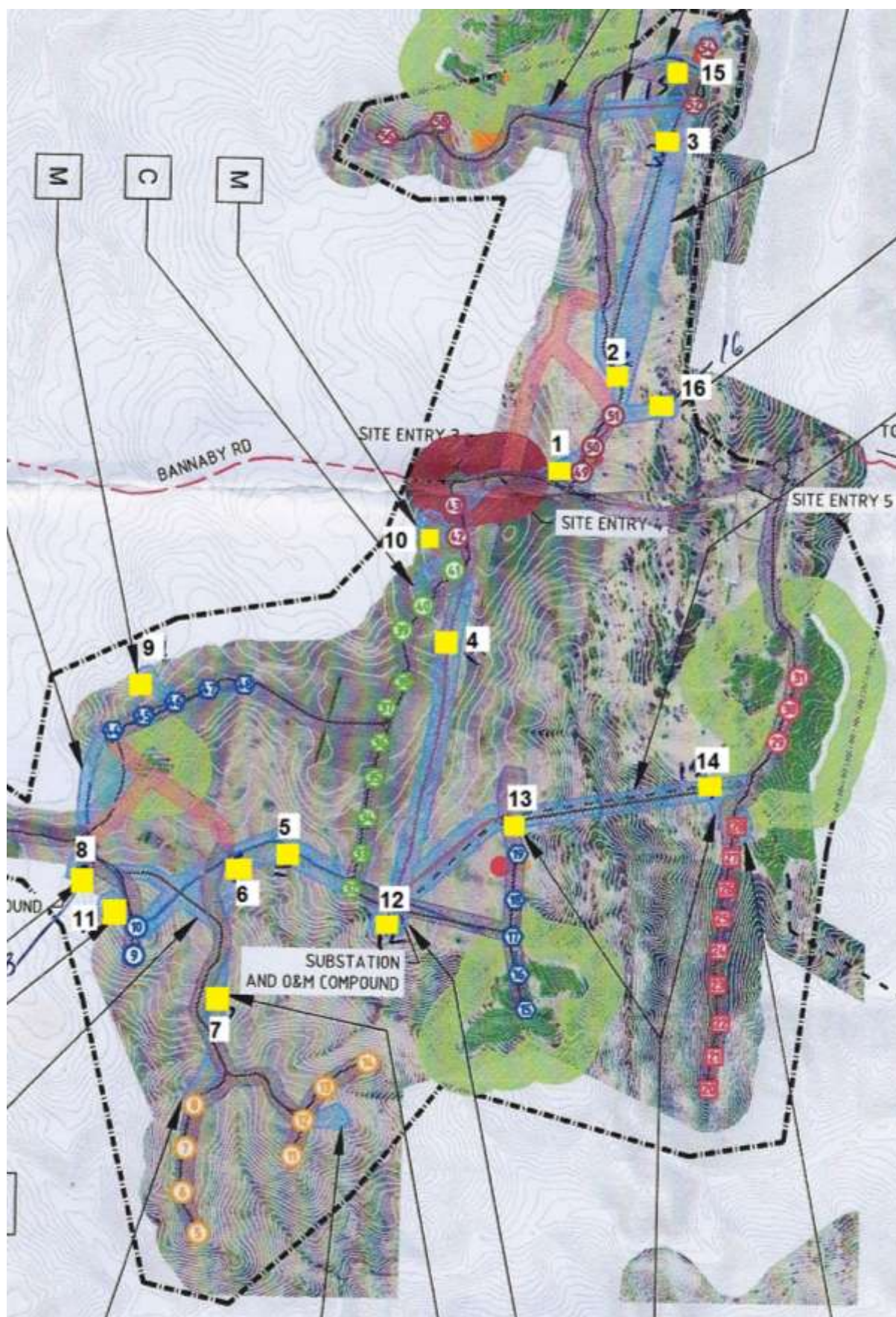


Figure 1. Location of the cable routes (blue) and the survey plots (yellow squares).

The photographs on the following page show the typical country traversed by the cable routes, while the photographs in **Appendix 1** show the grassland at the survey plots.

In addition to the cable routes, there is a proposal for a power line crossing of the valley parallel to the approved power line and an operational and maintenance compound (O&MC) near the approved substation. The grassland plot information provided here includes sites on and adjacent to these areas.

4. ASSESSMENT

The overwhelming character of the paddocks traversed by the cable routes, and indeed the entire infrastructure for the Taralga Wind Farm, is exotic grassland. This has almost all been pasture improved, that is fertilised and sown with fodder species such as Subterranean Clover and Rye Grass. The survey plots clearly demonstrate this fact.

The majority of the land, all of which is on basalt, was originally Tablelands Basalt Forest. Although some sections of the project area still support vegetation that meets the minimum criteria for this endangered ecological community, the areas traversed by the proposed cable routes and the other minor infrastructure investigated here is not Tablelands Basalt Forest.

None of the grassland at the sites is of a condition that makes it *derived native grassland* of a quality that reaches the minimum set for an EEC. In fact, of the 16 sites, 15 sites are exotic grassland and one sites was probably never an EEC in the first place, but Snow Gum Woodland.

The grassland sites were also assessed using the method in the document issued by the NSW Dept. of Environment and Climate Change (now OE&H) and prepared by Rehwinkel (2007) titled *A Method to Assess Grassy Ecosystem Sites: Using floristic information to assess a site's quality*. Employing this method, the grassland at all sites was found to be of very low quality.

Given the character of the grassland areas traversed by the cable routes and other infrastructure, their habitat value for native fauna is negligible and is of no importance to any species, including threatened species.

The overhead 33 kV line crossing the valley will be spanned using a helicopter. Trees that impede on clearance on the 25 metre wide easement or have the potential to do so in the future will need to be felled, although the likelihood of trees needing to be removed is minimal; shrubs and groundcover will not be impacted.



Photograph 1. View looking northeast along cable route to WTG52.



Photograph 2. View along cable route northeast from substation site to power line start.

The valley crossed by the overhead line is very steep and there are very few trees on the flatter land on both sides of the valley where the line would be closest to the ground. The trees, *Eucalyptus viminalis*, are part of the Tablelands Basalt Forest EEC, although the understorey, as documented elsewhere, is mostly exotic. The removal of a few paddock trees will not impact significantly on the forest community in the locality. The wind farm will be developing an offset forest area for the trees that it removes.

5. CONCLUSION

None of the grassland within the proposed cable route easements (shown in blue on **Figure 1**) or on the other minor infrastructure sites investigated here (O&MC and power line easement) is native grassland and it does not meet the minimum criteria as the Tablelands Basalt Forest EEC.

Given the very poor quality of the grasslands and the absence of any listed species or community, assessments of significance as provided for under the NSW *Threatened Species Conservation Act 1995* (TSC Act) or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) are not required.

Recommendation

There is some native grassland in the vicinity of the western edge of the valley where the power line is proposed to cross. These are small rocky knolls and support comparatively diverse native grassland and was likely to have originally been Snow Gum *Eucalyptus pauciflora* Woodland, as evidenced by the trees nearby. Although not the EEC, it is recommended that the poles and access tracks to the poles to be located in the area be positioned to avoid clearing these areas.

6. REFERENCES

Department of Environment and Heritage (2006). *White Box-Yellow Box-Blakely's Red Gum grassy woodlands and derived native grasslands*. The Department, Canberra.

Kevin Mils & Associates (2013). Ecological Assessment – Proposed Meteorological Masts, Modification to Approved Taralga Wind Farm. Consideration of OE&H Submission. October.

Rehwinkel, R. (2007). *A Method to Assess Grassy Ecosystem Sites: Using floristic information to assess a site's quality*. NSW Dept. of Environment and Climate Change (now OE&H), Queanbeyan.

APPENDIX 1

SURVEY SHEETS FOR THE CABLE ROUTES

Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m Kevin Mills & Associates	
Site Name: Taralga Wind Farm		Plot No. CR01	Photo: yes
Location: Southwest of WTG49			Recorder: K. Mills
Date: 087 / 11 /13	Community: Exotic grassland		
GPS (centre): 764290E 6188766N (WGS84, Z55)		Soil: Clayey and rocky	
Land Tenure: Freehold		Geology: Basalt	
Slope: very gentle slope	Aspect: southwest	Topography: upper slope	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.			
Natives		Exotics	
Carex inversa	1	Acetosella vulgaris	2
Geranium sp.	1	Bromus mollis	1
Microlaena stipoides	4	Cirsium vulgare	2
Hydrocotyle laxiflora	1	Holcus lanatus	2
Juncus ? australis	1	Grasses	4
Poa labillardieri	4	Hypochaeris radicata	1
Rumex ? brownii	1	Lolium sp.	1
Scleranthus sp.	1	Poa bulbosa	2
Pteridium esculentum	1	Trifolium sp.	1
Notes		Trifolium repens	1
Heavily grazed.		Trifolium subterranean	1



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR02		Photo: yes
Location: north of WTRG 51 (next paddock)				Recorder: K. Mills	
Date: 07 / 11 /13		Community: Exotic grassland			
GPS (centre): 764545E 6189255N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: north		Topography: broad ridge crest	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
<i>Microlaena stipoides</i>		5	<i>Acetosella vulgaris</i>		2
			<i>Bromus mollis</i>		1
Notes			<i>Cirsium vulgare</i>		1
Heavily grazed; very dry grasses.			<i>Erodium sp.</i>		1
			<i>Carduus nutans</i>		1
			<i>Lolium sp.</i>		1
			<i>Onopordium acanthium</i>		2
			<i>Poa bulbosa</i>		1
			<i>Trifolium subterranean</i>		3



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR03		Photo: yes
Location: South of WTG52				Recorder: K. Mills	
Date: 07 / 11 / 13		Community: Exotic grassland			
GPS (centre): 7664803E 6190745N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: south		Topography: gentle slope	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Pteridium esculentum		1		Bromus mollis	
				Carthamus lanatus	
Notes				Cirsium vulgare	
Heavily grazed (sheep),				Grasses ?	
very short grassland.				Hordeum sp.	
				Lolium sp.	
				Poa bulbosa	
				Trifolium subterranean	



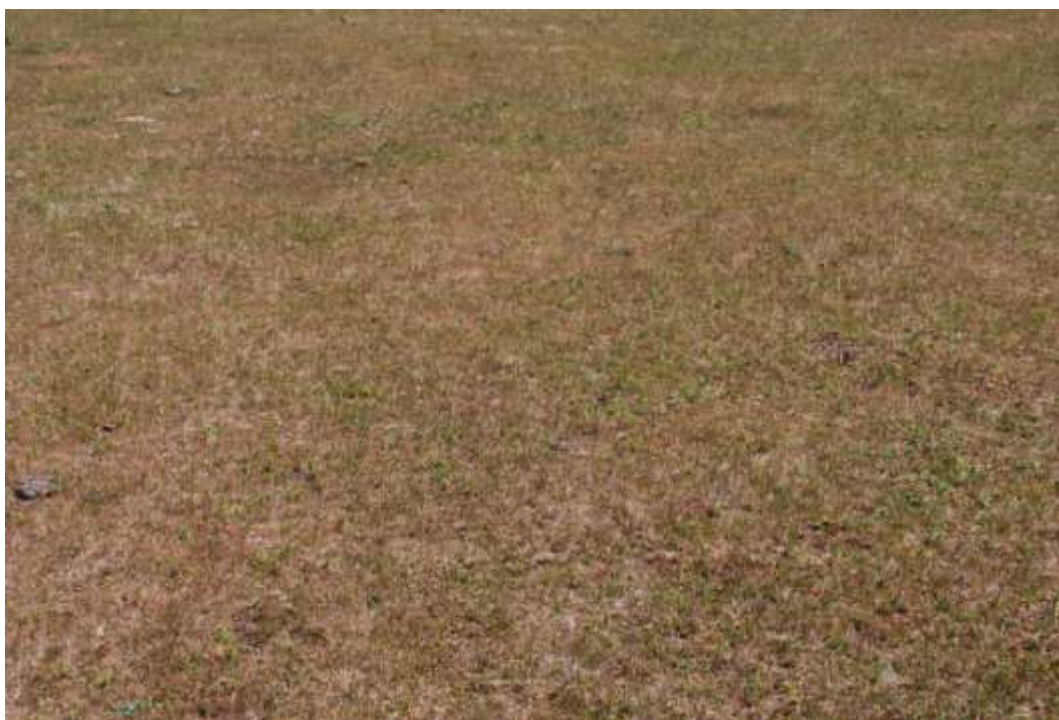
Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR04		Photo: yes
Location: east of WTG39				Recorder: K. Mills	
Date: 07 / 11 / 13		Community: Exotic grassland			
GPS (centre): 763645E 6187911N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: south		Topography: broad flat	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Austrodanthonia sp.		1	Acetosella vulgaris		1
Microlaena stipoides		3	Bromus mollis		2
			Holcus lanatus		1
Notes			Grasses ?		6
Heavily grazed (sheep), very short			Trifolium subterranean		3
grassland, pasture improved.					



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR05		Photo: yes
Location: gully sire between WTG32 and WTG10				Recorder: K. Mills	
Date: 07 / 11 /13		Community: Exotic grassland			
GPS (centre): 762803E 6186448N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: very gentle slope		Aspect: south		Topography: lower valley side	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Asperula conferta		2	Acetosella vulgaris		2
Austrodanthonia sp.		4	Bromus mollis		2
Carex inversa		1	Carthamus lanatus		1
Convolvulus erubescens		1	Gamochaeta sp.		1
Poa labillardieri		1	Hypochaeris radicata		2
Scleranthus sp.		1	Lolium sp.		2
Solenogyne gunnii		1	Melilotis sp.		1
			Petrorhagia nanteuillii		1
Notes			Plantago lanceolata		2
Heavily grazed; pasture improved.			Trifolium arvense		1
			Trifolium subterranean		4



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates			
Site Name: Taralga Wind Farm			Plot No.		CR06	Photo: yes	
Location: Northeast of WTG10 past access track route					Recorder: K. Mills		
Date: 07 / 11 /13		Community: Exotic grassland					
GPS (centre): 762531E 6186423N (WGS84, Z55)				Soil: Clayey and rocky			
Land Tenure: Freehold				Geology: Basalt			
Slope: Level		Aspect: south		Topography: lower slope			
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.							
Natives				Exotics			
Austrodanthonia sp.		3		Bromus mollis		3	
Geranium sp.		1		Carduus nutans		1	
Poa labillardieri		1		Carthamus lanatus		4	
Rumex ? brownii		1		Grasses		4	
				Hypochaeris radicata		1	
Notes				Lolium sp.		2	
Heavily grazed; pasture improved.				Trifolium subterranean		4	



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates			
Site Name: Taralga Wind Farm			Plot No.		CR07	Photo: yes	
Location: Northeast of WTG08					Recorder: K. Mills		
Date: 07 / 11 /13		Community: Exotic grassland					
GPS (centre): 762262E 6185615N (WGS84, Z55)				Soil: Clayey and rocky			
Land Tenure: Freehold				Geology: Basalt			
Slope: Level		Aspect: north		Topography: upper slope			
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.							
Natives				Exotics			
Asperula conferta		1		Acetosella vulgaris		2	
Austrodanthonia sp.		2		Bromus mollis		3	
Austrostipa bigeniculata		1		Carthamus lanatus		2	
Convolvulus erubescens		1		Erodium sp.		1	
Microlaena stipoides ?		3		Grasses ?		4	
Oreomyrrhis eriopoda		1		Hypochaeris radicata		2	
Poa labillardieri		1		Lolium sp.		1	
				Petrorhagia nanteuillii		1	
Notes				Trifolium arvense		1	
Heavily grazed.				Trifolium subterranean		3	



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR08		Photo: yes
Location: New proposed compound location				Recorder: K. Mills	
Date: 10 / 10 /13		Community: Exotic Grassland			
GPS (centre): 55 0761496 6186584 (WGS84)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: North		Topography: Valley flat	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Austrostipa sp. ?		1	Acetosella vulgaris		1
Microlaena stipoides		3	Carthamus lanatus		1
Other native grasses possible			Cerastium fontanum		1
			Cirsium vulgare		1
			Erodium sp.		1
			Gamochaeta		1
Notes			Grasses		6
Pasture improved			Hypochaeris radicata		2
Heavily grazed			Lolium sp.		1
No native tussocks			Melilotis sp.		1
			Poa bulbosa		1
			Trifolium subterraneum		2
			Unidentified herb		1



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR09		Photo: yes
Location: Proposed met. mast no MET4546				Recorder: K. Mills	
Date: 14 / 10 /13		Community: Exotic Grassland			
GPS (centre): 761823E 6187538N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: North		Topography: Broad ridge crest	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Austrodanthonia sp.		1	Acetosella vulgaris		3
Austrostipa sp.		1	Avena sp.		2
Crassula sieberiana		1	Bromus mollis		3
Microlaena stipoides		2	Carduus nutans		2
Pteridium esculentum		1	Carthamus lanatus		1
			Erodium sp.		1
Notes			Silybum marianum		2
Pasture improved; heavily grazed;			Hirschfeldia incana		1
previously Tablelands Basalt Forest.			Hypochaeris radicata		1
			Lolium sp.		2
			Melilotis sp.		1
			Poa bulbosa		1
			Trifolium subterraneum		2



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR10		Photo: yes
Location: Proposed met. mast no MET4243				Recorder: K. Mills	
Date: 14 / 10 /13		Community: Exotic Grassland			
GPS (centre): 763432E, 6188473N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: North		Topography: Broad ridge crest	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Rumex ? brownii		1	Acetosella vulgaris		1
			Bromus mollis		1
Notes			Carthamus lanatus		3
Pasture improved; heavily grazed;			Erodium sp.		2
sheep camp.; previously			Hordeum sp.		3
Tablelands Basalt Forest.			Melilotis sp.		1
			Paronychia brasiliensis		1
			Poa bulbosa		1
			Trifolium repens		1
			Trifolium subterraneum		2
			Unknown herb		1



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR11		Photo: yes
Location: Proposed WTG 9/WTG10				Recorder: K. Mills	
Date: 14 / 10 /13		Community: Exotic Grassland/Native Pasture			
GPS (centre): 761647E, 6186237N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: North		Topography: Broad ridge crest	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Asperula conferta		1	Acetosella vulgaris		2
Austrodanthonia sp.		1	Bromus mollis		3
Crassula sieberiana		1	Carduus nutans		1
Dichondra repens		1	Carthamus lanatus		3
Microlaena stipoides		1	Erodium sp.		1
Poa sieberiana		1	Grasses		4
Notes			Hypochaeris radicata		1
Heavily grazed;			Lolium sp.		1
previously Tablelands Basalt Forest.			Melilotis sp.		1
			Petrorhagia nanteuillii		1
			Paronychia brasiliensis		1
			Plantago lanceolata		1
			Trifolium repens		1
			Trifolium subterraneum		4



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates		
Site Name: Taralga Wind Farm			Plot No. CR12		Photo: yes	
Location: Old proposed compound location				Recorder: K. Mills		
Date: 10 / 10 /13		Community: Exotic Grassland/Native Pasture				
GPS (centre): 55 0763215 6186369 (WGS84)			Soil: Clayey and rocky			
Land Tenure: Freehold			Geology: Basalt			
Slope: Level		Aspect: North		Topography: Broad ridge crest		
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.						
Natives			Exotics			
Asperula conferta		1		Acetosella vulgaris		2
Juncus sp.		1		Carthamus lanatus		1
Microlaena stipoides		3		Cerastium fontanum		1
Other native grasses possible				Erodium sp.		1
				Gamochaeta		1
Notes				Grasses		6
Pasture improved				Hypochaeris radicata		2
Heavily grazed				Lolium sp.		2
No native tussocks				Melilotis sp.		2
				Plantago lanceolata		2
				Poa bulbosa		1
				Trifolium augustifolium		1
				Trifolium repens		1
				Trifolium sp.		1
				Trifolium subterraneum		3



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR13		Photo: yes
Location: Cable-power line junction west of valley				Recorder: K. Mills	
Date: 14 / 10 /13		Community: Native Pasture or Native Grassland			
GPS (centre): 763953E, 6186 979N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: East		Topography: Broad ridge	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Microlaena stipoides		5	Acetosella vulgaris		1
Poa labillardieri		1	Bromus mollis		1
Rumex ? brownii		1	Carthamus lanatus		2
			Cerastium fontanum		1
Notes			Grasses		3
Previously Eucalyptus pauciflora			Holcus lanatus ?		1
Woodland.			Hypochaeris radicata		1
			Lolium sp.		1
			Melilotis sp.		1
			Silybum marianum		1
			Trifolium ? arvense		1
			Trifolium repens		1
			Unknown herb		1
			Trifolium subterraneum		2



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR14		Photo: yes
Location: Power line route east of valley				Recorder: K. Mills	
Date: 14 / 10 / 13		Community: Native Pasture or Native grassland			
GPS (centre): 765178E, 6186921N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: North		Topography: Broad ridge crest	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Hydrocotyle laxiflora		1	Acetosella vulgaris		2
Microlaena stipoides		5	Hypochaeris radicata		1
Poa labillardieri		1	Lolium sp.		1
Pteridium esculentum		1	Melilotis sp.		1
Notes			Sonhus oleaceus		1
Pasture improved; heavily grazed;			Trifolium subterraneum		3
previously Tablelands Basalt Forest.			Unknown herb		1



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR15		Photo: yes
Location: Proposed met. mast site near WTG52/WTG54				Recorder: K. Mills	
Date: 14 / 10 /13		Community: Exotic Grassland			
GPS (centre): 764814E, 6191102N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: North		Topography: Broad ridge crest	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
nil			Acetosella vulgaris		
			Carthamus lanatus		3
			Cerastium fontanum		1
			Erodium sp.		1
Notes			Hirschfeldia incana		1
Pasture improved; sown and			Hordeum sp.		3
fertilised; very heavily grazed;			Lolium sp. ?		3
previously Tablelands Basalt Forest			Onopordium acanthium		1
			Paronychia brasiliensis		1
			Poa bulbosa		2
			Unknown herb		1
			Sheperds purse		1
			Trifolium subterraneum		4



Survey Sheet - Vegetation Plot		Plot Size: 33m x 33m		Kevin Mills & Associates	
Site Name: Taralga Wind Farm			Plot No. CR16		Photo: yes
Location: Proposed met. mast SITE				Recorder: K. Mills	
Date: 14 / 10 /13		Community: Native Pasture or Native Grassland			
GPS (centre): 764792E 6189168N (WGS84, Z55)			Soil: Clayey and rocky		
Land Tenure: Freehold			Geology: Basalt		
Slope: Level		Aspect: North		Topography: Broad ridge crest	
Species Cover: 1:<5% (uncommon); 2:<5% (common), 3:5-25%; 4:25-50%; 5:50-75%; 6:75-100%.					
Natives			Exotics		
Hydrocotyle laxiflora		2	Acetosella vulgaris		2
Microlaena stipoides		5	Bromus mollis		1
Poa labillardieri		1	Carthamus lanatus		1
Pteridium esculentum		3	Cirsium vulgare		1
Stellaria pungens		2	Erodium sp.		1
			Holcus lanatus ?		1
Notes			Lolium sp.		1
Pasture improved;			Onopordium acanthium		1
previously Tablelands Basalt Forest			Trifolium repens		1
			Trifolium subterraneum		3
			Urtica urens		1

