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Date 8 June 2017
Attention
From Information supplied by WestWind Energy Pty Ltd
Subject **Distance of Wind Farm Infrastructure from Waterways and Wetlands**

1. Introduction

The proponent has measured the distances of the wind farm infrastructure from both the VicMap Waterways GIS layer and also the 2013 aerial imagery (Refer Appendix 11a). This approach has been adopted as waterways have shifted as a result of historic farm draining works to increase the cropping and grazing capacity of farms within the site. Field investigations conducted by Brett Lane and Associates in December 2016 (after periods of above average rainfall meaning that the wetlands were at maximum capacity) were used to develop updated wetland maps. These have been used as a reference for infrastructure distances from wetlands. These methods were chosen as it has been identified that the VicMap wetland spatial layer has some inaccuracies, when ground truthed, in terms of depicting the physical location of waterways.

The Proponent's analysis has shown that:

- There are four (4) wind turbines located on the land affected by the Land Subject to Inundation Overlay (LSIO);
- There are three (3) wind turbines (as measured from the centre of the wind turbine) located less than 100 metres from the waterways. Of those three the wind turbines are located a minimum of 95 metres from the waterway
- There is one (1) wind turbine located less than 100 metres from a wetland (89 metres from the centreline of the wind turbine)
- Underground cables will intersect Ferres Creek in five places and Mia Mia Creek in four places
- Internal tracks will cross Ferres Creek in one place and Mia Mia Creek in four places
- Underground cables and internal access tracks will intersect wetlands in four places, and
- No infrastructure is proposed within 100 metres from confirmed Growling Grass Frog wetland sites.

These significant distances provide an effective setback to reduce the potential for environmental impacts on waterways and wetlands.

2. Distances of WTGs from Waterways

WTG ID	Waterways	Waterways GIS Layer (Distance (m)) ¹	Aerial Imagery (Distance to the edge of creek (m)) ²
GP079	(Meadows Creek)	91.80	~102.193
GP182	(Mia Mia Creek)	99.27	~96.40
GP194	(Mia Mia Creek)	101.81	~95.57
GP129	(Ferres Creek)	111.24	~116.06
GP036	(Mount Misery Creek)	112.98	~114.319

3. Distance of WTG from Wetlands (BL& A 2017 2.3)

WTG ID	Wetland No ID	Wetland GIS Layer (Distance (m) to the edge of wetland)
GP124	54030 (Moderate, BL&A classification)	89.05

4. UG Cables Crossing Waterways

WTG ID To WTG ID	Waterways
GP089 to GP098	Ferres Creek
GP085 to GP094	Ferres Creek
GP102 to GP097	Ferres Creek
GP118 to GP123	Ferres Creek
GP129 to Collector Station 3	Ferres Creek
GP149 to GP143	Ferres Creek
GP188 to GP193	Mia Mia Creek
GP184 to GP204	Mia Mia Creek
GP178 to GP182	Mia Mia Creek
GP182 To GP170	Mia Mia Creek

¹ Wind Turbines have been measured from the centreline of the turbine to the waterway

² Wind Turbines have been measured from the centreline of the turbine to the waterway

5. Tracks Crossing Waterways

GP097 to Meadows Road	Ferres Creek
GP195 to Gumley South Road	Mia Mia Creek
GP182 to Bells Road	Mia Mia Creek

6. Length of UG cabling within Wetland

UG Length (m)	Wetland No ID	Comments
148.57	54032 (Moderate, BL&A classification)	Adjacent UG cabling within the same wetland.
148.57		
249.51	54032 (Moderate, BL&A classification)	

7. Length of Track within Wetland

Track Length (m)	Wetland No ID
81.05	54002 (Low, BL&A classification)

8. WTG within the Land Subject to Inundation Overlay (LSIO)

WTG	Flood Extent
GP76	Within the LSIO
GP74	Within the LSIO
GP73	Within the LSIO
GP222	