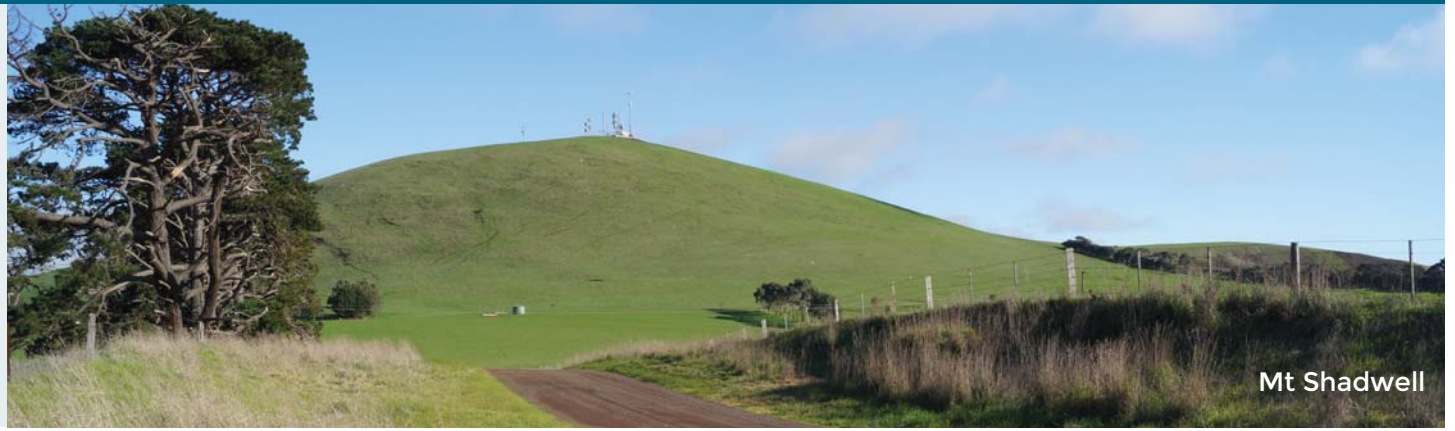


# ENVIRONMENT AND HERITAGE

Our environmental, geoheritage and heritage studies have informed the design of the wind farm. The development envelope for the turbines and supporting infrastructure takes into account sensitive locations and has been designed to avoid significant impacts.



Mt Shadwell

## Geoheritage

Mortlake is located in the Victorian Volcanic Plain bioregion. Remnants of volcanic activity feature prominently in the area including lava flows from Mt Shadwell, Mondilibi and Mt Fyans. The area contains a range of seasonal and permanent creeks and wetlands formed by volcanic activity that form important habitat for significant species and communities.



Remnant tree in Stony Rise (N Johnson)

The Mt Fyans and Mondilibi eruption points and some sections of lava flows, clearly demonstrate volcanic phenomenon are considered to be of regional significance.

The Stony Rise areas in the northern part of the site were formed by Volcanic activity around 300,000 years ago and contain many significant areas.

The design of the wind farm has been planned to avoid areas recognised as having geoheritage significance.



Green stone axe

## Fauna

Three threatened fauna species were identified under the *EPBC Act* and/or *FFG Act*:

- a previously unknown population of dwarf galaxias (*Galaxias pusilla*)
- the Corangamite water skink (*Eulamprus tympanum marnieae*) and
- striped legless lizard.

The Brolga has been the focus of bird studies at the wind farm site including:

- aerial surveys
- on ground observations to support home range surveys, and
- landowner surveys regarding brolgas on their properties.

Findings from these studies have been incorporated into the design of the wind farm in accordance with state guidelines.



Brolga - Winter Swamp Ballarat 2015 (Ed Dunes)

## Aboriginal heritage

Aboriginal Heritage assessments identified heritage values along Blind Creek and Salt Creek riparian areas and in sections of the Stony Rises especially close to sources of fresh water.

A range of significant artefacts were identified in these areas, (including the green stone axe photo left).

The Mt Fyans Wind Farm has been planned to largely avoid areas identified as having a high level of sensitivity for Aboriginal heritage. Cultural Heritage Management Plans are currently being prepared in consultation with relevant Aboriginal organisations.

## Flora

Broad scale agriculture has shaped the modern landscape. The land is predominately cleared with a few areas of remnant native vegetation. Many of the traditional stock routes in the area now form important areas for habitat conservation

Three threatened communities were identified under the Australian Government's *Environment Protection and Biodiversity Conservation Act (EPBC Act)* and/or the *Victorian Flora and Fauna Guarantee Act (FFG Act)*:

- natural temperate grassland of the Victorian Volcanic Plain
- seasonal herbaceous wetlands (freshwater) of the temperate lowland plains, and
- western (basalt) plains grassland.



Common tussock grass (N Johnson)

Only one threatened flora species was identified:

- Spiny riceflower (*Pimelea spinescens* subsp.)



Spiny riceflower