

# 05

## Existing Landscape Character





# 5.0 Existing Landscape Character

## 5.1 Overview of Landscape Character Analysis

The purpose of the Landscape Character Analysis is to establish the existing landscape and visual conditions through descriptions, mapping and photographic representations. The study method for undertaking the Landscape Character Analysis has been established in accordance with the *Draft National Wind Farm Development Guidelines* and Australian Institute of Landscape Architects (AILA) Guidance Notes for Landscape and Visual Impact Assessment where relevant and in conjunction with previous experience on large scale wind energy projects.

### Landscape Character Analysis inputs:

#### Regional Landscape Character

- *Description of the regional area of land in which the wind energy project is located including a description of the typical landscape character type.* **Refer to Section 5.2 & 5.3**

#### Local Landscape Character

- *Description of the local area within which the Project sits.* **Refer to Section 5.4**

#### Landscape Character Unit Classification

- *Landscape is categorised into Landscape Character Units (LCU) and Scenic Quality Ratings are applied to each LCU.* **Refer to Section 5.6**

#### Landscape Features and Key Viewing Locations

- *Identify areas of visual interest or quality that stand out visually in the landscape. Establish key viewing locations from which assessment is to be undertaken.* **Refer to Section 5.5**

#### Viewpoint Inventory

- *Undertake a viewpoint inventory from public and private locations and assess the potential visual impact of the Project.* **Refer to Section 6.0**

**Table 3** Overview of Landscape Character Analysis Process

## 5.2 South West Victoria Landscape Assessment Study

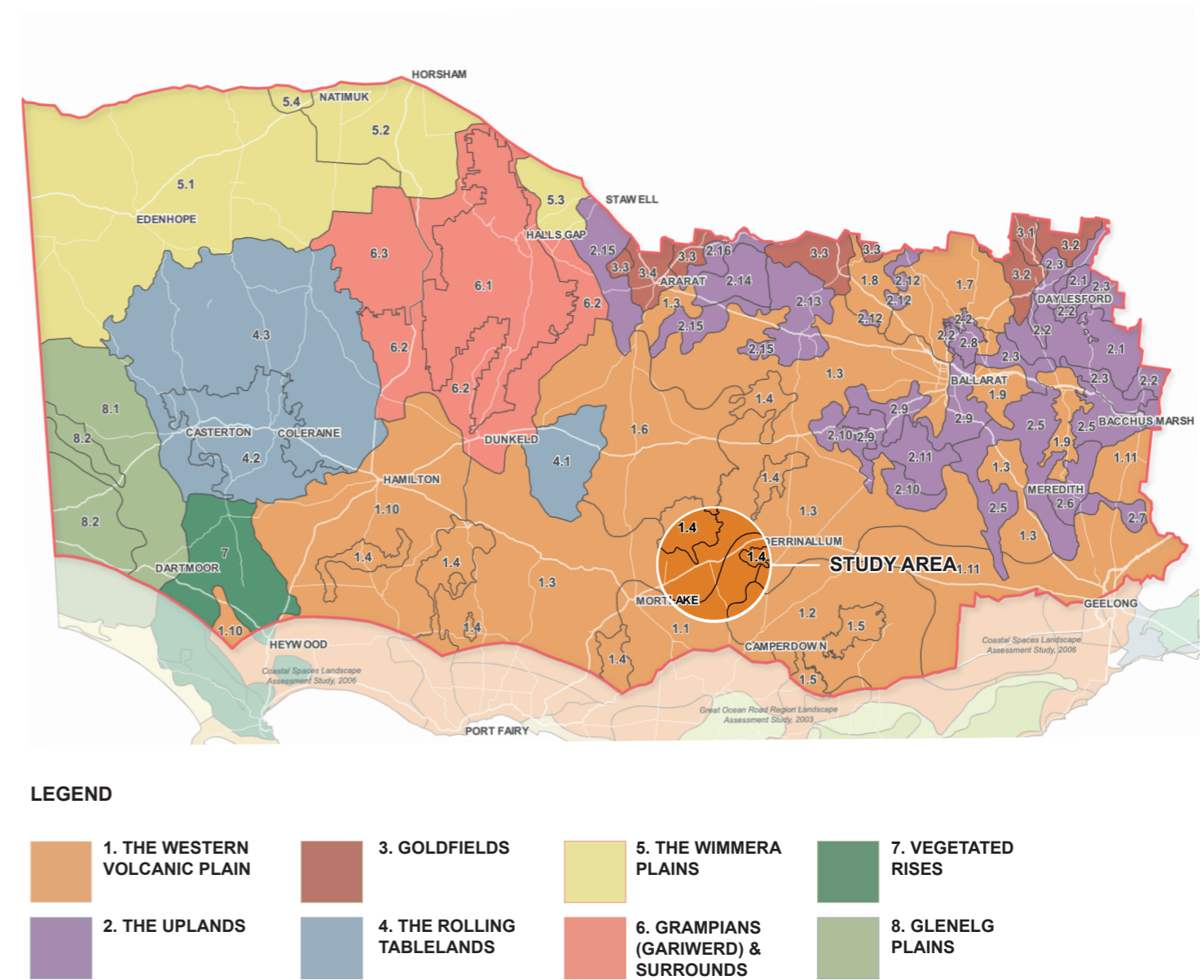
The *South West Victoria Landscape Assessment Study: Regional Overview Report* was prepared by the Victorian Government’s Department of Planning and Community Development. The Department commissioned a landscape assessment of South West Victoria to better understand and assess the visual character and significance of the wide range of landscape types, and this includes the volcanic plains and cones that dominate much of the area. The Western Volcanic Plain region extends between the Great Dividing Range in the north and the Grampians in the central west. The study is also used to inform planning scheme policies that assist in planning decision-making, and ensures that landscapes of importance are adequately protected and managed for the future.

### 5.2.1 The Western Volcanic Plain

The Study Area is primarily located within the area defined as the Western Volcanic Plain (refer to **Figure 10**).

*This Character Type is formed by a flat to undulating basaltic plain scattered with volcanic features including stony rises, old lava flows, numerous volcanic cones and old eruption points which together create a unique visual landscape. This is a place of big skies, long views with volcanic rises that punctuate the horizon. When the first European settlers arrived they found the land primed for agriculture as it contained very few trees. Shelterbelts of cypress and pine were planted to protect crops and livestock from the winds that sweep the plain and are now a defining characteristic of the Type (Department of Planning and Community Development).*

The landscape associated with the Western Volcanic Plain within the Study Area has been extensively cleared for farming.



**Figure 10** Landscape Types & Areas of South West Victoria (Planisphere, 2013)



### 5.3 Significant Landscapes of South West Victoria

The *Significant Landscapes of South West Victoria* is another study that was conducted in 2012 to assess character and significance of landscapes throughout south west Victoria. Broad landscape areas were examined in detail and an assessment of their cultural landscape values was undertaken. These detailed assessments led to the designation of some landscapes as Regionally Significant, and others of State Significance (or higher, though a rating of 'national' significance has not been attributed due to the scale/ context of the study, and the inability to justify such a rating through comparative analysis (Planisphere, 2015).

**Figure 11** shows the levels of significance attributed to the landscapes across South West Victoria, as well as the viewing locations from which regionally and state significant views are available.

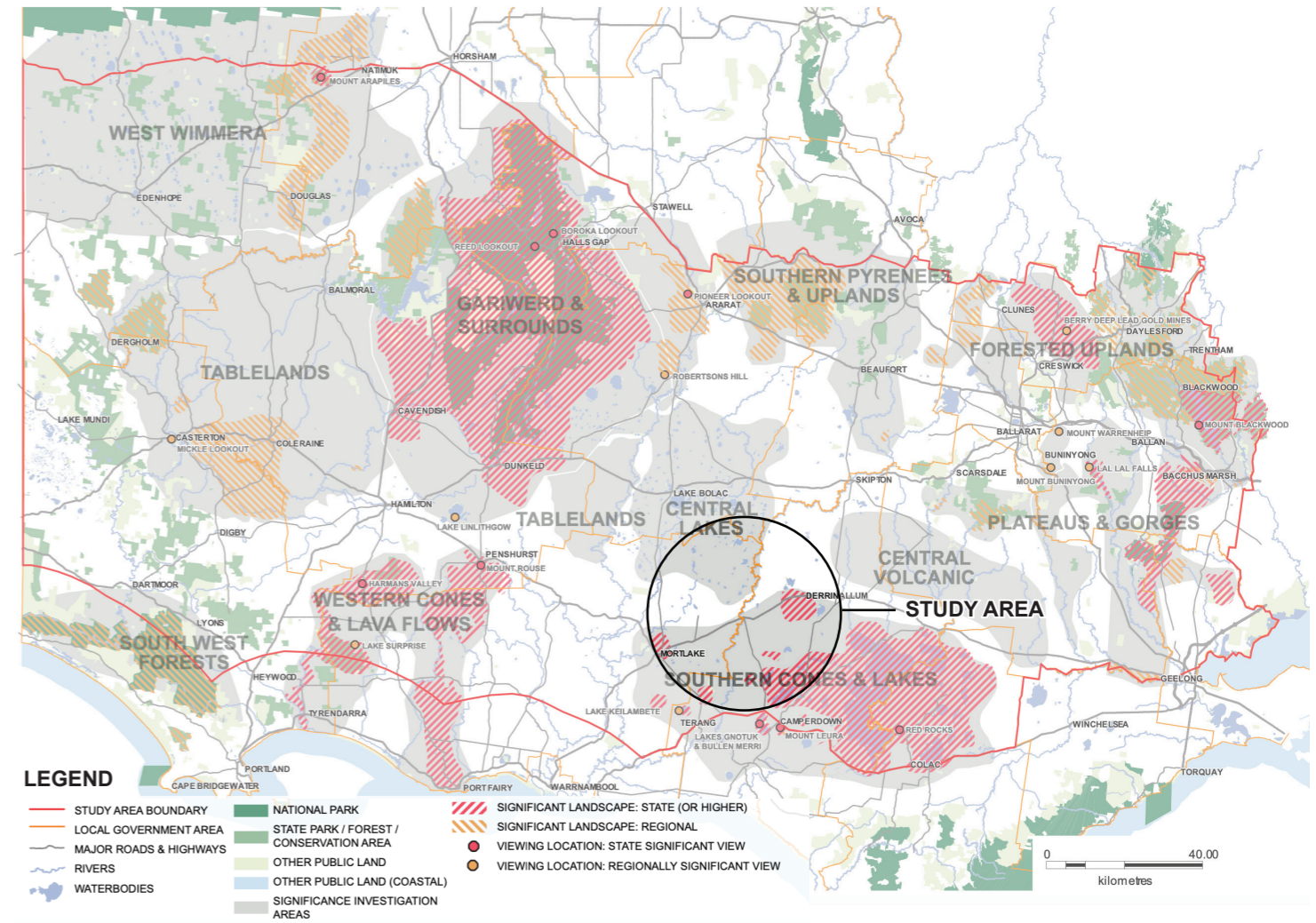
The Study Area is located within a significance investigation area, with areas of Significant Landscape State (or higher). The areas of Significant Landscape are attributed to 'Southern Cones'.

*This landscape contains some of the most significant and iconic volcanic rises to be found in Western Victoria. Spreading out across the landscape from many of these features are the low stony rises of their lava flows. Paddocks and roadsides are often lined with impressive and intact dry stone walls. The landscape is dispersed with numerous large bodies of water (discussed in the "Inland Lakes" Significance Paper.).*

*These volcanic features rise up dramatically from the open and slightly undulating agricultural plain. Many of them are visible on the horizon from long distances away, and create a high level of contrast and visual interest in the landscape. The lakes in the area provide additional wide, flat surfaces that further highlights the prominence of the cones. Geometric shapes of shelterbelts and property edges run at sharp angles to the features.*

The significant features of the Southern Cones Landscape are generally to the south of the Project Site. The Project Site itself is largely farming land which has been highly modified by agricultural activities. The Project is unlikely to alter the landscape characterised as the Southern Cones Landscape.

Regional and State Significant viewing locations have been identified to the south of the Project (in excess of 20 km south of the Project). At this distance, the Project is unlikely to be a noticeable element in the landscape and if visible would be viewed in the context of nearby wind farms.



**Figure 11** Significant Investigation Areas and Significant Landscapes and Views of South West Victoria (Planisphere, 2013)



## 5.4 Existing Character of the Study Area

Generally one of the first steps in carrying out a Landscape and Visual Impact Assessment is to identify and map the character of the Study Area which is defined by all areas that fall within 15 km of the Project Site (refer to section 2.2).

### 5.4.1 Towns and Villages

The Project is located within the Moyne Shire Council LGA. It is located approximately 3.2 km west of the edge of Darlington and 6.4 km east of the edge of Mortlake. Other towns and settlements that are located close to the Project include Woorndoo, Dundonnell, Glenormiston, Kolora, Bookar and Terang.

#### Mortlake:

Mortlake is the largest town located nearest to the Project Site. It is a historic town that was established by the Western District pastoralists when agricultural activity began to grow in these volcanic plains in the early 1800s and resulted in the Bolac Plains pastoral run in 1842. The town lies south of Mount Shadwell, an extinct volcano, and is known for its regional country charm that is offered by the unique heritage it exhibits through the bluestone buildings and wide main roads. A total of 1372 people reside in Mortlake and most people engage in beef, sheep and cattle farming (ABS, 2016a). The character is generally defined by contained views that are limited by structures and vegetation.

#### Darlington:

Another important historic town located five (5) km away from the Project. It was established on the banks of Mount Emu Creek as a farm-settlement for soldiers. It lies in the Corangamite Shire LGA on Hamilton Highway and has a population of 65 people as recorded in 2015 (ABS, 2015). The drystone buildings and Elephant Bridge which runs over Mt Emu Creek are significant features of this town. Visual and landscape character is generally open or filtered by vegetation and minor undulations near Mt Emu Creek.

#### Glenormiston, Noorat, Kolora and Terang:

Located south of the Project Site are the settlements of Glenormiston, Noorat, Kolora and Terang, of which Terang is the biggest town. These settlements were established around the early 1800s as pastoral runs for expanding agricultural activity in the Western District. The character is generally defined by a flat terrain with open views that are occasionally filtered by vegetation.



Image 6 Character of Mortlake's town centre



Image 7 Terang's town centre with a broad avenue of English Oak trees



Image 8 Darlington Mechanics Institute building



Image 9 Mt. Noorat in the background with Noorat Post Office and Noorat Hall in the foreground



Image 10 Typical character of land parcels around Darlington and Mortlake.



### Woorndoo and Dundonnell:

Woorndoo is a rural town located 20 km north of Mortlake which was also established in the 1840s along with other towns within the Bolac Plains pastoral run. In many ways it is very similar to surrounding towns such as Noorat, Dundonnell and Glenormiston. The landscape character is defined by flat, cleared parcels that support grazing and farming. Views are occasionally fragmented by existing vegetation.

Dundonnell is located 8.5 km north of the Project. It is a small agricultural rural town that has a recorded population of 46 residents (ABS, 2016). The town is most known for the wind farm that was established in 2019.

#### 5.4.2 Accessibility

Hamilton Highway (B140) connects Mortlake and Darlington to other towns in the surrounding region. The highway connects Hamilton to a number of other small towns such as Derrinallum, Lismore and Inverleigh and serves as an important conveyance route within the Western Plains region. Smaller towns such as Woorndoo, Noorat, and Terang are connected by moderate use roads such as Mortlake-Ararat Road, Terang-Mortlake Road, and Darlington-Camperdown Road.

Most dwellings within the 15 km radius are located along low use roads such as Darlington-Nerin Road, Castle Carey Road, Darlington-Terang Road and Woorndoo-Darlington Road. Typical character of these roads is defined by moderate to dense vegetation corridors that help filter views and act as windbreaks (See **Image 12**).

#### 5.4.3 Surrounding wind farms

High wind speeds prevail in the Western Plains region of Victoria. The wind farms that are in closest proximity of the Project are:

- Salt Creek Wind Farm, which is currently operational.
- Dundonnell Wind Farm and Mortlake South Wind Farm, which are currently under construction
- Mt. Fyans Wind Farm, which is awaiting approval.

The Salt Creek Wind Farm generates a maximum of 54 MW of energy and it is planned that Dundonnell, Mortlake South and Mt. Fyans wind farms will generate 336 MW, 157.5 MW and 400MW of energy. The cumulative impacts of these wind farms has been discussed in Section 9.0 of this report.



**Image 11** Hamilton Highway, Darlington



**Image 12** Typical character of low use roads that provide access to dwellings within and around the Study Area



**Image 13** Views of Salt Creek Wind Farm (operational) located south of Woorndoo



**Image 14** Dundonnell Wind Farm (currently under construction) as seen from Darlington-Nerrin Road



## 5.5 Key Landscape Features

The following provides an overview of the key features identified within the Study Area and its surrounds which contribute to the visual character of the landscape (refer to **Figure 22**).

### 5.5.1 Landform, geology and soils

The Western Plains region of Victoria is characterised by large, windswept flat plains with gentle undulations. The area is dominated by Cainozoic volcanic deposits that comprise of old eruption points, numerous volcanic cones, old lava flows to form an extensively flat to undulating basaltic plain with stony rises (DELWP, 2019b). Extinct volcanoes such as Mount Elephant, Mount Shadwell, Mount Meningorot and Mount Fyans dramatically rise in an otherwise flat pastoral landscape which is dotted with shallow saltwater and freshwater lakes. The lands are extensively used for agricultural activities. A number of quarries were established on these high points to mine volcanic scoria gravel for many years.

Largely flat pastoral lands are fertile with rich, red volcanic soils that support agricultural activity such as animal grazing and cropping in certain areas. The predominant character within and in the immediate surrounds of the Project is pastoral (refer to **Image 13**) extending for kilometres until it is disrupted by sparsely populated towns, volcanic features that punctuate the landscape or the clusters of wind farms that have been developing across the volcanic plains.

The landscape character of the Western Plains is highly modified due to the introduced agricultural activity in a largely flat landscape. Because of this, very few elements are screened by natural land formations, and therefore, the landscape is highly susceptible to visual change.

### 5.5.2 Vegetation

The area falls within the Victorian Volcanic Plain Bioregion which is generally treeless and dominated by grasses or herbs such as *Microleana spp.* (Weeping Grass), *Themeda triandra* (Kangaroo Grass), *Acaena echinata* (Sheep's Burr), and *Schoenus apogon* (Common Bog-sedge) (DELWP 2019b). The land parcels are largely flat and are generally devoid of dense canopy cover. Most of the land has been cleared for agricultural activity which has led to the replacement of native grasslands with exotic pasture species and monocultural crops (Planisphere, 2013). Canopy cover of both exotic and native species is restricted to the windbreak plantations along rural residential lot boundaries and sparse corridor vegetation along main roads / highways.

Lakes and wetlands around the area support diverse aquatic species. The volcanic undulations are mostly bare with a few crops, grazing parcels and some shrubby vegetation.



Image 15 Lake Barnie Bolac Wildlife Reserve, Darlington



Image 16 Mt. Emu Creek flowing near the Darlington Cemetery



Image 17 Mount Shadwell as viewed from the outskirts of Mortlake



Image 18 Grazing land with patchy vegetation corridors in the Darlington - Mortlake region



### 5.5.3 Water form - creeks and lakes

The Volcanic Plains are drained by interspersed creeks. Of these, the most prominent creeks are Mt. Emu Creek, Blind Creek and Salt Creek. There are a number of other low-lying depressions and wetlands which were formed due to volcanic activity. This character is predominant within the extents of the Western Plains.

Mount Emu Creek is a perennial creek that runs for a total distance of 250 km and is the largest tributary of the Hopkins River. The creek has a very high cultural significance because a part of its gully was the site of the Murdering Gully massacre in early 1839. The creek also supports a variety of ecological communities, especially platypuses and River Blackfish (Victorian Fisheries Authority, 2021).

Salt Creek and Blind Creek are two of the other creeks that drain the Hopkins River basin. Salt Creek starts at Powlett Hill and runs for a distance of 8 km until it merges with Joyces Creek. Blind Creek starts at Mount Shadwell and runs for a distance of 18 km. These creeks are very narrow and seasonal. Another waterform in close proximity of the Project is the Lake Bernie Bolac Wildlife Reserve which hosts a variety of ecological communities in an otherwise flat, low-lying landscape.

### 5.5.4 Agricultural production

Prevalence of fertile volcanic soils across the Western Plains has led to the development of extensive agricultural activity in this area. The region's economic growth depends extensively on the agricultural activity in the region. The primary activities associated with farming within the surrounds of Mortlake and Darlington are livestock grazing and cropping. Cattle farming and food processing are the most important sectors of agricultural production in the areas around Mortlake and Terang (Agriculture Victoria, 2018).



Image 19 Character of farmlands around Kilcoy, Glenormiston and other areas south of Hamilton Highway



Image 20 Typical roadside corridor vegetation along rural residential lots within surrounds of the Study Area



Image 21 Mount Elephant, Derrinallum



Image 22 General topographic character - flat terrain with extrusions of dormant volcanoes