Western Victoria
transmission network project

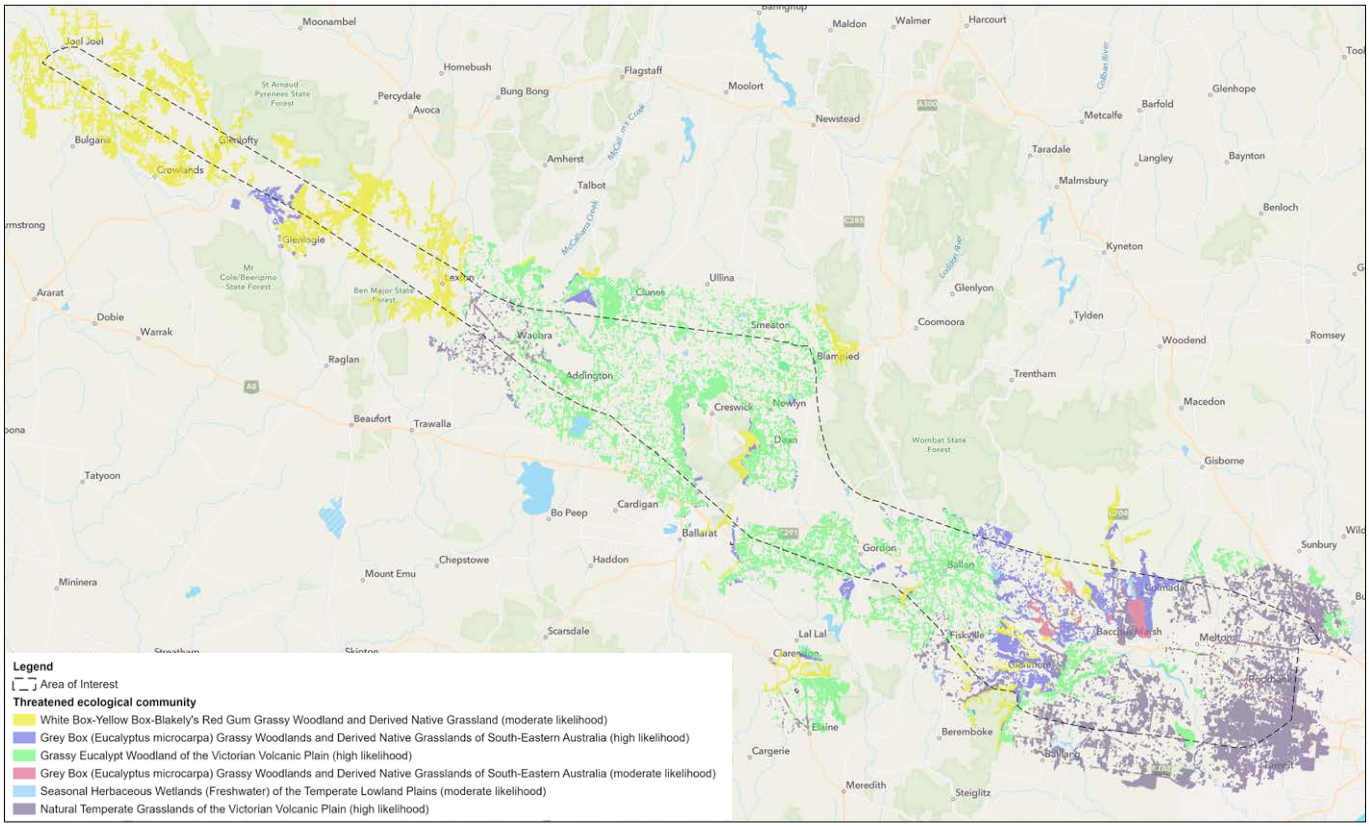
Preliminary EES Information Sheet for Existing Conditions:

Biodiversity

The purpose of this document is to provide a summary of the existing conditions identified for biodiversity within the Western Victoria Transmission Network Project (WVTNP) area of interest (AOI). Identifying the existing biodiversity within the AOI is an important step towards understanding the potential impacts, interactions and considerations for the project.

The existing conditions have been identified by qualified, independent technical specialists and include natural values, native vegetation, plant and animal populations, areas that support biodiversity, reserves, wetlands, and threatened flora and fauna.

A review of relevant databases and reports including the Victorian Biodiversity Atlas, NatureKit and BirdLife Australia's Birdata Atlas, as well as preliminary field assessments for vegetation and threatened species habitat have been undertaken. Specific targeted surveys for some threatened species have also commenced. Relevant legislation, policy and guidelines have been considered, along with stakeholder and community input on biodiversity. Further field surveys and investigations will be undertaken within the project corridor to gather more information, where required, about existing conditions and potential project impacts. The findings will be updated and included in the biodiversity impact assessment for the Environment Effects Statement (EES).



EPBC listed Threatened Ecological Communities (Data source: based on NV2005_EVCBCS, 2021)

Community and stakeholder feedback

The community has provided important input about existing conditions including:

- Areas of habitat offered by hollow-bearing trees.
- Existing riparian corridors along waterways, including Glen Donald Creek, Deep Creek and Dales Creek.
- Biolinks along Korkuperrimul Creek and Myrniong Creek.
- Observations of fauna including kangaroos, wombats, bats, brolgas and raptors.
- Areas where *Grevillea steiglitziana* (Brisbane Range Grevillea) is present.
- Braid Moss (*Pseudoleskea imbricata*) locations, listed as rare under the Victorian Advisory List.
- Areas of steep gradient where landslides may occur, and vegetation plays an important role in prevention.
- Nesting locations of Yellow-tailed Black Cockatoos.
- Little Eagle and other bird observations.
- Platypus and Rakali sightings around Clunes.

Bioregions

The AOI includes four bioregions as defined by the Department of Environment, Land, Water and Planning (DELWP). Bioregions are natural landscape units characterised by geology (and the associated soil and topography) and climate (rainfall, hydrology, and fire) that define the vegetation types and habitats that characterise the nature of an area.

From Lexton Reservoir in the west through to Newlyn in the east, including Waubra, the western section of the AOI is mostly situated in the Victorian Volcanic Plain bioregion. However, small, localised occurrences of the Central Victorian Uplands bioregion around Mount Beckworth, and a more extensive occurrence of the Central Victorian Uplands around Creswick do occur. The Victorian Volcanic Plain occurs predominantly around Ballan and then east from Bacchus Marsh through to Sydenham. The Central Victorian Uplands occurs at the western extent in the upper catchment of the Moorabool River and around Myrniong and Bacchus Marsh, including the Lerderderg State Park, Werribee Gorge State Park and Long Forest Nature Conservation Reserve.

Conservation reserves and corridors

Conservation reserves either contain large intact expanses of native vegetation and habitat or provide a connectivity function in the landscape, for flora and fauna.

The AOI contains 29 conservation reserves (in part or whole) managed by Parks Victoria, as well as those managed by Councils, historic and scenic reserves, streamside and water frontage reserves, and land reserved for water supply protection purposes.

The nature conservation reserves in the AOI with the largest area and most significant biodiversity values are Ben More Bushland Reserve, Creswick Regional Park and Mount Beckworth Scenic Reserve in the western section of the AOI, and Lerderderg State Park, Long Forest Flora and Fauna Reserve and Werribee Gorge State Park in the eastern section of the AOI. Wombat State Forest and Brisbane Ranges National Park (outside the AOI) are also important areas of biodiversity.

Several Landcare groups, including the Landsborough and Concongella Landcare Groups, are active in the western section of the AOI and are undertaking important biodiversity and erosion management work. In the eastern section of the AOI, the Pentland Hills Landcare group is developing a biolink along the Myrniong Creek corridor that links the Werribee Gorge State Park with Lerderderg State Park in the north.

Waterways and wetlands

Waterways and wetlands across the landscape provide important habitat for wetland and migratory birds as well as amphibians and fish. Eight river basins and sections of the Wimmera River, Avoca River, Moorabool River, Werribee River and Lerderderg River intersect the AOI. The Lerderderg River is listed in the Directory of Important Wetlands in Australia (DIWA 2021).

The AOI includes 568 DELWP mapped current wetlands, with the highest density between Ballan and Creswick, and around Ballarat. The largest wetlands are associated with water supply reservoirs. Hepburn Lagoon is also of importance as a volcanic caldera (crater lake).

In the western part of the AOI, wetlands provide important refuges and foraging resources for a variety of waterbirds, including wetland migratory birds that seasonally move across the landscape. The low-lying areas of the volcanic plain, between Lexton and Creswick in particular, contain many seasonal wetlands supporting habitat for a variety of waterbirds including ibis, herons, swamphens, and ducks.

Native vegetation

The AOI is largely cleared of native vegetation, with native vegetation mostly occurring in small and fragmented patches of bush. Some more connected, linear patches of native vegetation occur along waterways and within road corridors, while conservation reserves and areas of steeper terrain support larger contiguous areas of native vegetation. Numerous large, scattered trees including River Red Gums with occasional Yellow Gum, Red Box, and Longleaf Box are retained in grazing paddocks and along waterways and roadsides which provide important nesting hollows to a variety of birds and animals.

Ecological vegetation classes are the standard unit for describing native vegetation associations across Victoria, grouping a suite of species that occur together in relation to common ecological characteristics, such as soil, aspect, bushfire frequency and intensity (DELWP). Across the AOI, 69 ecological vegetation classes are present across four bioregions.

Threatened ecological communities

The AOI includes five *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) listed threatened ecological communities:

- Grassy Eucalypt Woodland of the Victorian Volcanic Plain.
- Grey Box Grassy Woodlands and Derived Native Grasslands of South-eastern Australia.
- Natural Temperate Grassland of the Victorian Volcanic Plain.
- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains.
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

The AOI includes seven State listed *Flora and Fauna Guarantee Act 1988* (FFG Act) threatened communities of flora and fauna:

- Creekline Grassy Woodland (Goldfields).
- Grey Box – Buloke Grassy Woodland.
- Lowland Riverine Fish community of the Southern Murray-Darling Basin.
- Rocky Chenopod Open-scrub.
- Victorian Temperate Woodland Bird community (west of Long Gully).
- Western Basalt Plains (River Red Gum) Grassy Woodland Floristic.
- Western (Basalt) Plains Grasslands.

Noxious weeds and pests

Noxious weeds are likely to be present across the AOI, particularly in areas of high human disturbance near townships, along roadsides and highly cultivated land, that will require consideration and management by the project.

Invasive feral predators, including feral cats and foxes primarily use open grasslands and agricultural landscapes for hunting, but are also known to occur within woodland and forest ecosystems. Feral goats are also known to be a problematic pest within the Lerderderg State Park and Werribee Gorge State Park, causing erosion and browsing pressures for native herbivores. Rabbits are highly prevalent across grassland agricultural ecosystems, causing significant ground disturbance, grazing pressure, and competition for native fauna.

Threatened flora

Twelve Commonwealth EPBC Act listed threatened flora species are known to occur in the area or are considered to have a high likelihood of occurring within the area, but none have been located in field work to date. 53 threatened flora species (provisional) listed under the State FFG Act have been identified as relevant to the AOI. Several of these species have been recorded during vegetation assessments to date including the Bacchus Marsh Wattle, Brooker's Gum and Yarra Gum.

Threatened fauna

Six Commonwealth EPBC Act listed threatened fauna species have been identified as relevant to the AOI. One species, the Golden Sun Moth, has been recorded during targeted surveys completed to date. 38 threatened fauna species listed under the State FFG Act have been identified as relevant to the AOI, of which nearly half are bird species and mostly associated with wetland areas. Species including the Brush-tailed Phascogale and Powerful Owl have been recorded during surveys to date.

Native grasslands provide habitat for the EPBC Act listed vulnerable Striped Legless Lizard and vulnerable Golden Sun Moth. The EPBC Act listed vulnerable Growling Grass Frog is known to occur in the Werribee River and Kororoit Creek.

Open woodland provides habitats for reptiles, including the threatened Bearded Dragon and Lace Monitor (FFG Act listed). Woodlands provide important habitat for woodland birds, including the Chestnut-rumped Heathwren (FFG Act listed). A variety of birds of prey, including the threatened Little Eagle and Grey Goshawk (FFG Act listed) have previously been recorded in the area. The FFG Act listed Brolga is known to frequent wetlands and seasonally filled wetlands west of Ballarat and is likely to utilise wetlands in the western section of the AOI. Large reservoirs, waterbodies and large seasonal wetlands may provide habitat for the FFG Act listed Freckled Duck and Blue-billed Duck.

Golden Sun Moth

Brittle Greenhood

Field assessments

Field assessments are currently underway to validate the findings of the desktop data review in relation to the extent, type and condition of vegetation and habitat values in the AOI. Targeted surveys have commenced and have confirmed the presence of some threatened flora and fauna species. Additional targeted surveys are planned.

Flora species targeted surveys underway and complete include:

- Adamson's Blowngrass
- Bacchus Marsh Wattle
- Basalt Pepper-cress
- Brittle Greenhood
- Button Wrinklewort
- Hoary Sunray
- Large-fruit Groundsel
- Matted Flax-lily
- Small Golden Moth Orchid
- Spiny Rice-flower
- Sturdy Leek-orchid
- Swamp Fireweed.

Fauna species targeted surveys underway and complete include:

- Hollow-dependent birds – Barking Owl, Masked Owl, Powerful Owl.
- Mammals – Brush-tailed Phascogale, Greater Glider.
- Reptiles – Striped Legless Lizard, Tussock Skink.
- Amphibians – Brown Toadlet, Growling Grass Frog.
- Invertebrates – Golden Sun Moth (8 locations identified in the western section of the AOI to date).

General fauna surveys will also be conducted in suitable woodland habitat using terrestrial fauna cameras, microbat surveys, call play back and spot lighting for owls, bird census and active searching. Surveys are carried out in accordance with relevant State and Commonwealth guidelines.

Considerations for the project

A range of considerations have been identified for further investigation and management which will be addressed in the biodiversity impact assessment including:

- Potential for construction and easement management to impact on threatened flora and fauna species and communities.
- Loss of native vegetation, including large and scattered trees, during construction.
- Loss and fragmentation of habitat due to clearing.
- Disturbance of native fauna by construction.
- Interference with waterways, aquatic areas and wetlands.
- Collision threat of transmission line for threatened bird or bat species, or disturbance by operating transmission lines.
- Transmission lines as vantage points for predators.
- Spreading of weeds, pests or other biosecurity concerns due to construction.

Next steps

- Engage with landholders to continue field surveys and investigations on properties in areas identified based on the findings to date.
- Vegetation quality assessments, including noxious weed assessments, threatened flora surveys, scattered tree mapping, and threatened fauna habitat assessments.
- Complete targeted field surveys for threatened flora and fauna.
- Further landholder, community and stakeholder consultation.
- Prepare a biodiversity impact assessment based on the project corridor, including proposed mitigation measures to manage any potential impacts. The impact assessment will inform the proposed route and be published as part of the EES. The EES will be an important source of information about potential project impacts for the community, landholders, decision-makers and as part of the approvals process.

Providing feedback

You can call 1300 360 795 or email info@westvictnp.com.au, to provide feedback on this document.

More information

More information about the project, the EES and the corridor is available in fact sheets on the project website westvictnp.com.au, and you can register via the website to have project updates emailed directly to you.

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