Hazelwood Rehabilitation Project DISCUSSION PAPER | NOV 2023

# **Biodiversity and ecological values**

ENGLE Hazelwood is progressing a comprehensive technical assessment and consultation process for the Hazelwood Rehabilitation Project Environment Effects Statement (EES).

Delivering a safe, stable, sustainable and non-polluting landform is central to the feasibility and success of the Hazelwood Mine Rehabilitation Project and the site's potential for productive future uses.

A pit lake is proposed as the most effective solution to keep the mine void and surrounding areas stable and safe from risks of ground movement and fire.

This paper provides information on:

- How the ecology studies will be prepared
- What the studies will consider
- What we already know about the site



### What are the ecological considerations being assessed in the Environment Effects Statement?

An EES is a well-established process under the Victorian Environment Effects Act 1978, that provides a comprehensive framework for assessing projects with the potential for significant environmental effects.

The EES studies are connected, and the ecology study will consider information from other relevant studies including water, and changes to waterways, to assess the potential effects on ecological values.

Scoping Requirements developed by the Department of Transport and Planning (DTP) will set out the matters to be assessed in the EES and will define a specific evaluation objective related to ecological values.

All environmental studies being prepared for the EES will be reviewed by the Governments Technical Reference Group to ensure they are prepared in accordance with the final Scoping Requirements.

### Why a full pit lake is proposed to rehabilitate the Hazelwood mine void

The size and close proximity of the Hazelwood mine void to the Princes Freeway, Morwell township and the Morwell River mean that long-term safety and stability are extremely important considerations for its rehabilitation.

If left unfilled and unmanaged, the Hazelwood mine void could lead to issues including unsafe ground movement and fire from exposed coal. These are significant risks for the community and ENGIE Hazelwood has a legal responsibility to manage these risks.

A full pit lake is proposed because the weight of the water would push down on the floor and out on the walls of the mine. This pressure will keep the very large mine void, walls and the land around it stable and safe, as well as effectively eliminate the risk of coal fire.



### Assessing ecological values at Hazelwood

The Ecology study will assess the potential effects on native vegetation, habitat, listed threatened species and ecological communities that may be found at the Hazelwood site.

## What legislation does the ecology study consider?

The EES will include an assessment of potential effects on native vegetation, including trees, ecological communities and fauna and flora species listed under the relevant Commonwealth and State environmental protection legislation.

The Key legislation that applies to the ecology study include:

- Environment Protection and Biodiversity Conservation Act 1999 (Cth)
- Planning and Environment Act 1987 (Vic)
- Flora and Fauna Guarantee Act 1988 (Vic)
- Wildlife Act 1975 (Vic)
- Catchment and Land Protection Act 1994 (Vic)

### How is the Ecology study prepared?

Specialists will complete extensive desktop and literature reviews to understand what may be present on the site. This is followed by targeted surveys to determine if species may be present.

Where habitat is found that may support species, it is assumed that the species can be found there. Specialists will also look closely at waterways to determine if there is presence of aquatic species.

Once specialists have determined what is within the site, they can make an assessment how the project may affect each species, and identify opportunities to avoid, mitigate or offset potential effects.

### Measuring downstream effects

The Catchments, Rivers and Wetlands study will consider downstream ecological effects of the project to determine how changes to flow regimes and water quality as a result of the project could impact ecological values in the Gippsland Lakes and other waterways.



### What is remnant vegetation?

Remnant vegetation is vegetation that existing prior to European settlement and has not been significantly disturbed by mining, agriculture or other clearing activities.

### Managing impacts on protected species

When planning a project, specialists must consider the potential effects of the proposal on a protected species. The planning process sets out a mitigation hierarchy to limit impacts on the environment. These steps are:

- **1. Avoid –** avoid impacting areas where there are protected species.
- 2. Mitigate after you have sought to avoid impacts, specialists must consider what options could be put forward to limit and minimise impacts.
- **3. Offset –** where avoidance and mitigation is not possible, offsets can be used to protect other areas that may support the species you have an impact on.

### How will other studies be considered?

The Ecology study will consider findings from other studies including:



### Lake water balance and water quality

This study will investigate the amount of water flowing in to the mine void compared with the water leaving the system as run off or through evaporation and predict future water quality within the pit lake.



### Catchments, rivers and waterways

This study considers waterways within the site and beyond the mine site into nearby catchments and water bodies.

### Groundwater

The groundwater technical study will assess the potential effects of the proposal on groundwater flow into and out of the mine void during and after filling. It will consider potential impacts to groundwater availability, quality and the effects of pumping on the availability of groundwater to other users, such as groundwater dependent ecosystems.

Finding from these studies may influence the extent of, and potential effects on ecological values around the site and within connecting waterways.

### What do we already know about the site?

While large areas of the site have been changed by mining and power generation activities, we know from historical records and other information that there are large portions of vegetation left on the site that could host significant species.

Early desktop reviews have identified potential for some significant local flora species on the site, including the Strzelecki Gum and Yarra Gum, species which are unique to the Gippsland region. Waterways within the site, including the Morwell River are home to fish species, and may support platypus habitat.

Further investigations, including targeted surveys and investigations will determine if these species exist within the site.

## Improving biodiversity and ecological values at Hazelwood

ENGIE Hazelwood has been progressively rehabilitating a number of areas across the site since closure of the mine.

There are a number of active programs on site that manage existing vegetation species that are threatened or contain listed species, alongside active waterways monitoring programs.

The site team is working with Latrobe City Council to link conservation areas both internally and externally through the site.





### Have your say on the Environment Effects Statement

The EES for the Hazelwood Rehabilitation Project is being prepared and is expected to be exhibited for public comment from late 2024.

### Key steps to prepare the Hazelwood Rehabilitation Project EES



ENGIE Hazelwood is holding a range of consultation activities to understand community views and feedback, and you can have your say any time.

## Visit our website



Sign up for updates

### Find out more and stay involved

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ENGIE Hazelwood acknowledges that the Gunaikurnai people are the Traditional Owners and Native Title holders of lands and waters in the Latrobe Valley and broader Gippsland region in which the ENGIE Hazelwood Rehabilitation Project is located, and we pay our respects to Elders past and present.

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