



Hazelwood Rehabilitation Project

Environment Effects Statement



**Summary
Brochure**

Table of Contents

01	Introduction	04
02	The project	07
03	Project need	10
04	Project alternatives	12
05	Project assessment and approvals	14
5.1	Requirement for an Environment Effects Statement	14
5.2	Requirement for assessment and approval under the EPBC Act	15
5.3	EES process and key approvals required	15
5.4	Assessment approach	17
5.5	Scenarios assessed	18
06	Assessment of key potential effects	19
6.1	Water resource availability	19
6.2	Pit lake water quality	21
6.3	Ecological values downstream of the site	24
6.4	Ecological values on site	25
6.5	Geotechnical risks	25
6.6	Contamination	27
6.7	Mine fire risk	28
6.8	Aboriginal cultural heritage and historic heritage values	28
6.9	Community amenity and land use	29
07	Managing the environmental effects	30
08	Consultation and public participation	32
8.1	Consulting with community, stakeholders and Traditional Owners.	32
8.2	Public exhibition of the EES	33
8.2.1	Viewing the EES	33
8.2.2	Making a submission	33
8.3	Next steps	34

01 Introduction

ENGIE Hazelwood owns and manages the site of the former coal-fired 1600-megawatt (MW) Hazelwood Power Station and open-cut brown coal mine. The site is situated on Gunaikurnai Country, immediately south of the township of Morwell in the Latrobe Valley, Victoria.

The Hazelwood Mine and Power Station produced electricity in the Latrobe Valley for more than five decades prior to its operational closure in 2017. During its operation, approximately 772 million tonnes (Mt) of coal and 195 million cubic metres of overburden were extracted from the mine.

In response to a global shift towards clean energy, growing climate change concerns and the ageing nature of the plant, the Hazelwood Mine and Power

Station ceased operations in March 2017. The closure of Hazelwood represents a significant shift away from reliance on brown coal for power generation, historically one of Victoria's largest contributors to greenhouse gas emissions. Since operational closure, preliminary rehabilitation works, including demolition, infrastructure removal and earthworks, have been undertaken in accordance with previous approvals.

As part of the overall rehabilitation strategy for the site, the Hazelwood Rehabilitation Project (the project) involves the final rehabilitation of the former Hazelwood Mine into a safe, stable, sustainable, and non-polluting final landform, capable of supporting productive future land uses.

The proposed landform is centred on a high-level pit lake. The pit lake landform provides a long-term passive solution to the most significant risks associated with the mine (which currently require ongoing active management), including floor heave, slope failure, ground movement and coal fire.

On 3 February 2022, the Victorian Minister for Planning determined that an Environment Effects Statement (EES) was required for the project under the *Environment Effects Act 1978* (Vic). On 20 February 2023, the delegate for the Commonwealth Minister for the Environment and Water determined the project to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). The Victorian EES process has been accredited for assessment under the EPBC Act in accordance with the Bilateral Assessment Agreement between the Commonwealth Government and the Victorian Government.

The EES describes the project and its potential environmental effects, and how significant effects will be avoided, minimised and managed. The EES, public submissions and Inquiry and Advisory Committee's report will be considered by the Minister for Planning to determine the acceptability of the environmental effects of the project at the end of the EES process. The Minister for Planning's assessment will inform decisions by the relevant Ministers and statutory authorities regarding statutory approvals.

The EES is exhibited concurrently with:

- The draft Declared Mine Rehabilitation Plan (DMRP), applicable to the management of rehabilitation works within the mining licence boundary, including the mine void (Attachment II).
- The draft Planning Scheme Amendment (PSA), applicable to land outside of the mining licence boundary, including the Hazelwood Cooling Pond (Attachment III).

Declared Mine Rehabilitation Plan (DMRP)

The DMRP describes how closure is being planned, scientifically informed and executed. This is the key approvals document for the project, which is supported by a range of live operational plans to manage risks during rehabilitation.

A draft of the DMRP was publicly exhibited in 2025 for 60 days. It will be updated to reflect recommendations from the Minister's assessment (where required) and then submitted to Resources Victoria (RV) for approval. The site's operational plans will continue to be updated throughout the life of the project, in response to changing site conditions.

This summary brochure provides an overview of the 17 technical studies undertaken as part of the EES, outlines the overall structure of the EES documentation and identifies where readers can access further information. It also sets out the next steps in the EES process, including where the EES is exhibited for public review and how to make a submission.

Further details on the technical studies are provided in the EES Main Report and the technical reports attached to the EES. We encourage you to read the EES chapters and reports to understand the matters of interest further before making a submission on the EES.

The structure of the EES is shown in Figure 1-1.



Artist's impression

Hazelwood Rehabilitation Project EES

Summary Brochure

Executive Summary

Part 1: Understanding the project

1. Introduction

2. Project rationale

3. Project development and alternatives

4. Project description

5. Legislative framework

6. Assessment framework

7. Stakeholder and community engagement

Part 2: Environmental assessments

8. Climate change

9. Water resource use and regulation

10. Lake water balance and water quality

11. Catchments, rivers and wetlands

12. Groundwater

13. Land and solid waste

14. Ground movement and geotechnical hazards

15. Ecology

16. Aboriginal cultural heritage

17. Historical heritage

18. Air quality

19. Noise and vibration

20. Landscape and visual

21. Land use

22. Socio-economic impact

23. Mine fire risk

24. Transport

Part 3: Project delivery and key findings

25. Matters of national environmental significance

26. Environmental Management Framework

27. Integrated assessment

28. Conclusion

Technical Reports

A. Climate Change

B. Water Resource Use and Regulation

C. Lake Water Balance and Water Quality

D. Catchments, Rivers and Wetlands

E. Groundwater

F. Land and Solid Waste

G. Ground Movement and Geotechnical Hazards

H. Ecology

I. Aboriginal Cultural Heritage

J. Historical Heritage

K. Air Quality

L. Noise and Vibration

M. Landscape and Visual

N. Land Use

O. Socio-economic Impact

P. Mine Fire Risk

Q. Transport

Attachments

I. Landform and Water Supply Alternatives Assessment

II. Draft Declared Mine Rehabilitation Plan

III. Draft Planning Scheme Amendment

IV. Modelling Assumptions for Groundwater and Surface Water Assessments

V. EES Consultation Report

VI. Response to IESC Advice

Figure 1-1: Hazelwood Rehabilitation Project EES structure

02 The project

The Hazelwood Rehabilitation Project involves:

- Filling the mine void with water from a combination of sources to a relative level (RL) of +45 metres Australian Height Datum (m AHD) with a depth of up to approximately 120 metres and covering an area of 1,145 hectares, using predominantly groundwater, surface water and any other approved water sources.
- Earthworks to rehabilitate, stabilise and reshape landforms, primarily upper mine batters where they are above the level of the future pit lake, to geotechnically stable landforms with adequate stabilising vegetation and drainage.
- Decommissioning, draining and rehabilitation of the Hazelwood Cooling Pond (HCP) to be suitable for alternative uses and restoration of the natural alignment of Eel Hole Creek.
- Decommissioning of remaining redundant infrastructure, such as redundant roads, car parks, buildings, fire protection pipelines and infrastructure above RL +45m AHD, and pumphouses on the HCP.
- Construction and operation of infrastructure necessary to maintain lake depth and water quality, including a potential Morwell River interconnection, in a ‘connected lake’ scenario.

The project area and key components of the project are shown in **Figure 2-1**.



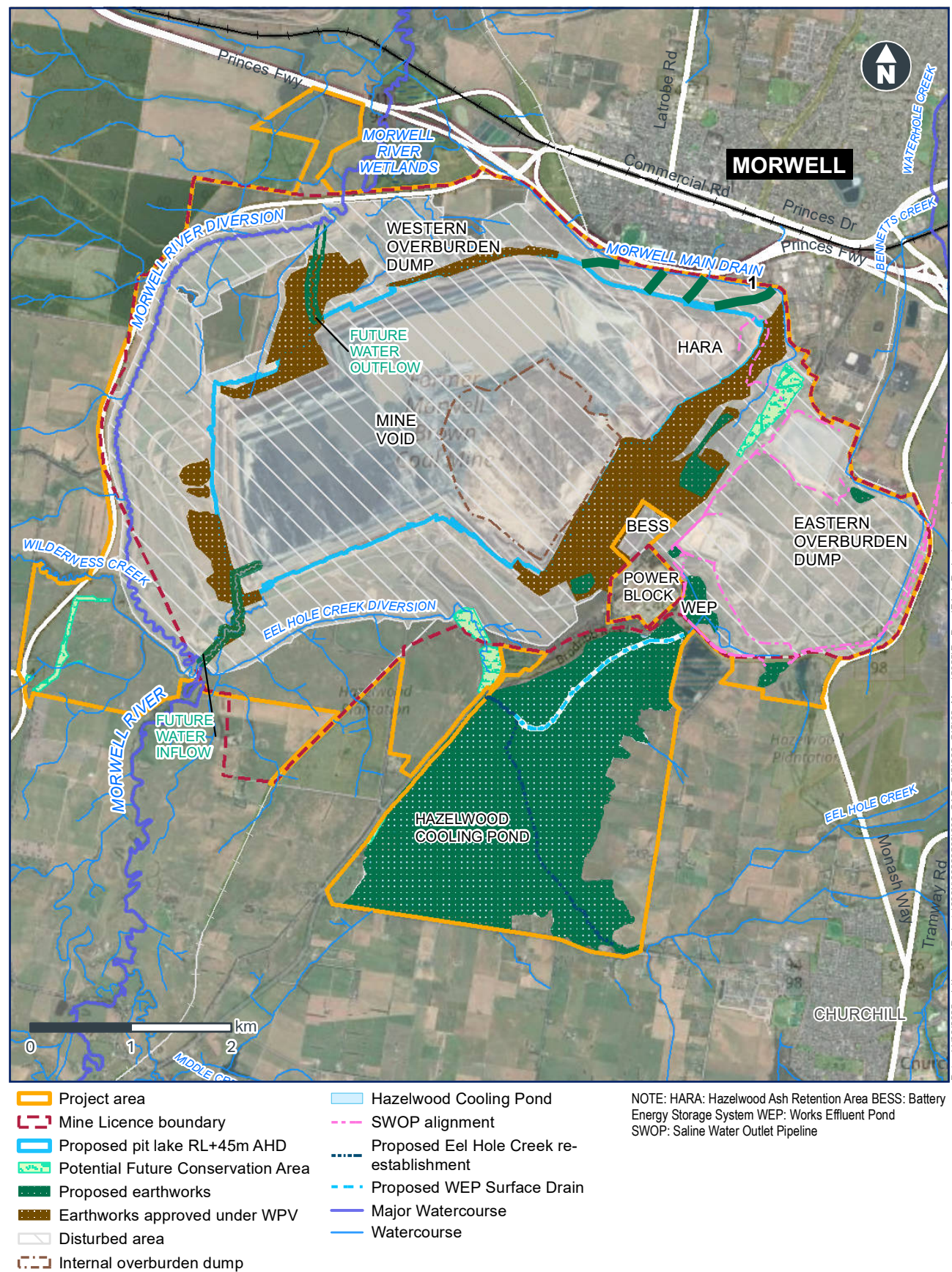


Figure 2-1: Project area, key components and activities (connected lake scenario)

The key phases of the project are shown in **Figure 2-2**. The final rehabilitation of the Hazelwood site would occur during the active rehabilitation and passive rehabilitation phases under the management of ENGIE Hazelwood. The active rehabilitation phase includes the earthworks, filling of the mine void, and decommissioning of structures as listed above. The targeted mine filling period is between 10 and 15 years, subject to the availability of water for filling and future climatic conditions. Once the pit lake is full, this would be followed by the passive rehabilitation phase, where the landform is maintained and monitored prior to relinquishment of the mining licence. 2026 is referenced as the commencement date of active filling to reflect the date in the EES modelling assumptions.

The implementation of the project works would enable the eventual relinquishment of mining licence MIN5004, the divestment of

the project area land, and its potential conversion to alternative productive land uses under the remit of the post-closure land manager in the post-closure phase. Specific land uses and activities in the post-closure phase are not the subject of the EES assessment; however, the EES assessments do consider long-term effects of the rehabilitation works, final landform and the suitability of potential end land uses based on the findings of the EES studies.

A detailed description of the project assessed in the EES is provided in Chapter 4: Project description.

The works subject to the EES include activities during rehabilitation that are not already permitted under existing approvals. The site has been undergoing interim rehabilitation and remediation works under its existing Work Plan and Clean

Up Plan, in accordance with requirements under the *Mineral Resources (Sustainable Development) Act 1990 (Vic)* (MRSD Act) and the *Environment Protection Act 2017 (Vic)*.

In addition to the geotechnical and hydrogeological data gathered over the mine's operational life, the current water body within the mine void (which has been developed under existing approval arrangements since 2021) has provided ENGIE Hazelwood with a wide range of valuable data regarding actual conditions observed in response to water retention, including mine floor, batter and aquifer responses, and overall water quality. The comprehensive site data and well-established management controls demonstrate that the project can be implemented safely.

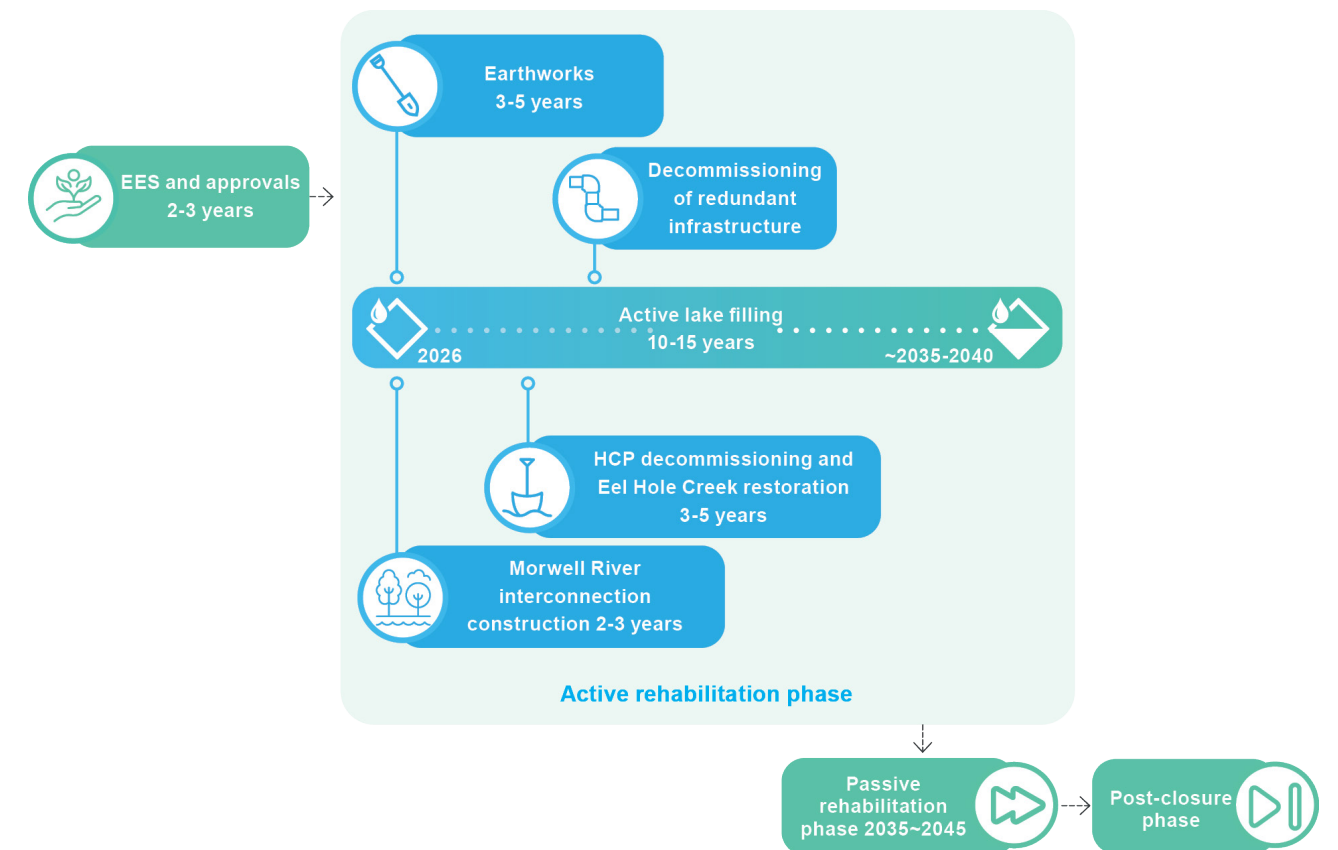


Figure 2-2: Hazelwood Rehabilitation Project phases

03 Project need

The rehabilitation of the Hazelwood Mine site responds to obligations under Mining Licence MIN5004, the MRSD Act and the Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2019 (Vic) (MRSD Regulations).

Consistent with ENGIE Hazelwood's legal obligations, the project objectives are:

- To further rehabilitate the former Hazelwood Mine to create a safe, stable, sustainable and non-polluting landform.
- To provide opportunities for productive future land use that benefits the communities in the Latrobe Valley and broader Gippsland region.

A high-level pit lake landform has been a central element of mine rehabilitation plans since before the mine was privatised, and this concept has been further refined since the establishment of the Latrobe Valley Regional Rehabilitation Strategy (LVRSS) process. The LVRSS principles have informed the project's planning and provided a strategy to consider the risks and benefits to the broader Latrobe Valley region during and post-rehabilitation.

The Hazelwood Mine is one of three similar sites in the Latrobe Valley that will undergo closure and rehabilitation over the coming decade. Due to their unique geological and hydrogeological conditions, the three Latrobe Valley mines (*declared mines*) all entail a similar closure concept of a high-level pit lake as their final landform.

Transformation of the mine to a pit lake landform is the most effective solution to substantially reduce safety and stability risks across the site and for the surrounding areas. This would passively control key geotechnical and coal fire risks and maximise the possibilities for productive future uses of the land surrounding the mine, especially important given its proximity to Morwell. Currently, stability, mine fire risks and dust are actively managed through groundwater extraction and the use of surface water on exposed coal surfaces. Once the high-level pit lake is established, the landform is stable, and all exposed coal is covered, it is expected that the site's reliance on large volumes of surface water and groundwater resources would reduce, such that surface water could be re-allocated for other uses, and groundwater levels would recover.

The Hazelwood site has the potential to become a multi-use area following its closure. Potential land uses are shown in Hazelwood's Concept Master Plan (**Figure 3-1**).

The proposed pit lake is informed by examples of successful pit lake rehabilitation models that have been implemented internationally, such as in former lignite mines in Germany. Case study examples demonstrate that a rehabilitated pit lake landform can stimulate new economic and recreational opportunities for the community. Rehabilitation of the Hazelwood site to achieve a safe, stable and sustainable landform aims to create a lasting positive social, environmental and economic legacy in the Latrobe Valley region for future generations.



More information on why the project is needed can be found in Chapter 2: Project rationale.

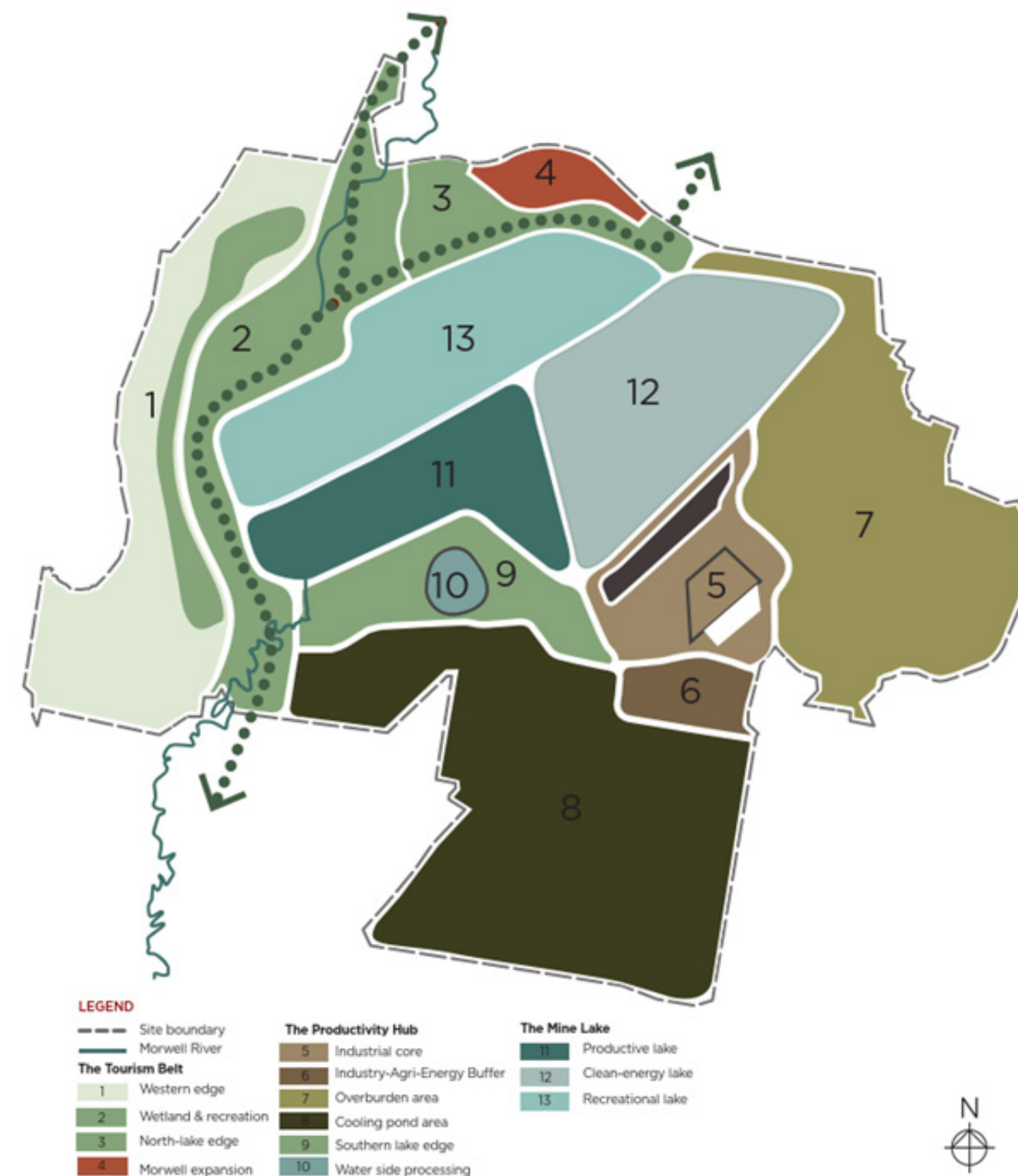


Figure 3-1: Hazelwood Concept Master Plan (2019)

04 Project alternatives

Alternative landform and water supply for the mine rehabilitation were reviewed using a multi-criteria analysis (MCA), considering:

- Previous assessments of alternatives undertaken as part of the Hazelwood Mine Fire Inquiry (HMFI, 2015-2016) and LVRRS.
- Stakeholder input during the EES.
- Modelling undertaken and technical data collected for preparation of the EES.

The alternatives assessment methodology is shown in **Figure 4-1**.

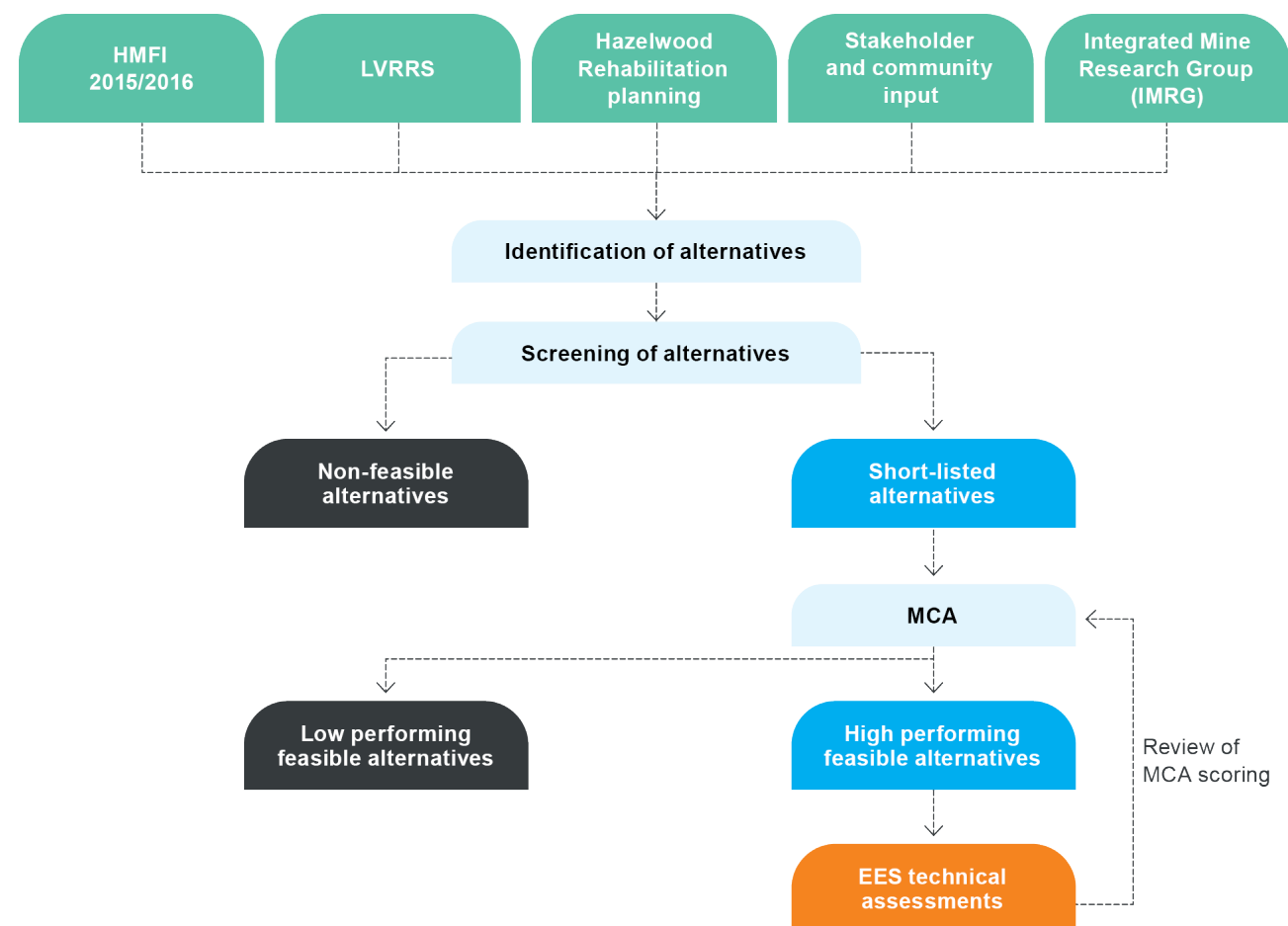


Figure 4-1 Alternatives assessment methodology



A total of 13 landform and water supply options were identified for assessment, considering different mine filling regimes. Four were screened out as being non-feasible because of fatal flaws, and the remainder were evaluated using the MCA process. The assessment criteria considered the key issues in meeting the project objectives, including landform stability, water resources and quality, ecology, cultural heritage, future land use, community well-being, approvals, greenhouse gas emissions, and cost.

To support the MCA, the geotechnical risks of various lake levels were analysed to determine at what level the lake landform would need to be maintained to achieve a geotechnically stable outcome in the long term. The study determined that lake levels below +45m AHD are unable to provide a long-term landform that is largely passive while minimising geotechnical risks at the Hazelwood site.

The alternatives assessment concluded that a lake level of +45m AHD is considered the best option to achieve a safe, stable, sustainable and non-polluting landform and provide opportunities for productive future land uses.

> The detailed findings of the evaluation of alternatives are presented in Chapter 3: Project development and alternatives and Attachment I: Landform and Water Supply Alternatives Assessment.

05 Project assessment and approvals

ENGIE Hazelwood holds a range of planning and environmental approvals and agreements for the previous operations and existing rehabilitation activities at the Hazelwood site. The Hazelwood site is highly modified and continues to change under its current operations and rehabilitation activities in accordance with existing approvals.

The EES process is not an approvals mechanism, but an assessment to inform statutory decisions. It provides decision makers, including ministers and other statutory authorities, with the information they need to determine whether to grant further statutory approvals for the project, and if so, what conditions should apply.

5.1 REQUIREMENT FOR AN ENVIRONMENT EFFECTS STATEMENT

On 3 February 2022, the Minister for Planning issued a decision that the project requires assessment through the preparation of an EES. The reasons for the decision were:

i) **The project has the potential for significant environmental effects, including on:**

- surface water and groundwater resources, including hydrology, water quality, availability and associated environmental values.
- existing land uses and landscape values.
- the Gippsland Lakes Ramsar site.
- native vegetation, listed ecological communities and species of flora and fauna.
- Aboriginal and non-Aboriginal heritage values.

ii) The project has the potential for cumulative adverse effects on the above-mentioned values from the combination of proposed works, previous and approved rehabilitation works at the site and other works/projects yet to be undertaken in the area.

iii) An EES process would enable an integrated and transparent assessment of the environmental effects of the project to inform decision-making for required approvals, including opportunities to avoid or minimise significant adverse effects through alternatives (e.g., landforms, water sources) and other mitigation measures. It also responds to the significant community interest in the project and its assessment.

Draft EES scoping requirements that set out the matters to be investigated and documented in the EES were exhibited for public comment in April 2023. After considering public submissions, the Minister for Planning published final EES scoping requirements in October 2023.



5.2 REQUIREMENT FOR ASSESSMENT AND APPROVAL UNDER THE EPBC ACT

On 20 February 2023, the delegate of the Commonwealth Minister for the Environment and Water determined that the project was a 'controlled action' and would need EPBC Act approval.

The relevant controlling provisions for the project are:

- Ramsar wetlands (sections 16 & 17B).
- Listed threatened species and communities (sections 18 & 18A).
- Listed migratory species (sections 20 & 20A).
- A water resource, in relation to a large coal mining development or coal seam gas development (sections 24D & 24E).

As the delegate of the Commonwealth Minister for the Environment and Water determined that the project required assessment under sections 24D and 24E of the EPBC Act, on the basis of potential impacts on a water resource in the context of a large coal mining development, the Independent Expert Scientific Committee on Unconventional Gas Development and Large Coal Mining Development (IESC) provided advice on a range of draft EES technical reports in late 2025. Relevant technical reports were updated in light of this advice.

5.3 EES PROCESS AND KEY APPROVALS REQUIRED

The EES was prepared between 2022 and 2026, with draft reports reviewed by the Technical Reference Group and the IESC during its development. The Technical Reference Group (TRG) comprised members from government agencies, local council and the Registered Aboriginal Party (RAP). Members of the TRG contributed knowledge and advice to the Department of Transport and Planning and ENGIE Hazelwood. An overview of the EES process and key approvals for the project is shown in **Figure 5-1**.

The key approvals required for the project include:

- Approval of a Cultural Heritage Management Plan (CHMP) (CHMP No. 16898) under the *Aboriginal Heritage Act 2006* (Vic) by the RAP.
- Approval of the project under the EPBC Act (Commonwealth).
- Approval of a DMRP under the *Mineral Resources (Sustainable Development) Act 1990* (Vic).
- Licences under the *Water Act 1989* (Vic).
 - Licence to construct works to deviate a waterway, in relation to the possible Morwell River interconnection in a connected lake scenario.
 - Licence to decommission works on a waterway in relation to the Hazelwood Cooling Pond decommissioning.

- Licence to take and use water from a waterway, in relation to accessing a portion of Morwell River flood flows in a connected lake scenario.
- Renewal of the licence to take and use groundwater to maintain safe and stable conditions (and as a contribution towards filling the pit lake).
- Approval to undertake works outside the boundary of Mining Licence MIN5004 pursuant to the *Planning and Environment Act 1987* (Vic) in accordance with the Latrobe Planning Scheme, via a PSA.

> More information on project approvals can be found in Chapter 5: Legislative framework.

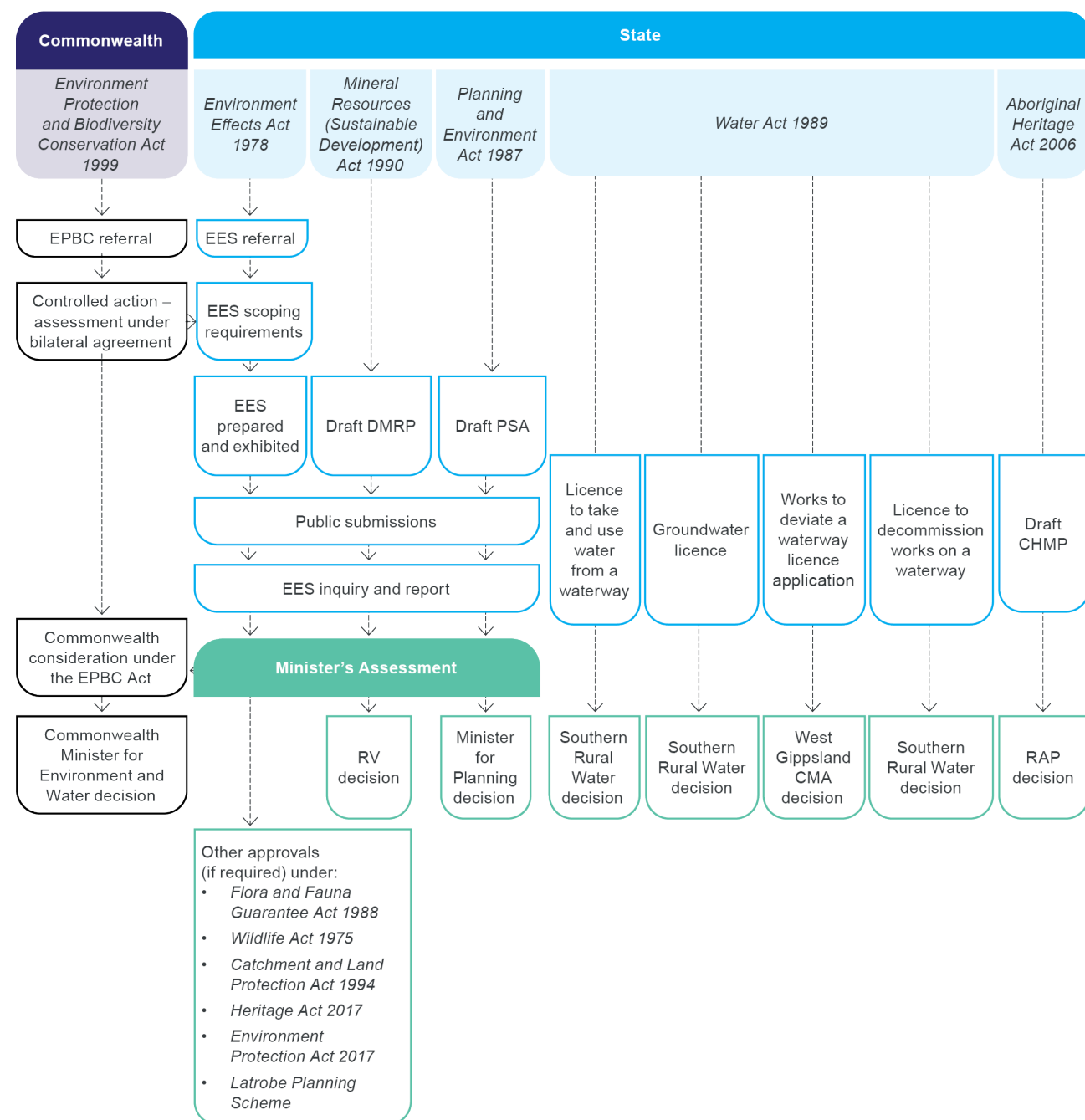


Figure 5-1: EES assessment process and key approvals

5.4 ASSESSMENT APPROACH

The scoping requirements establish evaluation objectives for the EES. These objectives reflect the decision of the Minister for Planning regarding the need for an EES, and the technical studies have responded to these objectives in their assessments. The evaluation objectives are outlined in **Table 1**.

This EES has been prepared in accordance with the final scoping requirements and evaluation objectives. To ensure all key issues identified in the scoping requirements were addressed, 17 technical studies were undertaken.

The 17 technical studies used a systematic risk-based approach to understand baseline environmental conditions, identify potential environmental impacts arising from the project, and propose mitigation measures to avoid, minimise or manage potential impacts. In addition, the potential for cumulative impacts of the project with other future developments was assessed.

The technical studies have informed the development of an Environmental Management Framework (EMF), which outlines ENGIE Hazelwood's environmental commitments and governance arrangements to mitigate, manage, and monitor environmental effects. Where improved environmental outcomes could be achieved by modifying the project design, mitigation measures proposed in the technical studies have been incorporated into the project description.

An overview of the assessment framework is shown in **Figure 5-2**.

Table 1: Evaluation objectives

EVALUATION OBJECTIVES	
	Water resources and environmental values Avoid and, where avoidance is not possible, minimise adverse effects on water resources and their environmental values (including existing and potential future values downstream of the project area) and uses (including cultural, recreational and agricultural) including licenced uses of surface water, groundwater and related catchment values over the short and long-term.
	Landform safety and stability Achieve a safe and stable landform in an environmentally sustainable way that protects public safety, current and planned infrastructure and supports proposed outcomes for future land uses.
	Biodiversity and ecological values Avoid, and where avoidance is not possible, minimise potential adverse effects on native vegetation, species of flora and fauna (particularly listed threatened species and their habitat and listed ecological communities), as well as address offset requirements (if required) consistent with state and Commonwealth policies.
	Cultural heritage Identify and maximise opportunities for potential beneficial outcomes related to Aboriginal and historic cultural heritage values and protect, avoid, or minimise where avoidance is not possible, adverse effects on historic cultural heritage values and tangible and intangible Aboriginal cultural heritage values, in partnership with Traditional Owners.
	Amenity, socio-economic and land use Protect the health and wellbeing of the community, and avoid or minimise, where avoidance is not possible, potential amenity, greenhouse gas emissions and land use effects.

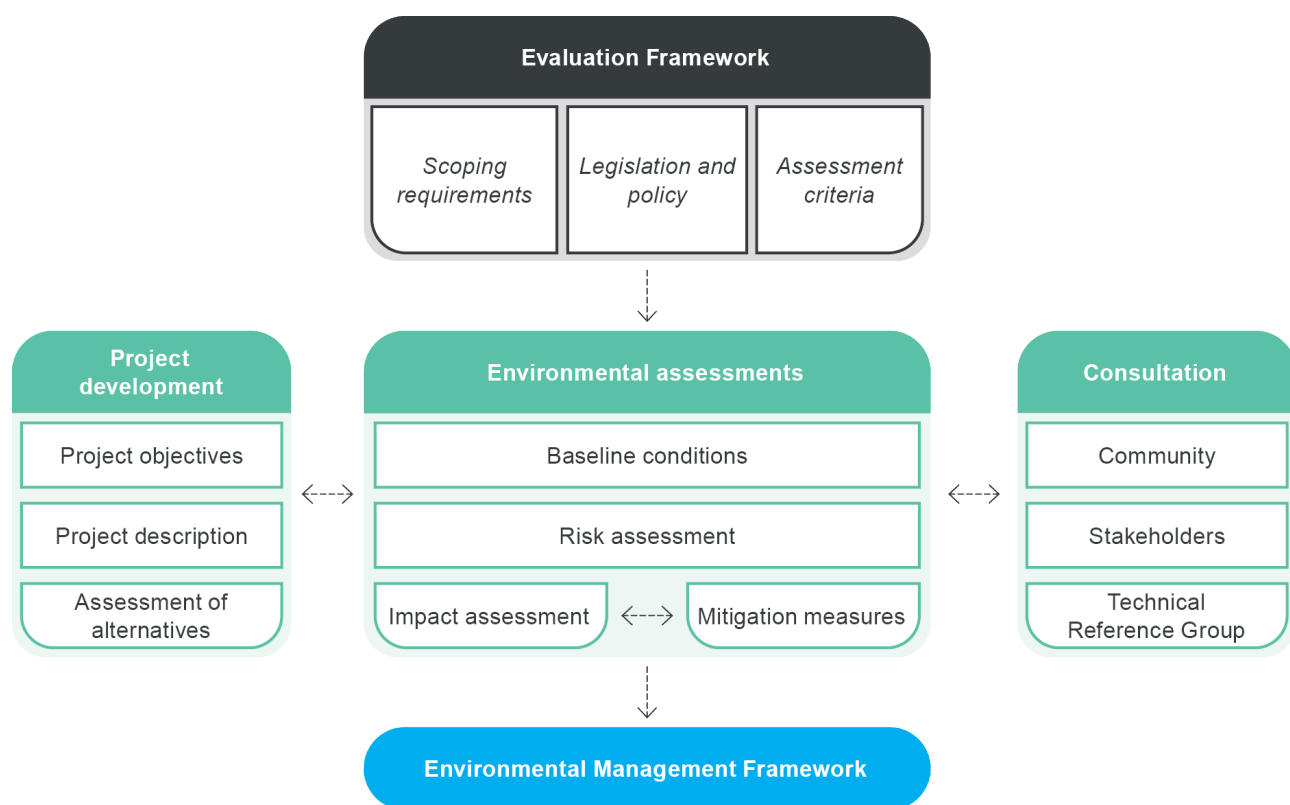


Figure 5-2: Assessment framework

> More information on the project assessment process can be found in Chapter 6: Assessment framework.

5.5 SCENARIOS ASSESSED

The two project alternatives that were ranked as the highest-performing rehabilitation alternatives across a range of criteria in the landform and water supply options assessment were assessed in further detail in the EES technical studies. These are:

- An 'unconnected lake' scenario, where the pit lake does not interact with any other waterways.
- A 'connected lake' scenario, where a portion of peak flows from the Morwell River during flood events would spill into the pit lake, and intermittently discharge back into the Morwell River downstream.

The connected lake scenario does not involve a direct connection between the Morwell River and the proposed pit lake, but would have the following interactions:

- Diversion of a portion of peak Morwell River flood flows (above an 86% annual exceedance probability event) into the pit lake to contribute to filling and top-up.
- Intermittent discharge from the full pit lake into the Morwell River when pit lake levels exceed RL +45m AHD and water is of suitable quality.

In addition to these two lake configurations, the EES assessed:

- Two fill rates being:
 - fast fill.
 - slow fill.

The assessments undertaken have considered climate change projections as outlined in **Chapter 8: Climate change**. Consistent with the approach outlined by the Victorian Government's *Guidelines for Assessing the Impact of Climate Change on Water Availability in Victoria*, 2020, the following climate scenarios were included:

- Low (wet).
- Medium (median).
- High (dry).
- Post-1997 Step.

06 Assessment of key potential effects

The Hazelwood site has been extensively modified since the 1950s for mining and industrial uses. Mining and power generation have resulted in a highly disturbed landform, including: a large open pit, areas containing ash (from burning coal) and overburden (the material overlying the coal), and various water storages. The site requires active controls to manage geotechnical, mine fire and contamination risks.

The project aims to rehabilitate the site to create a safe, stable and sustainable landform that supports future productive land uses and creates long-term environmental and socio-economic benefits.

The EES assesses the potential environmental effects of rehabilitation activities and explores measures proposed to avoid, minimise and manage these effects. A summary of the key issues assessed is provided in the following sections.

6.1 WATER RESOURCE AVAILABILITY

The proposed pit lake would be filled using a combination of:

- Groundwater pumped from the M1 and M2 aquifers under a licence from Southern Rural Water (SRW) at a target rate of 15 - 23 gigalitres (GL) per year.
- Surface water obtained under a Water Services Agreement with Gippsland Water at a rate of 20 -30GL per year. This water would be sourced from Gippsland Water's existing bulk entitlement from the Latrobe River system (Moondarra Reservoir) for urban and industrial purposes.
- Stormwater runoff from the Morwell Main Drain (MMD) in the north of the site at a rate of 1 - 3GL per year, subject to agreement with Latrobe City Council.

- A portion of peak flood flows from the Morwell River at an average rate of 4GL per year, in a 'connected lake' scenario, subject to agreement and licensing with regulators.
- 17.5GL of water from the Hazelwood Cooling Pond (HCP).

Once the lake reaches the target level of RL +45 m AHD, ongoing top-up water would be sourced primarily from surface water, with groundwater used as a contingency where required. Rainfall runoff and, for the connected lake scenario, managed flood flows, would also contribute to maintaining lake levels.

The proposed water resource use is shown schematically in **Figure 6-1**.

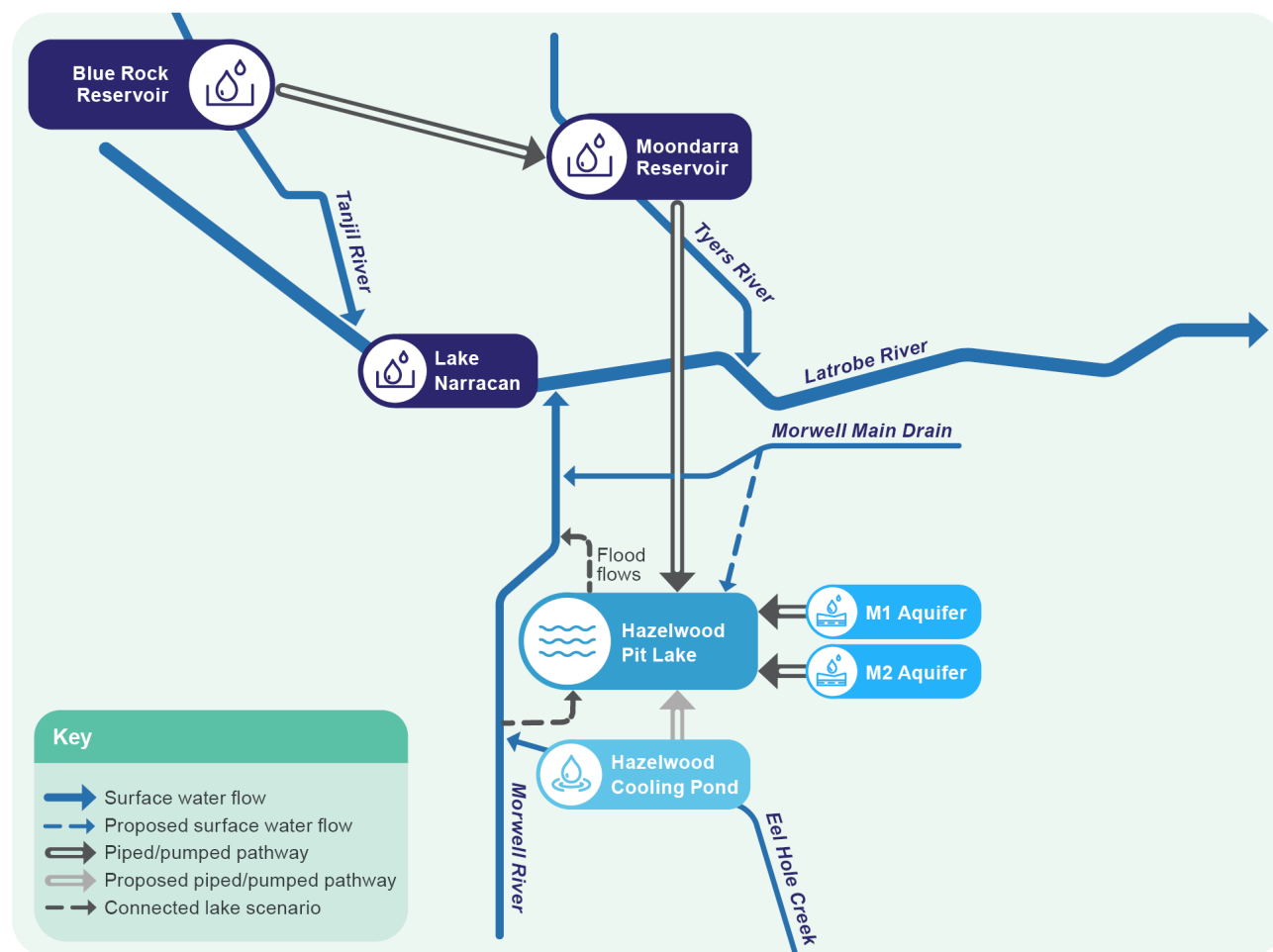


Figure 6-1: Proposed water resource use for the Hazelwood Rehabilitation Project

Water balance modelling undertaken in accordance with the *Guidelines for Assessing the Impact of Climate Change on Water Availability in Victoria* (Victorian Government, 2020) assessed water availability under a range of future climate scenarios. The assessment found that under most climate scenarios, surface water from Moondarra Reservoir is expected to be sufficient for filling and ongoing top-up requirements, while groundwater would be required occasionally as a contingency for pit lake top-up (where other top-up water sources are not available) under a high (dry) climate scenario.

Existing water users would not have their supply compromised, as ENGIE Hazelwood's commercial agreement with Gippsland Water enables the supply of surface water from Moondarra Reservoir to the Hazelwood Mine to be reduced or suspended in periods of extreme climate conditions.

An adaptive filling and top-up strategy would be applied to ensure the high-level lake is sustainably managed in the long term, balancing the needs of other users and the environment.

Further information is presented in Chapter 8: Climate change, 9: Water resource use and regulation, Chapter 10: Lake water balance and water quality, Chapter 11: Catchments, rivers and wetlands and Chapter 12: Groundwater.

6.2 PIT LAKE WATER QUALITY

Pit lake water quality was modelled to assess suitability for future use and its capability of supporting ecological values. For the connected pit lake scenario, the model also informed the level of risk associated with controlled discharge of pit water into downstream environments.

Pit water quality was predicted by modelling undertaken in accordance with the *Guidelines for Assessing the Impact of Climate Change on Water Availability in Victoria* (2020). The modelling reflects the inputs and outputs and geochemical interactions shown in Figure 6-2, and has enabled a comparison between baseline conditions (a pit lake at level -7m AHD) and the proposed project (a pit lake at level +45m AHD). Water quality modelling was undertaken with outputs assessed against the Australia Drinking Water Guidelines. This modelling also included the Hazelwood Ash Retention Area (HARA), a licensed landfill located within the pit. The HARA is the subject of separate EPA approvals, however the modelling is not expected to significantly impact the overall lake water quality.

The lake (once filled to RL +45m AHD) is predicted to stratify into layers in the warmer months of the year and mix in the cooler months of the year. The risk of algal blooms associated with nutrient levels within the pit lake are comparable to other human-made water bodies in Victoria and are the subject of inflow nutrient loads from surrounding uses. Overall, the modelling indicates that the pit lake would be suitable for a range of future productive uses, with ongoing monitoring to guide and confirm these opportunities.

Further information is presented in Chapter 10: Lake water balance and water quality.

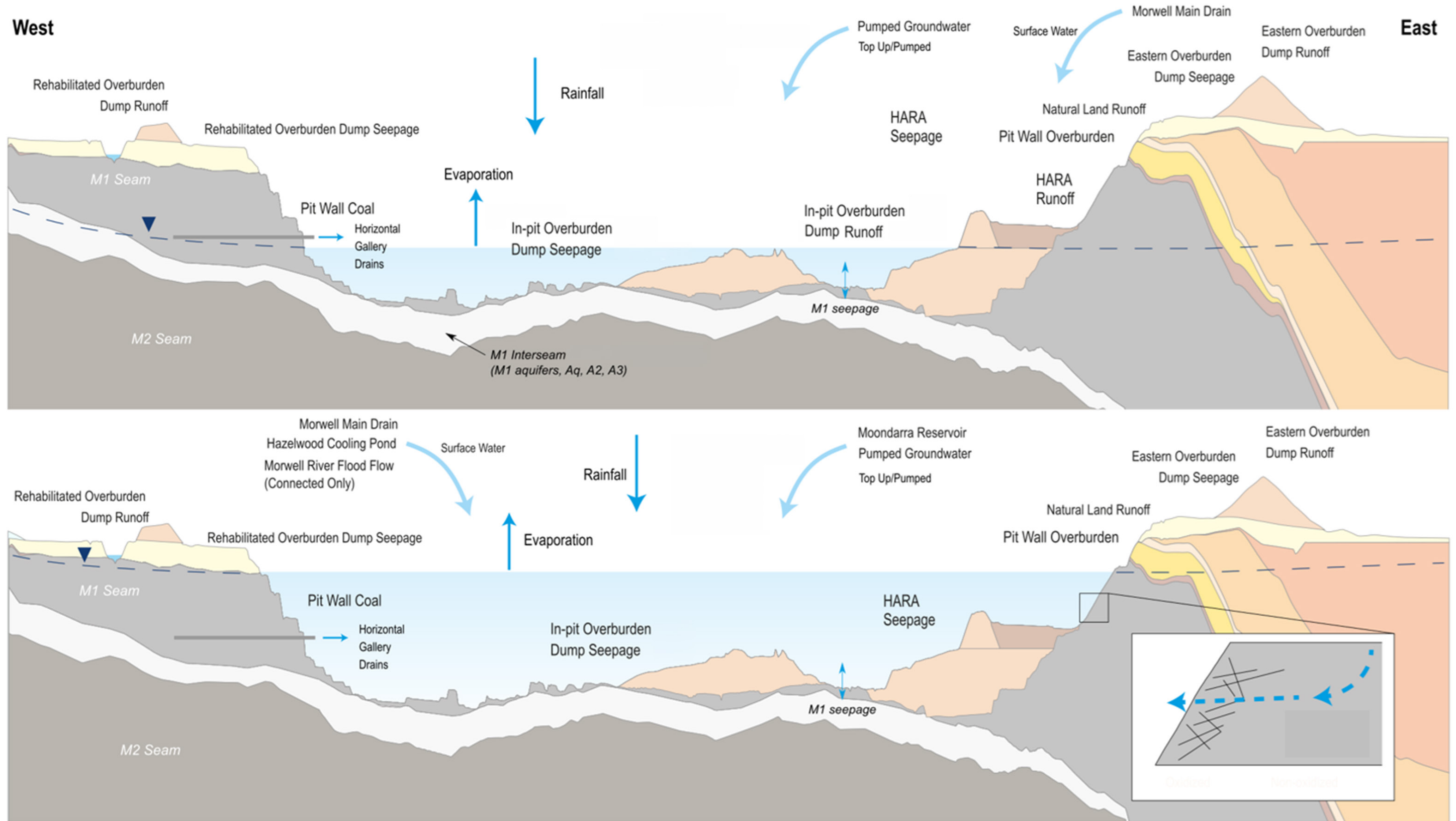


Figure 6-2: Conceptual model of geochemical processes for baseline conditions (-7m AHD scenario; top) and high-level lake (+45m AHD project scenario; bottom)



6.3 ECOLOGICAL VALUES DOWNSTREAM OF THE SITE

The Hazelwood site is within the Latrobe River catchment around 70 kilometres upstream of the Gippsland Lake Ramsar site. The Latrobe River system has experienced significant land use changes since European settlement. The upper reaches of the Latrobe River system are in good condition. However, river conditions deteriorate downstream, having been altered by major water storages, agricultural and mining activities, and the permanent opening of the Gippsland Lakes to the marine environment. The assessment of impacts on ecological values downstream of the site considered the implications of hydrological and water quality changes due to the project.

Hydrology and water quality assessments identified that the Gippsland Lakes are not expected to be materially different compared to the baseline conditions as a result of any changes to annual stream flows in the Latrobe River and Morwell River during filling. Significant impacts on associated environmental values and the Gippsland Lakes Ramsar site are not expected.

Once full, the pit lake may also discharge water intermittently in the connected lake scenario, subject to inflows. These discharges to the Morwell River and ultimately to Lake Wellington (part of the Gippsland Lakes Ramsar site) via the Latrobe River, are unlikely to influence water quality downstream. Nevertheless, this connection presents a pathway for downstream ecological risks, and the installation and operation of gates at the pit lake outlet will ensure that water discharges are of suitable quality.

With the implementation of mitigation measures, such as the installation and operation of gates at the pit lake outlet in the connected lake scenario to manage the release of flows into the downstream environment, any potential impacts on downstream ecological values can be effectively managed. Accordingly, no significant impacts on waterways and wetlands and associated environmental values compared to the baseline conditions are anticipated. Given the long-term nature of the project, adaptive management (monitoring and contingency plans) is an important part of project implementation.

Further information is presented in Chapter 11: Catchments, rivers and wetlands and Chapter 25: Matters of national environmental significance.



6.4 ECOLOGICAL VALUES ON SITE

The Hazelwood site is highly modified, with little pre-colonisation native vegetation remaining. Significant modifications have included clearing native vegetation, diversion of the Morwell River, changes to the landform and creation of water bodies. Nevertheless, some remnant ecological values exist at the site, including some associated with water features created for the operation of the Hazelwood Mine and Power Station, revegetation projects, and offset areas established by the mine operators.

Within the proposed rehabilitation works areas, earthworks and decommissioning activities would alter landforms and affect associated ecological values, including native vegetation on the fringes of operational ponds, and potential habitat for threatened species. The amount of native vegetation to be removed has been minimised by the siting of the inflow and outflow infrastructure, and opportunities to further reduce vegetation losses will be investigated during detailed design development.

EPBC Act listed and *Flora and Fauna Guarantee Act 1988* (Vic) listed threatened fauna species are known to or likely to use the Hazelwood site. The majority of these are birds that potentially use the HCP, other operational ponds within the site and the Morwell River wetlands immediately north of the site. Removal of potential habitat and the associated risk of displacement or physical impact could affect individuals or local populations of these species, including Lewin's Rail, Australian Little Bittern, Flinders Pygmy Perch and Glossy Grass Skink.

Offsets for the loss of native vegetation will be required in accordance with the Victorian Native Vegetation Removal Regulations. The remediation works at the site and the proposed restoration of the natural alignment of Eel Hole Creek following the decommissioning of the HCP are expected to have beneficial environmental outcomes, including increasing ecological values at the site.

Further information is presented in Chapter 15: Ecology and Chapter 25: Matters of national environmental significance.

6.5 GEOTECHNICAL RISKS

Landform stability is critical to rehabilitation success. The key geotechnical risks for the site are batter stability, ground movement and mine floor stability. ENGIE Hazelwood manages the present geotechnical and hydrogeological risks at the Hazelwood site in accordance with its Ground Control Management Plan. Groundwater pumping has been undertaken since 1960 to maintain safe and stable conditions at the Hazelwood Mine.

Batter stability refers to the structural integrity and safety of the angled walls in a mine pit. Ground movement, and potentially batter instability, can occur through block sliding, as shown in **Figure 6-3**. Ground movement may affect structures or assets. The high-level pit lake would provide a stabilising lateral counterweight on the mine batters, meeting the long-term design acceptance criteria.

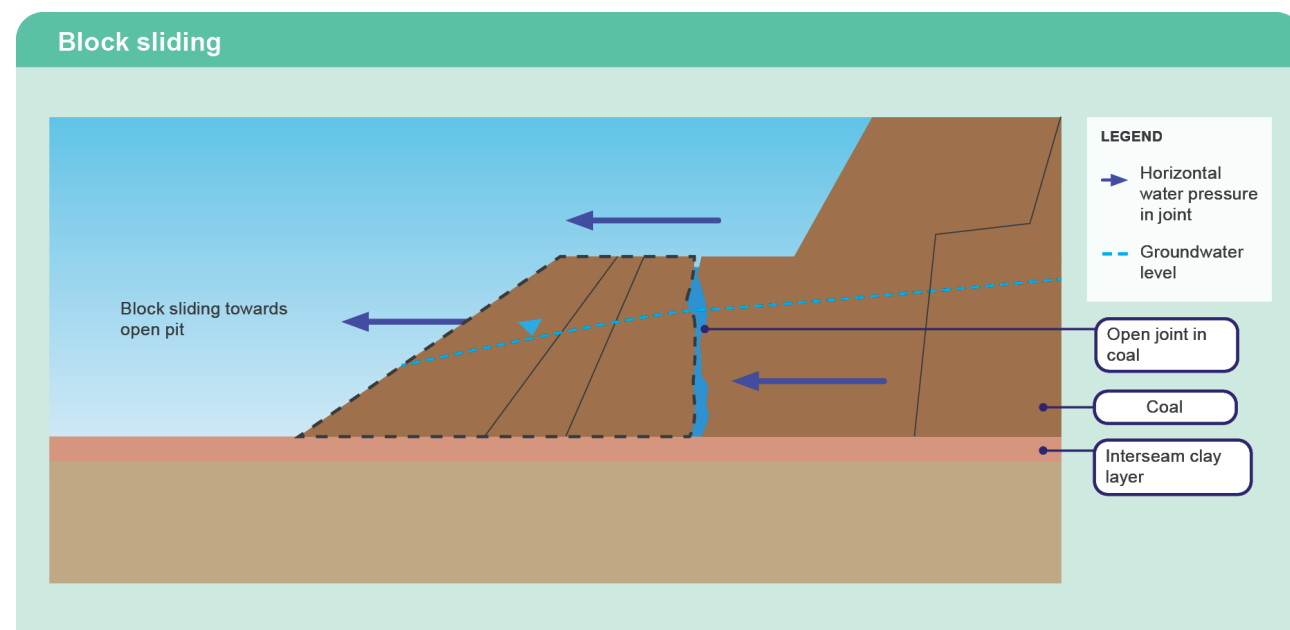


Figure 6-3: Block sliding

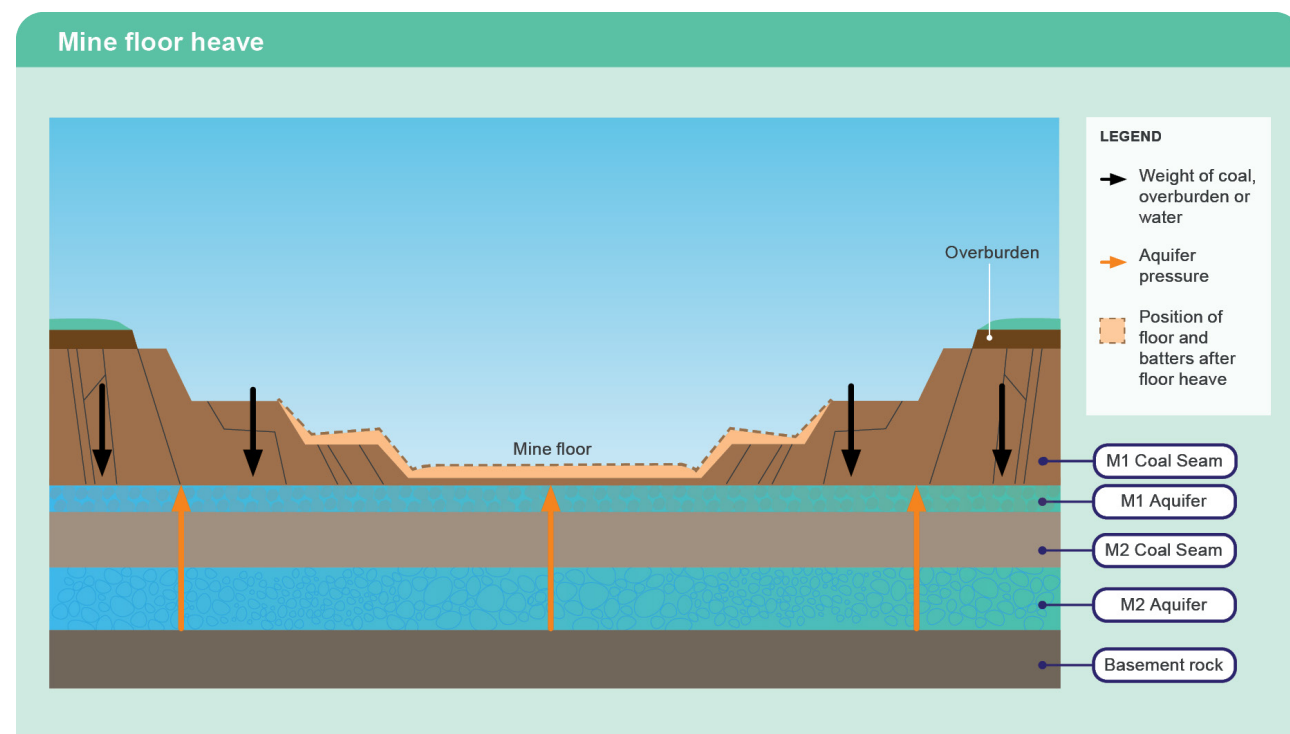


Figure 6-4: Weight balance forces and mine floor heave

Mine floor stability is affected by the potential for floor heave as shown in **Figure 6-4**. For mine floor stability in the long term, maintaining a pit lake at RL +45m AHD is predicted to create a safe and stable landform and effectively manage floor heave risk by counteracting the recovering aquifer pressures.

Historically, ground movement in the vicinity of the Hazelwood Mine occurred due to excavation of the material and dewatering and depressurisation of the M1 and M2 aquifers. Groundwater depressurisation has resulted in ground surface subsidence, which is expected to gradually reverse once groundwater pumping ceases.

To manage long-term risks, the lake level of RL +45m AHD will need to be maintained, and a comprehensive groundwater monitoring network will be established for the post-closure phase. The final high-level lake landform will achieve largely

passive management of these geotechnical issues, minimising risks to infrastructure, property, public safety and supporting productive future uses of the site. Furthermore, once the pit lake is established, the cessation (or significant reduction) of groundwater pumping once the pit lake is established is expected to enable regional aquifer levels to recover towards pre-mining conditions.

Further information on geotechnical risks and ground movement is presented in Chapter 14: Ground movement and geotechnical hazards. Further details on groundwater impacts and recovery are presented in Chapter 12: Groundwater.

6.6 CONTAMINATION

Following operational closure, investigations of the Hazelwood site have been progressively undertaken to address historical land contamination under an EPA Victoria-approved Clean Up Plan (CUP). Several landfills are present at the site, including coal ash contained within the Hazelwood Ash Retention Area (HARA). ENGIE Hazelwood is required to remediate and clean up the land in accordance with the CUP and verify this through statutory environmental audits. This work is being completed separately from the EES assessment.

The rehabilitation works would be undertaken according to the project's environmental management plans such that any exposed sediments, contaminants or acid sulfate soils from the draining of the HCP or earthworks are contained, reducing the risk of poor quality runoff to aquatic ecosystems. Further, the environmental audit recommendations will be implemented to address any residual risks, and subsequent audits may be necessary for any specific alternative land uses pursued by third parties in the future.

Further information on contamination is presented in Chapter 13: Land and solid waste.

6.7 MINE FIRE RISK

Mine fire represents a significant risk at the Hazelwood site, which currently requires ongoing active management. Considering the physical properties of brown coal, or lignite, and history of mine fires across the Latrobe Valley mining industry, including the Hazelwood Mine Fire in 2014, fire risk at the Hazelwood site is the subject of rigorous legislative and regulatory controls and risk management documentation.

ENGIE Hazelwood’s rehabilitation planning has been strongly informed by fire risk, as effectively mitigating fire risk is a key aspect of establishing a safe, stable, sustainable, and non-polluting final landform at the Hazelwood Mine.

Filling the mine void with water would reduce mine fire risk associated with exposed coal. In the post-closure phase, mine fire risk would be effectively eliminated, and it is expected that the site’s risk profile would be similar to or lower than the surrounding landscape.

> Further information is presented in Chapter 23: Mine fire risk.



6.8 ABORIGINAL CULTURAL HERITAGE AND HISTORIC HERITAGE VALUES

The Gunaikurnai people are the Traditional Owners of the land and waters for the region within which the project is located. They are the native title holders over a significant area of Crown land and waters in the Latrobe Valley and greater Gippsland regions.

As a result of historic mining activities and salvage works in accordance with previous approvals, limited Aboriginal cultural heritage artefacts and post-contact historic heritage places remain at the site. Known artefacts within the project area indicate patterns of Aboriginal occupation and subsistence. A CHMP will be developed for the works to specify mitigation and monitoring measures to manage potential impacts on Aboriginal cultural heritage, including protocols to manage any unexpected finds.

In recognition of the significant historic disturbance at the Hazelwood site, ENGIE Hazelwood is committed to ongoing engagement with the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) on rehabilitation methods and opportunities for participation.

> Further information is presented in Chapter 16: Aboriginal cultural heritage and Chapter 17: Historic heritage.

6.9 COMMUNITY AMENITY AND LAND USE

Notwithstanding the proximity of the towns of Morwell and Churchill to the Hazelwood site, the potential amenity impacts associated with the rehabilitation works are localised and comparable to existing conditions. Following the successful completion of the rehabilitation works, including the implementation of the high-level pit lake and remediation and revegetation of the surrounding land, the project is expected to have a positive effect on the community. It is anticipated that the local air quality, noise and vibration, and the landscape and visual outlook would be improved.

Once the mining licence is relinquished, the project area is expected to present opportunities for various alternative land uses. As outlined in the Concept Master Plan, residential, commercial, recreational, agricultural and conservation land uses are all conceivable. Specific developments would be subject to further investigations to determine their feasibility, consultation with stakeholders and separate approvals in accordance with applicable planning requirements.

The final high-level pit lake landform is expected to be suitable for future productive uses and would improve socio-economic conditions in the area through providing possible public access to the site, and creating opportunities for economic development, local employment and a future community asset.

> Further information is presented in Chapter 18: Air quality, Chapter 19: Noise and vibration, Chapter 20: Landscape and visual, Chapter 24: Transport, Chapter 21: Land use and Chapter 22: Socio-economic impacts.



07 Managing the environmental effects

An EMF provides a transparent framework to manage environmental effects of the project during rehabilitation and post-closure to achieve acceptable environmental outcomes. Further details are provided in Chapter 26: Environmental Management Framework.

The EMF outlines the mitigation measures, monitoring and contingency measures derived from the technical studies to manage risks and impacts, serving as environmental commitments enforced through statutory approvals. These measures will be carried through to the site's management plans, including the DMRP, Risk Management Plan, Emergency Response Plan, Stakeholder Engagement Plan, Construction Environmental Management Plan and other specialised plans. These management plans will be approved by the relevant statutory authorities.

Once the pit lake has been established, long-term risks at the Hazelwood site would continue to be managed through the post-closure plan within the DMRP (which would be registered on title) and through the administration of the Declared Mine Fund, to which ENGIE Hazelwood will be required to contribute once the closure criteria within the DMRP have been met.

ENGIE Hazelwood will continue to oversee the project during the active and passive rehabilitation phases, encompassing stakeholder and community engagement, securing project approvals, and managing the site's rehabilitation. Once the closure criteria have been met, ENGIE Hazelwood will seek approval from Resources (RV) and the Minister for Resources to enable the relinquishment of Mining Licence MIN5004 and the eventual transfer of ownership of the site. Relinquishment of the Mining Licence would allow the land to be transferred to other parties for non-mining land uses.

Figure 7-1 provides an outline of the key plans required under the relevant statutory approvals and consents. Different plans will be required for areas within and outside the boundary of Mining Licence MIN5004.

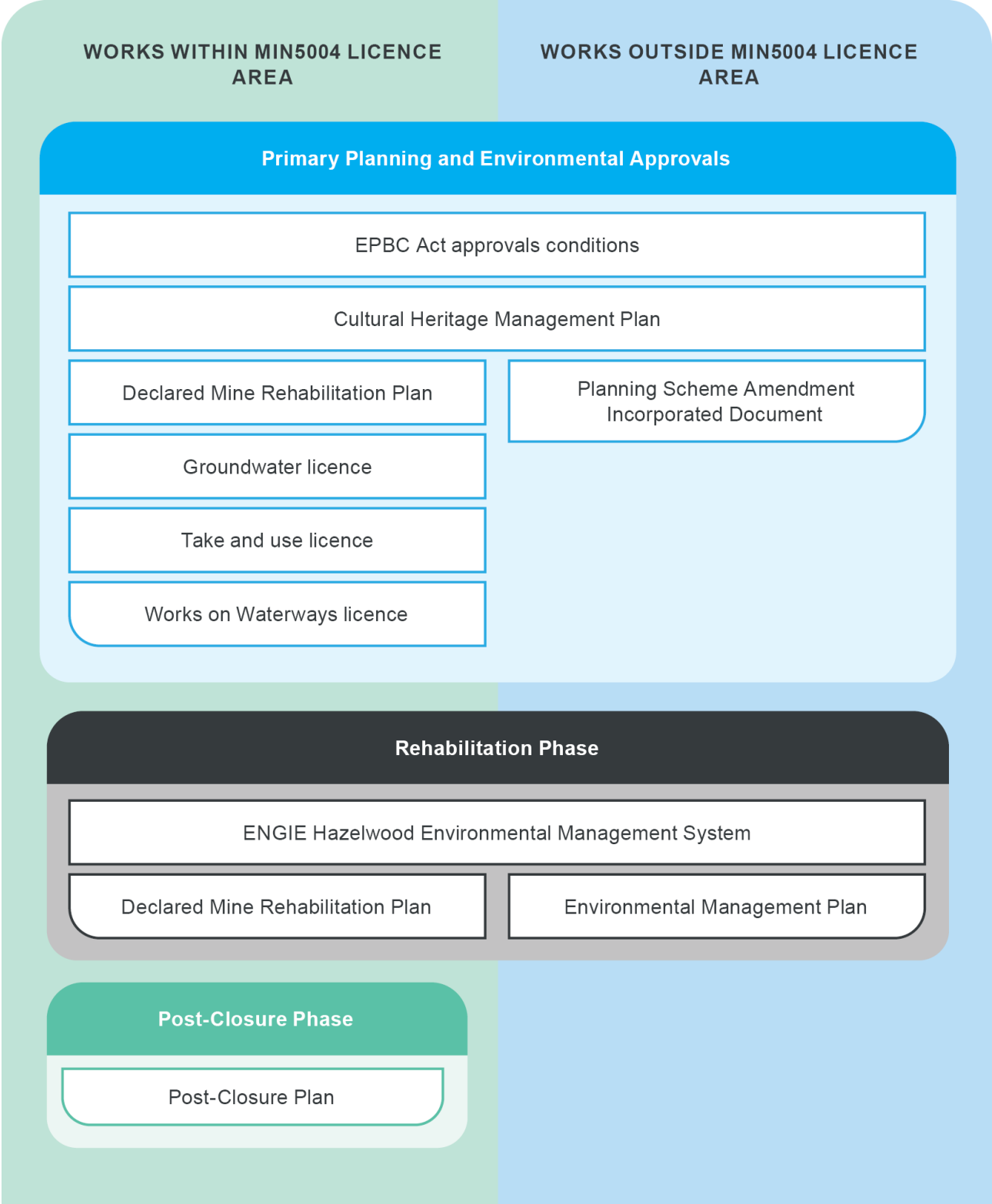


Figure 7-1: Statutory approvals and environmental management systems and plans

08 Consultation and public participation

During EES preparation, stakeholders, including the local community, were invited to provide feedback on the project’s assessment, particularly on the scope and methods of the technical assessments. Community members are also invited to provide feedback on the EES findings and the draft PSA during its public exhibition.

8.1 CONSULTING WITH COMMUNITY, STAKEHOLDERS AND TRADITIONAL OWNERS

Throughout 2023 and 2024, various consultation activities were held to support the preparation of the EES, using multiple methods to share information and promote participation. These included email updates, the launch of a new dedicated project website to provide detailed information, the publication of project overviews, fact sheets, and technical papers, briefings and a Technical Conversation Series.

Advice was also received from the TRG and the IESC during preparation of the EES. ENGIE Hazelwood continues to engage with statutory authorities on approvals documentation, including the DMRP working group and GLaWAC.

GLaWAC has been involved at several stages of the project, including engagement through the EES process, participation in a cultural values study, guiding and evaluating the project’s CHMP and direct engagement on partnership opportunities.

The feedback received from the community, stakeholders and Traditional Owners has helped identify areas of community concern or interest, so these could be considered during design development and in the EES technical studies. Some feedback related to the entire project, while other feedback was more specific about an individual aspect or local area.

In addition to the EES process, ENGIE Hazelwood was required to publicly exhibit a draft of its DMRP to gather public feedback (by seeking written submissions) for a period of at least 60 days. This was undertaken between July and September 2025.

>

Further information on the engagement activities undertaken during the EES preparation period can be found in Chapter 7: Stakeholder and community engagement and Attachment V: EES Consultation Report.

8.2 Public exhibition of the EES

The EES and draft PSA will be on public exhibition for 30 business days. During this time, the public can read the EES and make written submissions about matters presented within it.

8.2.1 Viewing the EES

The EES documents can be accessed via:

- The project website at: hazelwoodrehabilitation.com.au
- Printed copies of the EES and Attachments are available to view at:
 - Morwell GovHub, Ground Floor, 65 Church Street, Morwell.
 - TAFE Gippsland, Traralgon Campus, 49-63 Princes Street Traralgon.
 - Sale Library, 70 Foster St, Sale
 - State Library of Victoria, 328 Swanston Street, Melbourne.
- USBs containing the EES and Attachments are available for free at:
 - Morwell GovHub, Ground Floor, 65 Church Street, Morwell.
 - TAFE Gippsland, Traralgon Campus, 49-63 Princes Street Traralgon.
 - Sale Library, 70 Foster St, Sale.

Engagement activities during the exhibition of the EES are designed to help communities and interested stakeholders access information in the EES relevant to their interests and provide information on how to make a submission. Engagement activities during this phase include:

- Advertising and promotion of the EES exhibition and opportunities to make a submission, through print and radio advertising, mailouts and local awareness raising activities.
- Drop-in information sessions with technical support available to help attendees navigate the EES and submission process.

8.2.2 Making a submission

Through the formal public exhibition process, community and stakeholders have the opportunity to make a submission in relation to the EES and draft PSA.

Submissions can be lodged via the Victorian Government’s Engage Victoria website: <https://engage.vic.gov.au/Hazelwood-Rehabilitation-Project-IAC>. Submissions will be treated as public documents and will be published on the Engage Victoria website.

Submissions on the EES and draft PSA must be made in writing and received before the close of the exhibition period 11:59PM on Monday 2 November 2026.

If you do not have internet access and are unable to lodge a submission online, please contact Planning Panels Victoria (PPV) through the Customer Call Centre on 136 186 (select Option 6) and request a hard copy submission coversheet.

The submission collection process is independently managed by Planning Panels Victoria (PPV), and any enquiries regarding the management of submissions or the Inquiry and Advisory Committee and hearing process should be directed to PPV.





8.3 NEXT STEPS

Public Hearing and review of public submissions

The Minister for Planning will appoint an independent Inquiry and Advisory Committee to advise on the environmental effects of the project in accordance with terms of reference issued by the Minister for Planning.

After the exhibition period, the Inquiry and Advisory Committee will conduct a public Hearing. The Hearing gives ENGIE Hazelwood and people who have made submissions and indicated they wanted to be heard an opportunity to speak in support of their written submission.

Following the public Hearing, the Inquiry and Advisory Committee will review the EES, and all written submissions received before providing advice to the Minister for Planning.

Further information about the hearing process will be published on the Engage Victoria website: <https://engage.vic.gov.au/Hazelwood-Rehabilitation-Project-IAC>

Minister's assessment

The Minister for Planning prepares an assessment that considers all relevant information, including the EES, tabled documents, public submissions and the Inquiry and Advisory Committee report. This assessment makes recommendations about whether the environmental effects of the project are acceptable or whether modifications are needed.

Informing decision-makers

The relevant decision-makers, including the Commonwealth Minister for the Environment under the EPBC Act, will consider the Minister's assessment in deciding whether or not to approve the project. While the recommendations of the Minister's assessment carry considerable weight, they are not binding on decision-makers, who can impose further requirements on the project.

Approving the Hazelwood Rehabilitation Project

Once decision-makers are satisfied, approvals will be granted for the project to proceed.



