STAR OF THE SOUTH

Environment Effects Statement

WORKS IN VICTORIA SUMMARY REPORT

ACKNOWLEDGEMENT

We acknowledge the people of the Gunaikurnai nation as the Traditional Custodians of the country where Star of the South is proposed, and pay respect to their Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to working in partnership with First Nations people.

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Star of the South has also prepared a Commonwealth EIS which assesses the offshore wind farm and matters of national environmental significance.

Refer to the EIS Summary Report

1. INTRODUCTION

Bringing offshore wind to the grid to power Gippsland, Victoria and Australia

1.1 About this report

This Environment Effects Statement (EES) Summary Report provides an overview of works in Victoria for the Star of the South Offshore Wind Farm Project and findings from its Victorian EES.

It provides an overview of the underground cable system in Victoria including:

- How it has been developed
- What is involved in its construction, operation and decommissioning
- Environmental assessment findings associated with the transmission cables.

A separate **Environmental Impact Statement (EIS) Summary Report** provides an overview of the Commonwealth EIS, which assesses the entire project. This is where information about the offshore wind farm can be found.

1.2 Works in Victoria

In Victoria, the project comprises underground transmission cables which cross Victorian waters (up to 5.5 km offshore) and 30 km of land from Reeves Beach to Giffard.

1.3 Development

The project's underground cable system has been developed and refined over several years in consultation with Traditional Owners, government, local communities and other stakeholders.

The development process has involved identifying and evaluating a range of design options and alternatives, considering environmental, technical, stakeholder and commercial factors.

Scientific data, expert advice and feedback have shaped key aspects of the cable system design, its route, proposed construction methods and approaches to avoiding and minimising potential impacts.

1.4 Approvals

The Star of the South project requires a range of Commonwealth and Victorian government approvals.

The EES is not an approval process. It results in an assessment of potential environmental effects and provides Victorian decision-makers with the information they need to decide if approvals should be granted.

Key Victorian approvals required for the underground cable system include:

- Consent under the Marine and Coastal Act 2018
- An approved Cultural Heritage Management Plan under the Aboriginal Heritage Act 2006
- Planning approval under the Planning and Environment Act 1987.

Refer to the EIS Summary Report for information about Commonwealth approvals for the offshore wind farm.

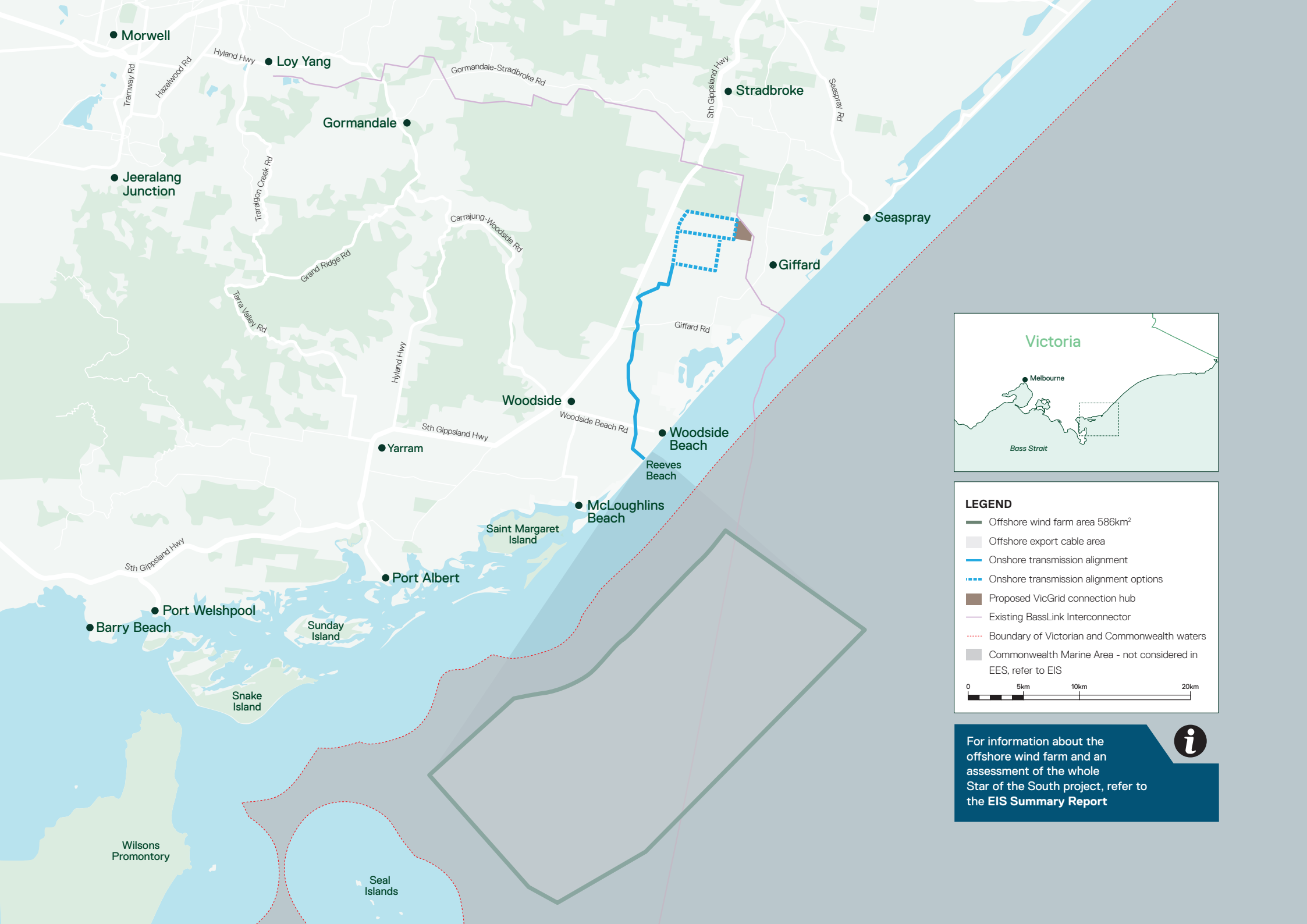
About the Star of the South project

Star of the South is Australia's most advanced offshore wind project.

Located off the coast of Gippsland, it will harness strong and consistent Bass Strait winds to deliver significant amounts of clean, reliable power to the grid from 2032.

With a capacity of up to 2.2 GW, the project can meet approximately 20% of Victoria's current electricity demand, enough to power more than 1.2 million homes annually.

It will help offset the loss of power supplied by Australia's retiring coal fleet, meet Commonwealth and Victorian emissions reduction targets, and create a more reliable and resilient energy system.


Morwell
Loy Yang
Gormandale
Stradbroke
Seaspray
Giffard
Jeeralang Junction
Woodside
Woodside Beach
Yarram
Reeves Beach
McLoughlins Beach
Saint Margaret Island
Port Albert
Port Welshpool
Barry Beach
Sunday Island
Snake Island
Wilsons Promontory
Seal Islands
Hyland Hwy
Tramway Rd
Hazelwood Rd
Gormandale-Stradbroke Rd
Sth Gippsland Hwy
Seaspray Rd
Traralgon Creek Rd
Carrajung-Woodside Rd
Grand Ridge Rd
Tarra Valley Rd
Giffard Rd
Woodside Beach Rd
Victoria
Melbourne
Bass Strait
LEGEND
Offshore wind farm area 586km²
Offshore export cable area
Onshore transmission alignment
Onshore transmission alignment options
Proposed VicGrid connection hub
Existing BassLink Interconnector
Boundary of Victorian and Commonwealth waters
Commonwealth Marine Area - not considered in EES, refer to EIS
0
5km
10km
20km
For information about the offshore wind farm and an assessment of the whole Star of the South project, refer to the **EIS Summary Report**

2. WHY THE STAR OF THE SOUTH PROJECT IS NEEDED

Supporting a clean, reliable and resilient energy system for Australia's future prosperity

The EES assesses works in Victoria associated with the project's underground transmission cables. These works are one part of the overall offshore wind farm project, which is assessed through a Commonwealth EIS. The following section provides an overview of the rationale for the Star of the South project overall, of which the works in Victoria are one component.

2.1 A clean energy future

Australia's electricity system is changing. Renewable energy is central to future supply and demand is rising as homes and businesses electrify.

The Commonwealth and Victorian governments have legislated targets to reduce emissions and increase renewable energy capacity, including specific Victorian targets for offshore wind.

Advanced in its development and backed by firm investment, the project is uniquely positioned to support these critical targets and timeframes.

Emissions targets

Target	
Commonwealth	
Net zero emissions	By 2050
Emissions reduction	62-70% below 2005 levels by 2035
Renewable electricity	82% by 2030
Victoria	
Net zero emissions	By 2045
Renewable electricity	65% by 2030, 95% by 2035
Offshore wind capacity	2 GW by 2032, 4 GW by 2035, 9 GW by 2040

2.2 The need to act now

Coal-fired power stations are retiring faster than initially expected, with 90% of capacity expected to close by 2035 and all by 2051.

This creates an urgent need for new energy sources to offset this loss. New capacity must be developed before coal-fired power stations close to avoid supply shortfalls and impacts to price and reliability.

The Star of the South project will deliver large-scale and reliable generation to support a stable energy transition.

2.3 The role of offshore wind

Offshore wind farms harness strong and consistent ocean winds to generate electricity.

This mature energy technology has been in use since 1991, with more than 13,000 turbines now generating power in 20 countries worldwide.

In Australia, offshore wind will be critical to meet energy needs and climate targets. The Australian Energy Market Operator forecasts that offshore wind will contribute:

- 5% of generation by 2035
- 10% of generation by 2040.

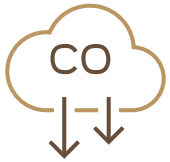
It will complement solar and onshore wind energy by supplying power at different times and when those sources are less available.

Harnessing a world-class resource

Australia has extensive untapped offshore wind resources. Bass Strait winds are particularly strong, consistent and match daily and seasonal peak demand for electricity. In recognition of this potential:

- The Commonwealth Government established a regulatory framework for the industry and declared an area off the coast of Gippsland as suitable for offshore wind development
- The Victorian Government legislated offshore wind targets and is developing supporting port and transmission infrastructure.

Boosting capacity
by up to
2.2 GW



Saving
7 million
tonnes of CO_2 emissions
per year

Enough electricity to power
1.2 million
homes

Creating up to
6,000
direct Australian jobs
over the project's life

Adding **$8 billion**
to the Australian economy

Key benefits

More energy, less impact

Offshore turbines are taller and more powerful than those on land. They catch stronger winds and produce more power, far from homes.

Gippsland is home to the largest available grid capacity in Victoria. Leveraging this existing infrastructure reduces the amount of new transmission needed, avoiding impacts and costs.

2.4 Alternatives considered

Different ways to meet Victoria's energy needs have been considered. Offshore wind provides a range of advantages, including:

- Delivers reliable, large-scale energy at the right time and place
- Furthers emissions reduction targets
- Creates long-term economic and social benefits.

2.5 Regional jobs and investment

The project will contribute around $8 billion to the Australian economy and create up to 6,000 Australian jobs over its lifetime, mostly in Victoria.

Gippsland has powered Victoria for generations. As its coal-fired power stations retire, offshore wind is an opportunity to continue the region's energy industry and jobs.

The project will create opportunities for Gippsland's economy, workforce and supply chain. Benefits for Gippsland include:

- $3 billion direct investment in the region
- 800 direct local jobs across the project's life, including up to 200 long-term roles, and substantial indirect job opportunities
- Opportunities for local businesses to participate in the supply chain
- Investment in regional skills, training and community partnerships
- Support for workers transitioning from coal, oil and gas industries.

Detailed information on why the project is needed is available in:

EES Chapter 2 – Project rationale

3. THE PROJECT IN VICTORIA

Connecting offshore wind energy to the grid

3.1 Overview

In Victoria, the project comprises underground transmission cables which cross Victorian waters (up to 5.5 km offshore) and 30 km of land from Reeves Beach to Giffard.

3.2 Overall project objectives

The Star of the South project aims to deliver an environmentally, economically and technologically viable project that provides clean and reliable electricity for Australians.

Objectives of the overall Star of the South project have also guided decisions about the works in Victoria. These objectives are:

1. Deliver a significant, secure and reliable source of large-scale renewable electricity to meet Victoria's legislated offshore wind target of 2 GW by 2032 and progress towards Australia's legislated net-zero emissions by 2050 target.
2. Adapt proven offshore wind technologies to local conditions while avoiding and minimising significant risks of harm to the environment, so far as reasonably practicable.
3. Develop and deliver the project in consultation with Traditional Owners and local communities.

3.3 Timeline

Development has been underway for around 7 years. If approved in the next few years, construction could start towards the end of the decade, with electricity generation from 2032.

3.4 Components

1 Offshore export cable

Up to 8 offshore export cables will transmit electricity from the offshore wind farm to shore. They transmit electricity at a higher voltage (up to 275 kV) and are buried in the seabed at a target depth of between one and 2 m.

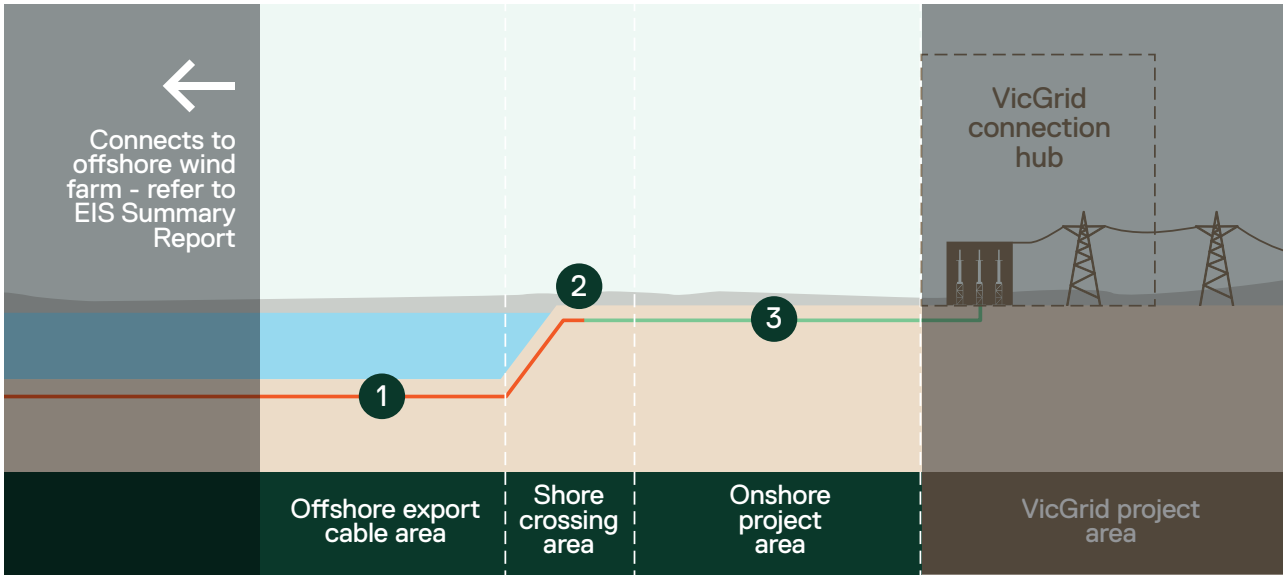
2 Shore crossing

Up to 8 trenchless shore crossings, running below the beach and dunes, will connect offshore export cables to the onshore cables.

3 Onshore underground cables

Onshore cables will be installed underground within a 40-m-wide easement. A maximum of 8 circuits will be buried 1 m deep in up to 4 trenches.

The cable route is approximately 30 km long and connects to the grid at the proposed VicGrid connection hub in Giffard. The connection hub is the responsibility of VicGrid and is subject to separate planning and approval processes.



Key project components

Example shore crossing work site

3.5 Construction

Victorian works are limited to the onshore cables, shore crossing and offshore export cables. These works may take up to 4 years.

Construction takes place in stages, starting onshore then moving onto offshore construction.

Offshore construction

Offshore construction in Victorian waters is expected to take up to 2 years and will involve:

1. Site preparation activities - including survey and removing obstacles or hazards from the seabed.
2. Offshore export cable installation - starting from the shore crossing, cable laying vessels are used to install cables in the seabed using methods such as ploughing, jet trenching or mechanical trenching.

Shore crossing construction

Shore crossing construction is expected to take up to 2 years and 3 months.

A trenchless construction method will be used to install the shore crossings. This will avoid open-cut trenching in the sensitive nearshore and coastal environment. It involves drilling bores and installing ducts underground through which the cables are then pulled and housed.

A temporary construction compound on private land north of Reeves Beach will host the drilling and cable jointing activities and provide storage and worker facilities. Vessels offshore assist with cable pulling.

All construction areas will be rehabilitated as soon as possible after works are finished, leaving no permanent visible above ground infrastructure except ground-level pit lids and safety signage.

Onshore construction

Construction of the onshore transmission system is expected to take up to 2 years and 2 months, and will involve:

1. Site establishment – including setting up work sites, temporary facilities and installing environmental controls.
2. Cable system construction – sections of cable are installed in trenches, jointed and the trenches backfilled. In select sensitive locations, trenchless methods may be used.
3. Demobilisation and rehabilitation – all construction areas will be rehabilitated as soon as possible after works are finished, leaving no permanent visible above ground infrastructure except ground-level pit lids and signage.

3.6 Operation

The offshore wind farm is expected to operate for 30 years. During this time, project infrastructure will be monitored and operated remotely from local facilities.

Offshore, infrequent inspections and maintenance of the export cables will be completed using vessels or remotely operated underwater vehicles.

Onshore, the underground cables and easement will be inspected once or twice a year and maintained as needed.

3.7 Decommissioning

At the end of the project's life, it will be decommissioned. Decommissioning plans will be prepared in advance, in accordance with approval conditions, regulatory and other requirements current at the time. These plans will describe the proposed activities, methods, potential impacts and management measures.

3.8 Ports

Ports serve as a hub for offshore construction and operation activities. Multiple port options are being considered to support the project's construction. An operations base will be established at a Gippsland port. Port selection is subject to ongoing investigation.

Any port development or upgrade is the responsibility of the port operator and is subject to separate assessment and approval processes.

Detailed information about the project is available in:

EES Chapter 4 – Victorian works project description

4. PROJECT DEVELOPMENT

Designing a feasible, effective, and responsible transmission connection that avoids and minimises impacts

4.1 The project's evolution

Project development involves advancing designs from a conceptual stage to detailed design over several years.

Since 2017, the underground cable system for Star of the South has undergone progressive review and refinement considering:

- Project objectives
- Site and environmental data
- Environmental assessment findings
- Feedback from stakeholders and communities
- Engineering and technical constraints
- Policy and regulations.

The EES considers a range of options rather than a single, fixed proposal. This ensures the impacts of all options are considered, while maintaining flexibility for ongoing refinement and innovation.

Transmission development – key steps

1. **Option identification**
   All potential shore crossing and onshore corridor options were identified.

2. **Options analysis**
   Engineering factors, environmental features, biodiversity values, registered Aboriginal cultural heritage sites and social values were analysed to shortlist suitable options.

3. **Consultation and field work**
   Three shortlisted options were studied in further detail. This included site visits and waterway, soil, flora and fauna, and feature surveys. Feedback was sought from landholders along all three corridors, as well as from local communities and stakeholders.

4. **Options assessment**
   Data and feedback were considered through a multi-criteria analysis. This is an evidence-based approach which evaluates each option against several important criteria to determine which one offers the best overall solution. One corridor was selected for further development.

5. **Refinement of selected corridor**
   In-depth landholder engagement, detailed environmental assessments and on-site surveys were undertaken on the preferred corridor. Data collected was used to refine the corridor.

6. **Updates due to VicGrid project**
   To align with new government policy, Star of the South adjusted its transmission alignment to terminate in Giffard at the proposed VicGrid connection hub. Three options for connecting the original transmission alignment to this hub remain open.

7. **Detailed design**
   If the project is approved and proceeds to construction, the alignment will be further refined and confirmed through a detailed design phase, in line with approval and landholder conditions.

4.2 Offshore transmission development

Offshore export cables

The maximum number of export cables has been reduced from 13 to 8 by ruling out an option to run cables directly from turbines to shore.

The initial offshore export cable area was narrowed down following selection of a shore crossing location. Assessment of the remaining area ensures that the impacts of all possible cable route options are considered.

The option of bundling cables together was explored to minimise the number of cable corridors. This option was ruled out due to technical and maintenance constraints.

4.3 Shore crossing development

Location

Two potential shore crossing locations were identified and assessed – Reeves Beach and McGaurans Beach. A multi-criteria analysis identified Reeves Beach as the preferred crossing site as it:

- Reduces the offshore export cable length and footprint
- Avoids complex design and construction challenges associated with existing infrastructure at McGaurans Beach
- Avoids a high-profile reef, registered Aboriginal cultural heritage sites, and Jack Smith Lake.

Construction method

A trenchless construction method was chosen over open trenching to avoid disturbance to the beach and dune system.

4.4 Onshore transmission development

Onshore cables

Underground cables were selected and overhead lines ruled out early in the project's development, based on regional precedents and landholder feedback.

The onshore cable alignment has undergone considerable study and evaluation to determine an appropriate, functional and commercially viable solution which avoids and minimises environmental, social, land use and Aboriginal cultural heritage impacts.

Site surveys and consultation on 3 alignment options informed a multi-criteria analysis and selection of a preferred alignment in 2021. This alignment has since been refined with advice from landholders, Traditional Owners and VicGrid.

Options remain open for connecting the project's onshore cables to the proposed VicGrid connection hub, pending confirmation of its final location.

Grid connection

Offshore wind projects must connect to the grid at the proposed VicGrid connection hub at Giffard.

The hub will include provisions for cable approach areas, substations and associated infrastructure, and is subject to a separate assessment and approvals process, led by VicGrid.

Detailed information on how the project was developed is available in:

EES Chapter 3 – Victorian works project development

5. COMMUNICATION AND ENGAGEMENT

Consultation has played an important role in shaping all parts of the Star of the South project and its assessment

5.1 Overview

As a major infrastructure project and the first of its kind in Australia, Star of the South has attracted interest from a broad range of stakeholders, recording more than 16,000 interactions.

Community engagement has revealed a strong appetite for new, large-scale energy projects to continue Gippsland's history of powering Victoria, provide continuity of energy jobs and economic opportunities in the region, and transition to clean energy sources.

There is also interest in how offshore wind farms are constructed and operated to avoid and minimise impacts to the local environment, heritage values, communities, and other uses of the ocean and land.

5.2 Engagement approach

Consultation helps identify potential issues, solutions and opportunities during the assessment process.

Star of the South published a Consultation Plan in 2021 which sets out its commitment and approach to communication and engagement during preparation of the EES.

Phases

Engagement was carried out in phases linked to project development and assessment milestones and will continue through construction and operation of the project.

This approach involves people at each stage of the project development process and ensures that the right feedback is obtained at the right times to inform project decisions and assessment.

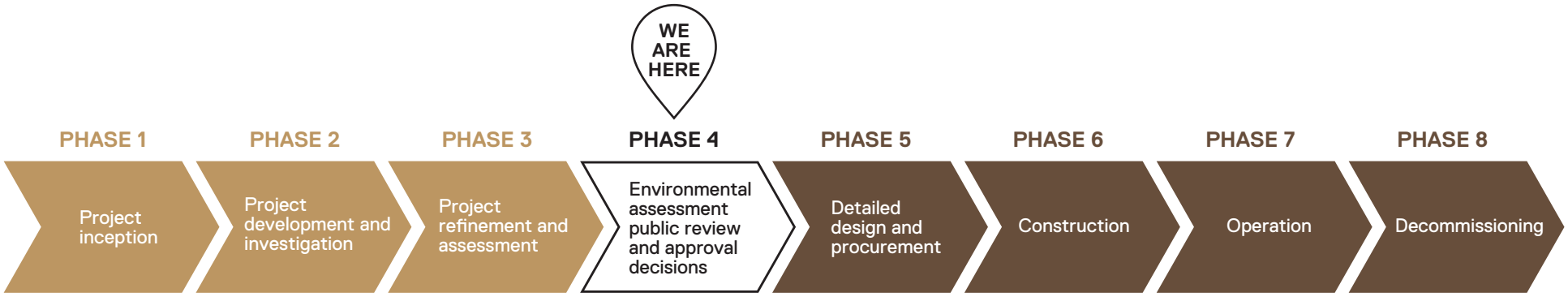
Targeted engagement at each phase has helped identify and understand issues for consideration in the assessment, as well as ideas for avoiding and reducing potential impacts.

Principles

Star of the South believes that involving people early and meaningfully leads to better project, community and environmental outcomes.

All engagement is underpinned by the following principles:

- Open and transparent – we listen with an open mind and are upfront about considerations, impacts and opportunities.
- Responsive – we respond promptly to feedback, no matter how big or small.
- Flexible and inclusive – we're flexible about how things are done, so that feedback can shape the project.
- Act with integrity – we are respectful and honest in all interactions.
- Accountable – we take ownership of issues and provide access to decision makers.



Consultation phases

Methods

A wide range of engagement and communication methods are used to build awareness and understanding of the project, to encourage participation in consultation opportunities and elicit informed feedback, including:

- Print and digital communication tools
- Community Advisory Group
- Technical Reference Group
- Briefings, meetings and workshops
- Presentations
- Information sessions and webinars
- Pop up stalls
- Website and online engagement tools
- Gippsland office staffed by locals
- Community research
- Youth and schools' engagement.

100+ communication materials

400+ visitors to the Gippsland office

133 newspaper advertisements

34 Community Advisory Group meetings

50,000+ households received 6 newsletters

88 community information sessions

100 email updates to 3000 subscribers

3,739 landholder interactions

12,000+ community correspondence

1500+ presentations and meetings

180,000+ website visitors

Engagement overview (to August 2025)

Smoking ceremony

5.3 First Nations

The project is located on Gunaikurnai Country.

As the Traditional Custodians of Country where the project is proposed, Star of the South has worked with Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) since 2017, including on site investigations, cultural education for project personnel, future workforce and procurement planning and agreement-making.

Star of the South entered into an Engagement Agreement with GLaWAC in March 2025 which will support ongoing engagement, agreement-making and benefit sharing.

The project may also be of interest to other First Nations people outside the immediate project area. Star of the South is committed to open and meaningful engagement with individuals and First Nations representative bodies across Australia.

Left: Boat ramp surveys

Schools' engagement

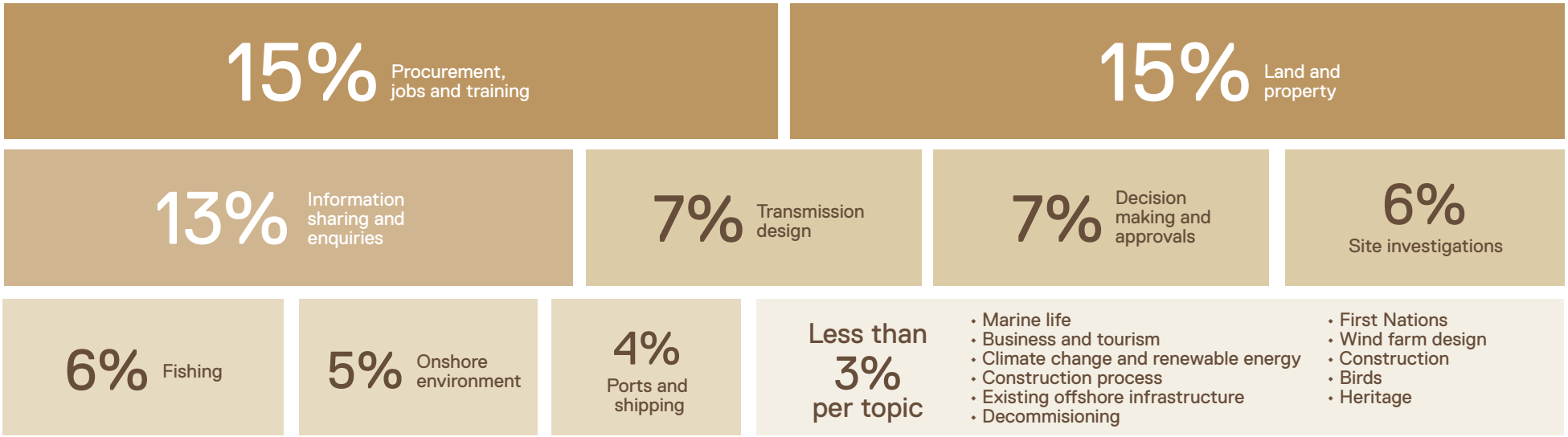
5.4 Key stakeholders

Stakeholder groups engaged in project development and assessment include:

- Government
- Landholders
- Commercial fishing industry
- Recreational fishers, boaters and divers
- Local communities and groups
- Environment and climate groups
- Other infrastructure and licence holders
- Peak bodies and associations
- Ports and shipping
- Education and training providers
- Energy industry stakeholders.

Star of the South appoints dedicated resources to provide a consistent point of contact and ensure appropriate engagement with key stakeholder cohorts, including a:

- Local community engagement team
- Local landholder engagement team
- Fishing Liaison Officer
- Indigenous Engagement Advisor.



Key topics of interest

5.5 Key topics of interest

Interest in job, procurement and training opportunities is the topic most frequently raised by Gippsland communities and stakeholders.

Extensive landholder engagement has also resulted in a range of discussions about land and property matters as the project investigated, consulted on and assessed its onshore transmission corridor.

There is also significant interest in general project information, particularly the timing of the project and its readiness to replace retiring coal-fired power generation, as well as funding and the project scope.

5.6 How feedback has shaped the project

Community and stakeholder feedback has helped shape the project's development and assessment, including in these ways:

- Selection of design options
- The design and delivery of site investigations and environmental surveys
- Understanding community values and concerns for assessment and mitigation
- Developing opportunities for local jobs and businesses
- Consultation planning and methods.

5.7 Ongoing engagement

Star of the South is committed to ongoing and comprehensive engagement with communities and stakeholders across all remaining phases of the project.

A Stakeholder Engagement Plan will be developed to guide continued communication and engagement, in line with best practices and government requirements.

Detailed information on communication and engagement is available in:

EES Chapter 7 – Community engagement

6. PLANNING AND APPROVALS

A robust planning approach addressing environmental requirements

The EES assesses works in Victoria associated with Star of the South's underground transmission cables. For information about the offshore wind farm and an assessment of the whole project, refer to the Commonwealth EIS.

6.1 Requirement for an EES

The Star of the South project was referred under the *Environment Effects Act 1978* (EE Act) in 2020, due to the potential for the project to impact biodiversity, marine and freshwater environments, Aboriginal cultural heritage and land use.

The EES process results in a Ministerial assessment of a project's potential environment effects, which decision makers can use to inform approval determinations. It does not result in an approval.

Victorian EES scoping requirements

The EES has been prepared in accordance with scoping requirements issued by the Minister for Planning in 2021. The requirements:

- Outline the matters that must be investigated under the EE Act
- Ensure that the EES provides sufficient information for the Minister for Planning to assess the environmental effects of the works in Victoria
- Set expectations for the structure and content of the EES
- Require the EES to explain how alternatives were considered, how the community and stakeholders were consulted, and how feedback was considered.

6.2 About the assessment process

The EES brings together scientific research, consultation and technical studies to understand how works in Victoria could affect the environment, people and other important values.

Environmental impact assessments prepared by subject matter experts are documented in technical reports and comprehensively summarised in EES chapters. Each chapter:

- Describes the existing environment, as identified through field work, desktop studies and consultation
- Explains potential impacts from construction, operation and decommissioning, using defined methods to rate their consequence, magnitude and likelihood

Key steps

2020

REFERRAL

Referral of proposed project and decision that an EES is required

2021

SCOPING

Development of scoping requirements for the Star of the South EES

2020-2025

EES PREPARATION

Environmental surveys, community and stakeholder consultation, and technical studies and modelling completed and documented in the EES

2026

PUBLIC REVIEW & INQUIRY

EES exhibited for public review and submissions. An Inquiry considers submissions and prepares a report for the Minister for Planning

2026

MINISTER'S ASSESSMENT

The Minister makes an assessment of the project's environmental effects, to be considered in future approval decisions

- Identifies mitigation measures to address any unavoidable impacts or risks
- Documents the residual impact expected after mitigations have been applied.

The assessment process was iterative to reflect evolution of the cable system's design and new information which became available.

The EES includes an Environmental Management Framework which outlines how environmental performance will be managed, monitored and reported in Victoria if the works are approved.

6.3 Cumulative impacts

Cumulative impacts arise when the effects of a single project are considered alongside other projects or activities which may be undertaken in the same area or timeframe.

The potential for cumulative impacts from other proposed projects are considered in the EES to identify where any combined impact needs extra management.

6.4 Victorian approvals

The purpose of the EES is to inform an assessment by the Minister for Planning that can in turn inform decisions about the following approvals.

Planning Scheme Amendment (PSA)

A PSA under the *Planning and Environment Act 1987* is proposed to allow construction of the onshore transmission system. The amendment would give planning approval through a new Incorporated Document in the Wellington Shire Council planning scheme. The amendment is exhibited with the EES so community feedback can be provided. The project will submit a request to the Minister for Planning to approve the PSA after the Minister's Assessment of the EES.

Cultural Heritage Management Plan (CHMP)

A CHMP under the *Aboriginal Heritage Act 2006* must be obtained before starting any project activities that have the potential to impact Aboriginal cultural heritage in Victoria. The CHMP must be assessed and approved by GLaWAC.

Marine and Coastal consent

Consent under the *Marine and Coastal Act 2018* is also required for the use, development and works on marine and coastal crown land. The consent application is not exhibited with the environmental assessments but will draw from the assessments prepared. The consent application must be considered by the Minister for Environment, or a delegate.

Detailed information about project approvals is available in:

EES Chapter 5 – Victorian legislative framework

Right: Cultural heritage survey

7. ENVIRONMENTAL ASSESSMENT SUMMARIES

The EES assesses potential impacts from the construction, operation and decommissioning of underground transmission cables in Victoria.

Onshore environment	• Ecology • Groundwater • Surface water • Soil and waste • Electromagnetic field exposure • Noise and vibration • Air quality
Social, economic and visual	• Social • Business and tourism • Fishing in Victorian waters • Agriculture and forestry • Land use and planning
Transport and infrastructure	• Traffic and transport
Heritage	• Onshore Aboriginal cultural heritage • Submerged Aboriginal cultural heritage • Historical heritage
Marine environment	• Victorian marine environment • Victorian marine protected areas

Common elements of each assessment and key terms used are explained below.

Study area

This is the geographic area in which impacts have been assessed. The study area can vary depending on the topic being assessed to make sure all important aspects of the environment are included.

Receptors

Receptors are physical or biological resources or user groups that could be impacted by the works in Victoria. Receptors can be people, communities, plants, animals, habitats, natural resources, industries or infrastructure.

Existing conditions

This is the environment or situation as it exists today, relevant to the assessment topic.

Impacts

Impacts refer to the consequences of planned activities. Assessment of the magnitude, sensitivity and significance of the receptors produces a rating for each impact:

Negligible > Minor > Moderate > **Major** > Severe

Potential impacts are positive or negative effects that can be expected to occur if the works are delivered with no mitigations. **Residual impacts** are the final consequences after mitigations have been applied to avoid, minimise or manage a specific impact.

Risks

Risks refer to unplanned events (accidents). Assessment of the likelihood and consequence produces a rating for each risk:

Very low> Low > Medium > **High** > Very high

Potential risks are accidents that could occur if precautions are not taken. Residual risks are the final consequences after mitigations are applied to reduce the likelihood or severity of a risk.

Mitigation measures

Mitigations are protective measures applied to reduce the level of impact or risk. By applying mitigations, impacts or risks may be avoided, minimised or managed to achieve a better outcome.

Mitigation hierarchy

Project phases

Each assessment considers impacts and risks at each phase - construction, operation and decommissioning.

Decommissioning activities are only discussed in this report where they are expected to have a different impact to construction.

Cumulative impacts

To assess cumulative impacts, technical specialists identified proposed developments which may overlap with the works in Victoria in terms of timing and location.

Cumulative impacts are described in the EES chapters.

Detailed information on the assessment process is available in:

EES Chapter 6 – Assessment framework

7.1 Onshore ecology

This assessment considers how the works in Victoria could affect native vegetation, threatened flora (plants) and fauna (animal) species and ecological communities.

More detail:

- **EES Chapter 8 – Onshore ecology**

Study area and approach

The study area for this assessment covers the onshore transmission alignment between Reeves Beach and the proposed VicGrid connection hub in Giffard, plus a surrounding buffer.

To study this topic, ecologists reviewed existing literature and data and carried out field surveys to identify native vegetation, ecological communities, protected species, and habitat features like hollow-bearing trees and ephemeral waterways.

The assessment considers threatened species listed under Victoria's *Flora and Fauna Guarantee Act 1988* (FFG Act), areas of potential groundwater-dependent ecosystems, conservation reserves and weeds and pests.

Existing environment

The existing environment includes agricultural land, roadside vegetation, waterways, private properties, McLoughlins Beach–Seaspray Coastal Reserve and Woodside Bushland Reserve, coastal and near-coastal zones and lowland plains. The Corner Inlet Ramsar site is located 6 km south of the project area.

The onshore environment has been highly modified due to historic clearing, with native vegetation mainly found in isolated patches along creeks, road reserves, property boundaries and conservation land. Vegetation is generally in better condition near and within conservation reserves.

Two endangered native vegetation types (Mapped Wetland and Swamp Scrub) and up to 496 scattered or large trees were identified in the study area.

Flora and fauna species that were either identified or which have the potential to be found in the study area include:

FFG Act-listed threatened flora species

- Pale Swamp Everlasting
- Coast Grey-box
- Dune Wood-sorrel
- Dense Leek-orchid
- Cobra Greenhood
- Spiral-leaved Sun-orchid.

FFG Act-listed threatened species

- Grey-headed Flying-Fox
- New Holland Mouse
- White-footed Dunnart
- Lace Monitor
- Glossy Grass Skink
- Southern Toadlet
- Martin's Toadlet
- Australian Mudfish
- Black Falcon
- Chestnut-rumped Heathwren
- Gang-gang Cockatoo
- Little Eagle
- Powerful Owl
- Orange-bellied Parrot
- Swift Parrot
- White-bellied Sea-Eagle
- White-throated Needletail.

Tree survey

Impacts, risks and mitigations

Residual impacts range from **negligible to major** during construction, with no direct impacts during operation. Residual risks are **low to medium** across all phases.

Construction

The works in Victoria are not expected to have any significant impacts on FFG Act-listed threatened species.

Flora

Early in the project's development, other transmission alignment options with more vegetation were discounted, reducing native vegetation impacts from the outset. As the alignment is further refined through detailed design, priority will be given to further reducing the project's footprint and vegetation removal.

Mitigations to protect native flora include:

- Positioning cables in already cleared agricultural land where possible
- Using trenchless construction methods in select locations to avoid sensitive ecological areas
- Establishing 'no-go zones' to prevent construction around high-value vegetation
- Implementing a suite of management plans to guide sustainable work practices.

These measures reduce the area of potentially affected native vegetation from between 22.53 ha and 29.67 ha to between 15.01 ha to 16.14 ha and reduce the number of large trees which may need to be removed from between 265 and 387 to between 82 and 119. These figures conservatively include the buffer zone, where no direct construction will occur.

All unavoidable vegetation loss will be offset in accordance with Victorian guidelines for the removal, destruction or lopping of native vegetation.

With these mitigation measures in place, the residual impacts to vegetation and flora are:

- Minor to moderate for FFG Act-listed threatened flora species
- Moderate to major for native vegetation
- Major for trees.

Strict procedures will be in place to avoid biosecruity risks, potential indirect impacts to vegetation and habitat fragmentation. All residual risks are low to medium.

Fauna

Mitigations such as route refinement, pre-clearance surveys, fauna relocation and a Flora and Fauna Management Plan will reduce habitat loss. Residual impacts to FFG Act-listed threatened fauna is negligible to moderate.

Pre-clearance surveys, fauna relocation, speed restrictions, and a Flora and Fauna Management Plan will ensure the risk of injury to fauna from vehicles or machinery is low.

Waterways

Residual impacts from construction around waterways are minor and will be managed with procedures to manage sediment and erosion, a Designated Waterway Crossing Management Plan and revegetation to restore connectivity.

Operation

There are no direct onshore ecology impacts associated with the operation phase.

Implementing an Operation Environmental Management Plan will minimise the potential for indirect impacts to biodiversity values.

Potential risks include indirect impacts from maintenance activities on retained vegetation and habitat, habitat fragmentation and injury to fauna by maintenance vehicles.

With mitigations in place, all onshore ecology residual risks during operation are low to medium.

Decommissioning

The removal of infrastructure may result in vegetation removal and typical construction impacts. This activity will be managed through a Decommissioning Management Plan prepared in accordance with regulatory requirements. Native vegetation and fauna habitats will ultimately regenerate.

Right: Skink survey

7.2 Groundwater

This assessment considers how the works in Victoria could affect groundwater in soil, sand and rock underground.

More detail:

- **EES Chapter 9 – Groundwater**

Study area and approach

The study area for this assessment covers the onshore transmission alignment between Reeves Beach and the proposed VicGrid connection hub in Giffard, plus a surrounding 200 m buffer.

To study this topic, specialists identified groundwater sources and uses and looked at current conditions.

Groundwater receptors include bores, groundwater dependent ecosystems and areas where groundwater interacts with surface water.

Existing environment

The primary aquifer (the layer of rock, sand or gravel that holds water or allows it to flow through) in the project area is the Quaternary Aquifer.

Water mainly enters the aquifer through rainfall, waterways and floods.

Groundwater in the study area is between 2 and 20 m underground. It is shallower near the coast and deeper inland.

Several ecosystems in the study area, including 4 watercourses and 8 vegetation types, depend on groundwater to function and support plants or animals. There are 7 registered groundwater wells which supply domestic or stock water in the study area. None of these are located within the construction footprint.

Impacts, risks and mitigations

Residual impacts range from **negligible to minor** across all phases and residual risks are **very low to low** during construction. There are no risks during the operation phase.

Construction

Construction is expected to have a negligible to minor residual impact on groundwater.

The intrusion of coastal saline groundwater into fresher inland groundwater is not anticipated during dewatering and is a negligible residual impact.

With landholder consultation and reinstatement post-construction, residual impacts to nearby wells are minor. Residual impacts to groundwater levels and groundwater dependent ecosystems are negligible.

Acid sulfate soils affecting groundwater quality is a low residual risk that will be managed with an Acid Sulfate Soil Management Plan.

Management plans for flood risk, pollution in trenches and fuel and chemical spills will be in place and the residual risk of runoff during surface excavations affecting groundwater quality is very low.

Operation

Underground transmission infrastructure, such as joint bays, are limited in size and groundwater will be able to flow around them. The residual impact of impeded groundwater flow is negligible. No mitigation is required.

The residual impact to groundwater flow paths is also negligible with monitoring and activation of contingency measures if waterlogging is identified.

7.3 Surface water

This assessment considers how the works in Victoria could affect surface water quality, flood risk, and draining pathways and flows in waterways, streams and wetlands across the region.

More detail:

- **EES Chapter 10 – Surface water**

Study area and approach

The study area for this assessment is the onshore transmission alignment and waterways that intersect it.

To study this topic, specialists completed desktop reviews and field surveys to determine waterway behaviour, channel dimensions and receiving water bodies.

Receptors for this assessment are receiving waters, coastal estuaries and adjacent properties.

Existing environment

The transmission alignment intersects 22 key waterways and several smaller waterways and drainage lines.

Many of these waterways lack prominent channels and have been cleared of natural vegetation making them more susceptible to erosion. Nearly all feature farm dams which are likely to reduce waterway flows in drier months.

Several mapped wetland systems are close to the project's shore crossing at Reeves Beach. Immediately south of Reeves Beach Road is a large coastal saltmarsh.

The project crosses a small unnamed waterway that flows to the Corner Inlet Ramsar Site, which is fed by runoff from paddocks and is seasonally dry.

Impacts, risks and mitigations

Residual impacts range from **negligible to minor** during construction and **minor** during operations. Residual risks are **low** during construction. There are no risks during the operation phase.

Construction

Potential construction impacts include changes to water movements, quality and flood risk. Any effects will be highly localised and/or temporary and the residual impacts are minor or negligible.

Where possible, construction areas will be outside of floodplains, with measures in place to allow continued water flows and avoid flooding. All waterway crossings will be constructed in dry weather or use trenchless construction methods where required.

Best practice guidelines, procedures, construction management plans and appropriate construction techniques will manage low risks to water quality from construction activities.

Operation

Residual impacts to surface water during the operation phase are minor.

Underground infrastructure will be outside of floodplains to allow the uninterrupted flow of surface water and will ensure draining pathways remain intact and can cope with predicted future climate conditions.

Unnamed waterway near Reeves Beach

7.4 Soil and waste

The assessment considers risks to human health and the environment from soil disturbance, waste, contamination and acid sulfate soils.

More detail:

- **EES Chapter 11 – Soil and waste**

Study area and approach

The study area for this assessment includes land within 200 m of the onshore transmission alignment and construction laydown areas.

To study this topic, specialists reviewed existing literature and data and completed visual field surveys and laboratory testing of soil samples.

Receptors for this study area are human health, land amenity, groundwater and surface water.

Existing environment

The project's onshore alignment is in a low-lying and flat part of the Gippsland Basin.

The ground comprises deep layers of sand and soil, including coastal dune, swamp and lake and river deposits. Groundwater is present across the region in a shallow aquifer.

Onshore geotechnical surveys

Field investigations confirmed:

- Contamination along the transmission alignment is rare, localised and low risk
- Acid sulfate soils are likely to be present near the coast.

Impacts, risks and mitigations

Residual impacts range from **negligible to minor** and residual risks are **low** across all phases.

Construction

Potential impacts from waste spoil, waste streams generated during construction and trench settlement are all negligible or minor.

A Construction Environmental Management Plan will guide construction activities, including the management and disposal of spoil and waste and procedures for preventing ground settlement.

There is a low residual risk of disturbing acid sulfate soils which will be managed by an Acid Sulfate Soils Management Plan and a monitoring program.

All other residual risks are low, including disposal of acidic or saline groundwater, encountering unexpected contamination, drilling fluid leaks and other leaks and spills, and will be managed with a Construction Environmental Management Plan.

Operation

The negligible residual impact of waste generation during operations will be mitigated through an Operational Environmental Management Plan which will include measures to minimise waste, promote recycling and ensure proper waste disposal.

This plan will also manage the low residual risk of fuel or chemical leaks or spills.

7.5 Electromagnetic field exposure

This assessment examines the potential for electromagnetic field exposure from underground transmission cables.

More detail:

- **EES Chapter 15 – Electromagnetic field exposure**

Electromagnetic fields are invisible areas of energy that occur wherever electricity is generated, transmitted or used. They are made up of electric fields and magnetic fields. These fields are present naturally and from human-made sources like power lines, electrical equipment, household appliances and communication technologies.

Study area and approach

The study area for this assessment covers the onshore transmission alignment between Reeves Beach and the proposed VicGrid connection hub in Giffard.

To study this topic, technical specialists modelled the maximum potential electromagnetic field levels from the cables and compared these against internationally recognised safety limits for:

- The general public
- Workers
- People with implanted medical devices
- Sensitive electronic equipment
- Vegetation.

Existing environment

The works in Victoria are located in a rural environment where there is low background electromagnetic activity. The nearest major powerline is the Basslink interconnector.

Impacts, risks and mitigations

Construction

Construction activities will be undertaken with low-powered equipment that has a negligible impact.

Operations

There will be no electric field exposure above ground level, with no adverse impacts to people or vegetation.

Magnetic field levels in and around the transmission easement will be very low - well below internationally recognised safety limits. The residual impact for the general public and workers is negligible and minor for people with implanted medical devices and sensitive electronic equipment.

Standard design mitigations will be applied to avoid and minimise electromagnetic impacts.

7.6 Onshore noise and vibration

This assessment considers how noise and vibration generated by the works in Victoria could affect nearby homes, public reserves and natural areas.

More detail:

- **EES Chapter 16 – Onshore noise and vibration**

Study area and approach

The study area for this assessment covers the onshore transmission alignment, including the shore crossing at Reeves Beach and a 1.5 km buffer. It also considers noise generated offshore during construction and operation.

To study this topic, specialists:

- Reviewed existing data, literature and guidelines
- Monitored background and ambient noise levels across the study area and in coastal towns
- Undertook noise modelling to predict expected noise levels during construction and operation of the project.

Receptors include residential buildings and outdoor recreational and public open spaces, including Reeves Beach Campground.

Existing environment

Baseline monitoring found that background noise is low across most of the rural areas and slightly higher near the coastline, especially at night, due to waves and insects.

Impacts, risks and mitigations

Residual impacts are **minor to moderate** during construction and **minor** during operations. No risks have been identified.

Construction

There will be a moderate residual impact from noise generated by general onshore construction activities such as excavation, trenching, batch plant activities, and vehicle movements.

The noisiest works will be cable trenching and laydown area preparation. As construction is staged and sequenced across the transmission alignment, works in any one area will be completed quickly and so receptors will only experience elevated noise levels for a short time (days or weeks).

Mitigation measures include restricting noisy works to standard hours and using quieter equipment where possible. Temporary noise barriers will be installed at batching plants if needed and residents will be notified in advance of works. Star of the South will consult with Parks Victoria on construction timing and noise at Reeves Beach Campground.

Construction of the trenchless shore crossing is a 24/7 activity which may cause temporary disturbance or reduced amenity near Reeves Beach.

Mitigations include using quieter equipment where possible, monitoring noise at sensitive locations and modifying or pausing onshore works if noise thresholds are exceeded.

With these mitigations, out-of-hours works will have a moderate residual impact.

Construction traffic noise is expected to be localised and may affect homes near access routes such as South Gippsland Highway and Woodside Beach Road during the day.

By using arterial roads where possible, limiting out-of-hours truck movements and consulting with landholders along access routes, residual impact is moderate.

Construction activities may produce vibration which could affect buildings and underground services within 50 m. This will be mitigated by limiting activities near sensitive buildings and monitoring vibration to avoid exceeding safe levels. The residual impact is minor.

Operation

The underground cable system will not generate any noise and any potential vibration impacts are minor.

7.7 Air quality

This assessment considers how dust and exhaust emissions from the works in Victoria could affect local air quality and community health.

More detail:

- **EES Chapter 18 – Air quality**

Study area and approach

The study area for this assessment includes areas up to 250 m from construction sites, access tracks and project facilities.

To study this topic, specialists reviewed relevant legislation and guidelines and identified receptors and potential sources of dust and emissions.

Both human and ecological receptors are considered. There are 7 receptors within 250 m of the project area comprising 5 homes, Reeves Beach Campground and Woodside H28 Bushland Reserve.

Existing environment

The transmission system is located in a rural area with low background air pollution. Air quality is generally good and the risk of elevated pollution is low. Weather conditions, including moderate rainfall and cool temperatures, help retain soil moisture and reduce dust. Winds are most commonly from the west, and fewer winds from the south mean receptors are less likely to be downwind of construction sites.

Impacts, risks and mitigations

Residual impacts are **negligible** across all phases and residual risks are **very low** during construction. There are no risks during the operation phase.

Construction

Excavation and site clearing, vehicle movements, handling of soils and materials and strong winds could generate dust.

With mitigations including water spraying, covering soil or loads, stabilising access tracks, speed restrictions and reduced vehicle movement and monitoring, residual impacts are short-term, localised and negligible.

Exhaust emissions from project vehicles and machinery are negligible and contained within the construction corridor.

With appropriate management plans and monitoring, odours from any contaminated or acid sulfate soils and dust from extreme weather events due to climate change are very low residual risks.

Operation

During operation, the only emissions will be from occasional vehicles used for inspections and maintenance and dust from unsealed roads.

With mitigations such as dust suppression and equipment maintenance and monitoring, the residual impact is negligible.

7.8 Social

This assessment considers how project works in Victoria could affect or benefit communities, including housing, services, amenity and recreational use of coastal areas.

More detail:

- **EES Chapter 20 – Social**

Study area and approach

This assessment considers social impacts of works in Victoria associated with the project's underground transmission cables. Social impacts from the offshore wind farm are covered in the Commonwealth EIS.

The study area includes coastal areas and towns, Reeves Beach campground, Victorian waters used for recreation and rural areas crossed by the transmission cables.

To study this topic, a technical specialist:

- Reviewed existing socioeconomic and population data
- Reviewed community feedback and attended local events
- Surveyed and interviewed local community members
- Considered relevant assessments relating to visual amenity, noise and fishing.

The assessment evaluates the significance of changes resulting from the works in Victoria on:

- Workforce and social profile
- Recreational boating, fishing and diving
- Coastal character and amenity
- Rural character and amentiy.

Existing environment

The study area is lightly populated with a limited housing market and services. People moving away from the area, driven by distance to education and career opportunities, is a challenge for the viability of local towns.

Coastal areas near the project accommodate small settlements and camping areas. These settlements have small permanent, aging populations and limited or no services.

The region features the natural coastline of the Ninety Mile Beach, Wilsons Promontory National Park and rural and coastal towns. Recreational opportunities centered around the Victorian marine environment include fishing, boating and camping.

Impacts and mitigations

Residual impacts range from **moderate negative to moderate positive** depending on the phase, location and receptor group.

Construction

Workforce and social profile

Construction of the project's transmission cables in Wellington Shire will generate economic activity, having a positive impact on local businesses.

Star of the South will implement a Workforce Accommodation Strategy to manage potential impacts on housing availability and community services.

With this mitigation in place, the residual impact is negligible for renters and service users, negligible to minor for short stay accommodation users and minor to moderate positive for the broader community.

Coastal character and amenity

Shore crossing works near Reeves Beach campground will temporarily increase activity in the area and generate construction noise, light and traffic, including 24/7 works during installation of the shore crossings.

With mitigations, such as a Stakeholder Engagement Plan to provide advance notification about construction and noisy periods, the residual impacts range from moderate negative for campground users to minor to moderate negative for casual visitors.

Recreational fishing and boating

Installation of the offshore export cables in Victorian waters may temporarily disrupt recreational fishing and boating in discrete areas for short periods of time, resulting in a negligible to minor negative residual impact.

A Stakeholder Engagement Plan will be implemented to provide early notice and real-time information to support fishers and boaters to plan ahead and stay safe on the water.

Rural land and amenity

The onshore cable alignment will be installed underground and has been developed in consultation with

Ninety Mile Beach

landholders to avoid sensitive land uses. Major construction areas have been located as far from homes as possible.

Eight homes are located within 500 m of construction, with a further 38 within 2 km. Residents may experience short periods of construction noise (up to 4 weeks) during normal working hours.

With mitigations, such as individual Property Management Plans, the residual impact is minor negative for landholders and nearby residents and negligible to minor negative impact for the broader community.

Operation

Workforce and social profile

Long-term employment generated by the Star of the South project is primarily associated with the offshore wind farm, which is assessed in the Commonwealth EIS.

Operation of the underground cable system requires a small workforce which will not impact on housing, community facilities and services.

Recreational boating and fishing

Boating and fishing will not be directly affected and can continue interrupted in the project's export cable area. Residual impacts during operation are negligible to minor negative.

Impacts associated with the offshore wind farm area are assessed in the Commonwealth EIS.

Rural land and amenity

Transmission infrastructure will be underground, with minimal visual or land use impacts. A 40 m easement will remain during operation, with some land use restrictions in place.

With mitigations in place, including compensation for hosting infrastructure, the residual impact is negligible.

7.9 Business and tourism

This assessment examines employment, workforce supply, housing availability, tourism activity and visitor experience and considers how project works in Victoria could affect businesses and the tourism industry.

More detail:

- **EES Chapter 21 – Business and tourism**

Study area and approach

This assessment considers business and tourism impacts of works in Victoria associated with the project's underground transmission cables. Impacts from the offshore wind farm are covered in the Commonwealth EIS.

The study area includes:

- A local area comprising the Foster, Longford-Loch Sport, Wilsons Promontory and Yarram Statistical Areas
- A broader regional area covering the Latrobe-Gippsland Statistical Area.

To study this topic, specialists reviewed existing data and statistics, community feedback and other relevant techncial assessments including fishing, social, visual and traffic.

Receptor groups for this assessment include small to medium businesses, accommodation providers, tourism operators and users of recreational assets.

Existing environment

The population in the local study area was 20,068 in 2021, with 307,807 in the regional study area.

The top local industries (by jobs) are agriculture, public administration and safety, health care, construction, education and training. Small businesses make up 92% of business types in the local study area and 89% in the regional study area.

The Gippsland tourism industry contributes $855 million to the regional economy (5.2%), supporting 12,100 direct and indirect jobs. The local study area includes key attractions Wilsons Promontory and Gippsland Lakes and is estimated to account for 20% of the region's visitors, supporting 10% to 15% of direct and indirect jobs.

Around 32% of dwellings in the local area are unoccupied, with many used as holiday homes.

Ninety Mile Beach, Wilsons Promontory and Nooramunga are key attractions close to the project area.

Impacts, risks and mitigations

Residual impacts range from **moderate negative to moderate-major positive.** No risks have been identified.

Construction

The number of construction and operations jobs for the offshore wind farm is much larger than for the Victorian works. An assessment of the effect of creating these jobs is provided in the Commonwealth EIS.

Project works in Victoria will create between 70 and 80 annual full-time construction jobs in Gippsland with a further 101 to 109 indirect jobs created in services, trades and logistics.

Opportunities exist for workers from the fossil fuel sector and developing local workforce capacity in the renewable energy industry.

A Workforce Development Strategy will be implemented to maximise regional participation, leading to a moderate to major positive residual impact.

Construction noise during certain shore crossing works will temporarily disrupt campers at Reeves Beach, with a minor residual impact.

The number of workers required to construct the transmission system in Victoria may provide some small disruption for local housing and labour markets. These potential minor to moderate impacts will be mitigated through collaborative planning and consultation with council, the implementation of a Workforce Accommodation Strategy and a Workforce Development Strategy.

Mitigations will include:

- Noise monitoring at key locations with action taken if thresholds are exceeded
- A Stakeholder Engagement Plan to inform businesses and visitors of upcoming and current works
- A Complaints Management Procedure to ensure any issues are appropriately managed and addressed to manage issues and enquiries
- A Workforce Accommodation Strategy to manage and monitor demand on local housing and support workforce development and retention

- A Community Benefit Program to be designed, in consultation with the local community.

Temporary traffic disruptions and potential loss of primary production due to construction of the transmission system in Victoria will have a negligible to minor impact.

Operation

Around 5 long-term operation roles will be created to maintain the onshore transmission system. These workers may be based along the coast or in contracting firms located in larger regional centres such as Sale or Traralgon.

Apart from the minor positive effect on regional employment, there are no significant impacts or risks for business and tourism arising from the project's transmission system in Victoria.

Right: Yarram

7.10 Fishing in Victorian waters

This assessment considers how the works in Victoria could affect commercial and recreational fishing.

More detail:

- **EES Chapter 25 – Commercial and recreational fisheries in Victorian waters**

Study area and approach

This assessment considers potential fishery impacts of installing, operating and decommissioning offshore export cables in Victorian waters. Victorian waters extend 5.5 km from the coast. Impacts from the offshore wind farm are covered in the Commonwealth EIS.

To assess this topic, specialists reviewed fisheries data and carried out field surveys, industry consultation, recreational boating surveys, underwater noise modelling, and a risk assessment.

Receptors include all commercial fisheries with the right to fish in the study area, charter operators and recreational fishers.

Existing environment

There are 21 commercial fisheries that can legally fish in the project's entire offshore area (including the offshore wind farm). Of these, 9 have not fished there in the 20 years up to 2021.

Fishing intensity within the export cable areas is very low.

Commercial fishing is a generational industry facing multiple pressures from competition for ocean space, conservation protections and climate change.

Recreational fishing is widespread throughout Gippsland's lakes, rivers, inlets and offshore waters.

Field surveys in the study area identified the presence of 50 fish and invertebrate species targeted or retained by commercial or recreational fishers.

Impacts, risks and mitigations

Residual impacts are **negligible** and risks are **very low or low** across all phases.

Construction

The installation of up to 8 export cables and the shore crossing at Reeves Beach will occur progressively and generate vessel activity offshore off Reeves Beach from time to time over 27 months. Fishers will be asked to keep a safe distance from construction activities and vessels.

This impact will be mitigated by providing advance notification of construction activities and locations so fishers can plan ahead.

A temporary redistribution of fish species in and around the area may be experienced at times as mobile fish move away from underwater noise sources. This is expected to be temporary and localised, with a negligible residual impact.

Operation

There will be limited impacts in Victorian waters during operation as all infrastructure will be below the sea floor. Export cables will be buried at a target depth of one metre. No access restrictions are proposed, however fishers may be asked to avoid certain activities (such as anchoring or trawling) directly over the export cables if required for safety and to avoid damage to the cables, consistent with current practices around the existing Basslink Interconnector cable.

7.11 Agriculture and forestry

This assessment considers how the works in Victoria could affect agriculture and plantation forestry through loss of land, productivity, access, and biosecurity impacts.

More detail:

- **EES Chapter 12 – Agriculture and forestry**

Study area and approach

The study area for this assessment covers the onshore transmission alignment and construction areas including access tracks, laydown and batching plant sites.

To study this topic, specialists reviewed existing literature and data, consulted stakeholders and landholders and undertook field surveys to map intersecting land uses. Impacts are assessed based on production values, infrastructure, biosecurity, soil, and operational disruption.

Receptors are grazing and mixed farming businesses, softwood and hardwood plantation forestry operators, farm infrastructure and livestock and agricultural soils and pasture.

Existing environment

The project area intersects with up to 265 ha of farm or forestry land.

Agriculture in the project area is mostly beef and sheep grazing with some cropping of canola and fodder. Farms typically include paddocks, water infrastructure, and basic access tracks.

Forestry is primarily softwood with some hardwood in mid-rotation stages. There is intensive activity on plantations during harvest periods.

Gippsland's agriculture and forestry sector represents around 13% of the regional workforce and over $2.8 billion in annual production.

Impacts, risks and mitigations

Residual impacts range from **negligible to moderate** and residual risks range from **very low to medium** across all phases.

Construction

Construction and operation of the transmission system will exclude up to 20 ha of softwood plantation land from ongoing timber production.

With compensation and property-specific management plans in place, the residual impact is moderate.

Construction activities will temporarily remove up to 259 ha of grazing and cropping land from production. Soil removal and reinstatement could also lead to erosion, compaction or slow pasture recovery.

With mitigations such as compensation, Property Management Plans, best-practice soil management measures and post-construction monitoring, these residual impacts are minor for agricultural production and soil management and negligible for disruption to farms and animal disturbance.

Any access restrictions or noise stress to livestock will be localised and short-term. These negligible residual impacts will be mitigated through Property Management Plans developed with landholders.

The potential for construction vehicles, equipment and personnel to spread biohazards will be mitigated with a Biosecurity Management Plan, presenting a medium residual risk.

Other very low to low residual risks include pasture rehabilitation failure, delays due to adverse weather conditions, and localised contamination from chemicals or fuels. These risks will be managed with tailored pasture re-establishment plans, weather contingencies in the Construction Environmental Management Plan, and adherence to spill management protocols.

Operation

The operational transmission easement will be unable to support plantation forestry production, representing a long-term loss of productive land and a moderate residual impact.

Access covers along the onshore transmission corridor may create bare patches or pose a minor hazard to farm machinery. Bays will be positioned along fence lines, where possible, and clearly marked. The residual impact is negligible.

Biosecurity will be managed through the Biosecurity Management Plan, with drones used where possible to minimise access. This residual risk is medium.

Subsidence and/or soil erosion along the easement could lead to failure or poor crops. With monitoring, annual inspections and additional rehabilitation if needed, this residual risk is very low.

7.12 Land use and planning

This assessment considers how project works on land may affect existing land use, planning schemes and land zoning.

More detail:

- **EES Chapter 22 – Land use and planning**

Study area and approach

The study area for this assessment includes land within 1 km of the onshore transmission alignment and construction areas.

To study this topic, specialists reviewed spatial mapping of planning zones and overlays and planning policies.

The assessment considers existing and planned land uses, planning scheme provisions, existing planning permissions and other permit applications underway.

Receptor groups include sensitive land uses (homes, conservation and recreation areas) and non-sensitive land uses (agriculture, plantation and transport).

Existing environment

The study area is made up of 94% non-sensitive land uses, mainly agricultural. The remaining 6% is made up of public conservation and recreational land, including the McLoughlins Beach - Seaspray Coastal Reserve and the Woodside H28 Bushland Reserve.

The project's onshore transmission alignment includes areas with planning overlays for bushfire management, environmental significance, heritage features and the Basslink interconnector.

Impacts, risks and mitigations

Construction

Residual impacts are **minor to moderate** during construction and **negligible** during operation. No risks have been identified.

Residual impacts to sensitive land use due to construction activities are moderate. There may be short to medium term changes to current land uses at Reeves Beach campground due to construction noise, at the Woodside H28 Bushland Reserve due to trenching.

This will be mitigated through implementation of a Construction Environmental Management Plan, incorporating noise, dust and access controls.

Residual impacts to non-sensitive land uses are minor. Potential changes to access and amenity will be mitigated with the implementation of management plans and consultation.

Housing the construction workforce may increase local housing demand and will be managed by implementing a Workforce Accommodation Strategy. This strategy employs a hierarchy of mitigations to avoid and minimise potential impacts, resulting in a minor residual impact.

Operation

During operation, a permanent easement will limit what can be built or planted above the underground cables. This will prohibit structures and deep-rooted vegetation but will still allow grazing and cropping. The residual impact is negligible.

7.13 Traffic and transport

This assessment considers how onshore project works could impact the local and regional transport network, including effects on road safety, traffic volumes, access, and vulnerable road users.

More detail:

- **EES Chapter 17 – Traffic and transport**

Study area and approach

The study covers the local and regional road network near the onshore transmission alignment, including access points and roads connecting to laydown areas, batching plants and construction work areas.

Specialists conducted traffic modelling, road condition surveys, crash history analysis, site inspections, and consultation with road authorities.

Receptors include general road users, pedestrians and cyclists, school bus services, emergency vehicles, and the capacity, safety and condition of road infrastructure.

Existing environment

The road network includes arterial roads such as the Princes and Hyland highways, and local council roads.

Most roads have low traffic volumes and are in good condition, although some local roads are narrow, unsealed or have limited visibility.

Crash data from 2020 to 2024 recorded five crashes on direct access roads, all on South Gippsland Highway, and 57 additional crashes on wider arterial routes such as Hyland Highway and Princes Highway.

Recreational cycling and walking occur on and near some roads and public transport is limited to school bus routes.

Impacts, risks and mitigations

Residual impacts are **minor** during construction and **negligible** during operation. There is one **low** residual risk during construction and no risks during operations.

Construction

With mitigations, all residual construction impacts and risks to transport and traffic are minor.

Maximum traffic volumes during short term, high activity periods of construction of up to 1,576 one-way vehicle trips per day and up to 363 peak hour vehicle trips, delivering equipment and materials to 6 construction staging areas across the alignment.

Traffic generation may lead to localised congestion or delays, particularly during peak hours.

Residual impacts on road capacity are expected to be minor, with capacity considered sufficient when supported by appropriate traffic management measures. A site access strategy will manage arrival times, entry points, and parking to minimise disruption.

Heavy vehicle access routes will be confirmed through route assessments and safety audits in consultation with road authorities, and unsuitable roads will be avoided or upgraded if necessary.

Safety upgrades may be required at intersections with limited visibility or tight turning space. These works may cause short-term localised delays, but with mitigations in place, the residual impacts are minor.

Other minor residual impacts include:

- Delays caused by temporary full closure of local roads and partial closure of main roles
- Dust, debris and noise from construction vehicles
- Temporary disruption to school bus services
- Safety risks to pedestrians and cyclists, especially in areas without formal paths
- Potential road surface damage.

With mitigations including a Traffic Management Plan, Stakeholder Engagement Plan, site access strategy, road safety audits, heavy vehicle route assessments, condition surveys and repair agreements, all residual impacts are minor.

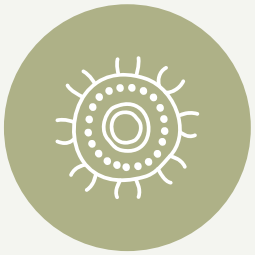
A low residual risk of delay to emergency vehicles was identified and will be addressed through coordination with emergency services and inclusion of access protocols in a Traffic Management Plan.

Operation

With mitigations, all residual operational impacts and risks to transport and traffic are negligible.

Traffic generated during operation will be minimal, with a small team accessing the underground transmission cables for inspection and maintenance as needed.

The conservative assessment assumed a maximum of 18 vehicle trips per day with no further mitigation needed.



7.14 Onshore Aboriginal cultural heritage

This assessment considers how the works in Victoria could affect Aboriginal cultural heritage on land, including known and potential Aboriginal cultural heritage values.

More detail:

- **EES Chapter 13 – Onshore Aboriginal cultural heritage**

Study area and approach

The study area covers the onshore transmission alignment which extends from the shore crossing at Reeves Beach to the proposed VicGrid connection hub in Giffard and lies within the traditional lands of the Gunaikurnai people.

Specialists reviewed existing literature and data and completed heritage register searches, predictive modelling, field surveys and subsurface testing.

This study considers cultural heritage places of scientific value as well as places of cultural value, also referred to as intangible heritage.

The assessment was undertaken in consultation withGLaWAC, the Registered Aboriginal Party.

Existing environment

Two sites are registered on the Victorian Aboriginal Heritage Register – the Reeves Beach Midden and the Yau-ung Artefact Scatter 1, both of which have scientific and cultural values.

Field surveys and subsurface testing identified cultural heritage material at a further 22 locations across the study area. This includes 16 stone artefact sites, 6 shell middens, and one place containing both.

Three places of particular significance to the Gunaikurnai were identified:

- The Warrigal Creek massacre site, which holds significant historical and cultural value for the Gunaikurnai and the broader Australian community
- The Ninety Mile Beach barrier dune system, which has aesthetic, scientific and cultural values
- White Rock, an island in Bass Strait that is recognised as a place of cultural significance.

Field surveys and subsurface testing concluded that additional unrecorded Aboriginal cultural heritage places are likely to be present.

For the purpose of this assessment, all known and unknown Aboriginal cultural heritage places are assumed to be of high cultural significance and that project impacts will be significant.

Impacts, risks and mitigations

Residual impacts range from **minor to major** during construction and **minor** during operation. Residual risks are low to medium across all phases.

Construction

Construction activities have the potential to affect 24 Aboriginal cultural heritage places of scientific and cultural value.

Trenchless construction methods to install cables at Reeves Beach will avoid impact to the dunes and 7 cultural heritage places identified at this location.

A Cultural Heritage Management Plan will be developed, approved and implemented, and the transmission design refined to avoid and minimise impacts to known Aboriginal cultural heritage values.

With mitigations in place, residual impacts are minor to major for places of scientific and cultural value.

Potential impacts to unrecorded Aboriginal cultural heritage places will be managed on a case-by-case basis. The Cultural Heritage Management Plan will include measures to avoid or minimise harm and contingency arrangements for managing previously unrecorded sites.

While these measures often help avoid or reduce impacts, this study conservatively assumes high heritage value and unavoidable impact. With mitigations in place, the residual impact is major.

There is a risk that construction activities could affect known intangible Aboriginal cultural heritage values, such as sightlines to White Rock or "healthy Country" values that may be influenced by heat from buried cables.

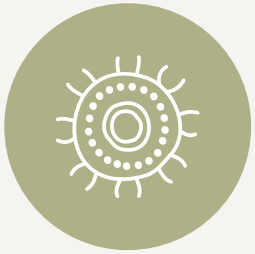
Aboriginal cultural heritage surveys

The Cultural Heritage Management Plan will include conditions and risk contingency protocols. The residual risk is medium.

Operation

Consultation with GLaWAC identified concerns about radiant heat from buried cables impacting plants. With the proposed depth of cables, their casing and the soils used to backfill trenches, this residual risk is minor.

The residual risk of accidental harm to Aboriginal cultural heritage values during operation and maintenance is medium, mitigated by preparation and implementation of the Cultural Heritage Management Plan.



7.15 Submerged Aboriginal cultural heritage

This assessment considers how the works in Victoria could affect Aboriginal cultural heritage in Victorian coastal waters.

More detail:

- **EES Chapter 19 – Submerged Aboriginal cultural heritage**

Study area and approach

The study area for this assessment is the offshore export cable area within Victorian coastal waters. As this area was once dry land connected to Tasmania, it may preserve archaeological or cultural heritage beneath the seafloor.

To study this subject, specialists carried out:

- Geophysical and geotechnical surveys of the seabed
- A terrestrial archaeological sensitivity model using landscape features and known Aboriginal places
- A submerged palaeolandscape assessment to identify ancient landforms such as river channels, wetlands, and dune systems
- Analysis of sediment samples and seismic data
- Consultation with GLaWAC.

All potential submerged Aboriginal cultural heritage features are assumed to be of high cultural significance.

Existing environment

The study area lies within the Gippsland Basin and contains ancient landscape features now buried under marine sediments.

Submerged landscape features in the offshore project area have been classified as either P1 or P2 receptors based on their potential to preserve Aboriginal cultural heritage.

P1 receptors are features such as ancient river channels, wetlands, and dunes that date to around 70,000 to 11,000 years ago – a time when the area was above sea level and potentially inhabited.

These features are considered to have high archaeological sensitivity due to their association with known periods of human activity and the presence of organic-rich, fine-grained sediments, often found at depths of around 15 m to 20 m below the seabed.

In contrast, P2 receptors include older or more disturbed features that may still hold archaeological or palaeoenvironmental value, but with lower confidence, either because of uncertain age, unclear formation processes, or less favourable conditions for preservation.

Although no submerged Aboriginal cultural heritage sites have been confirmed in the area, the landscape features and environmental conditions indicate potential for such sites to exist.

Impacts, risks and mitigations

Residual impacts range from **minor to moderate** during construction and **negligible to minor** during operations. Residual risks are **very low to low** across all phases.

Construction

The primary impact to submerged Aboriginal cultural heritage in Victorian waters is disturbance of potential P1 and P2 receptors during cable trenching.

Mitigations will include updating submerged palaeolandscape assessments with further pre-construction surveys and a Cultural Heritage Management Plan.

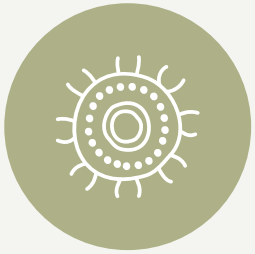
With these mitigations, the residual impact is moderate for P1 receptors and minor for P2 receptors.

With pre-construction briefings in place, the residual risk of construction equipment accidentally damaging P1 receptors is low, and very low for P2 receptors.

Operation

The likelihood of exposing or destabilising submerged cultural heritage during operation is low. An unexpected finds protocol will be developed to follow in the event that submerged Aboriginal cultural heritage is revealed during operation of the project. The residual impact is minor for P1 receptors and negligible for P2.

The risk of accidental damage from emergency anchoring or navigational error is very low to low.



7.16 Historical heritage

The assessment considers how the works in Victoria could affect historical heritage on land and in Victorian coastal waters.

More detail:

- **EES Chapter 14 – Historical heritage**

Study area and approach

This study covers the onshore project area and the offshore export cable area within Victorian coastal waters.

Specialists carried out:

- Reviews of heritage and shipwreck databases, including the Victorian Heritage Register, Victorian Heritage Inventory, and the Wellington Planning Scheme Heritage Overlay
- Searches of historical newspapers, maps, and heritage studies
- Consultation with Heritage Victoria, a marine archaeologist, local councils and historical societies
- Field inspections, including preliminary offshore geophysical survey, to identify potential heritage items and places on land and at sea
- Preliminary offshore geophysical surveys.

Receptors included existing, potential and previously unidentified heritage places and items.

The study identified built heritage and archaeological sites onshore and non-Aboriginal cultural heritage in Victorian waters, and developed mitigations in line with Heritage Victoria guidelines.

Existing environment onshore

Due to the historically low occupation of the onshore study area, there are limited places of historical heritage significance.

This area is characterised by longstanding agricultural land use, with some plantation forestry, and has historically supported grazing, soldier settlement farming and limited coastal tourism.

The project does not intersect any heritage places listed on the Victorian Heritage Register, Victorian Heritage Inventory, or Heritage Overlay within the Wellington Planning Scheme.

One Victorian Heritage Inventory site – former residence, Woodside Beach Road, Woodside - was identified adjacent to the project area. It relates to a demolished soldier settlement residence.

One potential heritage place was identified within the project area – the soldier settlement property on the South Gippsland Highway, Darriman. This property includes a run-down timber house, outbuildings, tank stand and mature trees. It reflects the history of land distribution under the post-war soldier settlement scheme.

Existing environment offshore

Maritime activity along the Gippsland coast dates to the late 18th century, with sealing and whaling vessels, trading schooners and steamships using the coastline. Numerous shipwrecks occurred due to shifting sandbars, weather and navigational challenges.

A total of 17 shipwrecks were identified as confirmed or potentially occurring within or near the study area, including the colonial schooner *Sarah* (1838), which is thought to lie within the proposed export cable area and may contain human remains. Four confirmed wrecks are located within 5 km of the offshore project area, and 3 additional unconfirmed wrecks may also lie nearby. A further 8 vessels were lost while travelling along the Gippsland coast, with their exact locations unknown.

The study area also overlaps with a World War II air weapons range in Giffard, where historical ordnance may remain on the seabed.

Sixteen seabed anomalies were identified through geophysical surveys, which may represent shipwrecks, objects, or other cultural heritage items.

Impacts, risks and mitigations

Residual impacts range from **negligible to minor** across all phases. Residual risks are **very low to medium** during construction and **very low to low** during operation.

Construction (onshore)

Construction of an access track is proposed to the north and east of the soldier settlement property at Darriman. With mitigations, including awareness of historical heritage and management of any accidental damage, the residual impact is negligible.

Accidental damage to potential heritage places, inadvertent disturbance to the adjacent Victorian Heritage Inventory site, or discovery of previously unidentified heritage archaeology are medium residual risks.

There is a very low residual risk of impacts to previously unidentified non-archaeological heritage places.

These risks will be mitigated through heritage no-go zones, unexpected finds protocols, and construction staff inductions.

Construction (offshore)

Physical disturbance from cable installation, vessel anchoring, and seabed preparation will be minimised by undertaking surveys and inspections before construction and establishing exclusion zones if heritage items are discovered.

An Underwater Cultural Heritage Management Plan will guide assessment, management and reporting.

With these mitigations, residual impacts on seabed anomalies are negligible to minor depending on their sensitivity and proximity to construction activities.

The precise location and condition of the colonial schooner *Sarah* is not known. Detailed seabed surveys will confirm if the wreck is present within the final project footprint. If so, exclusion zones will be established to prevent disturbance. These measures are expected to prevent physical impact with the *Sarah* and the residual impact is minor.

Operation (onshore)

No impacts on historical heritage places were identified.

Operation (offshore)

The residual impacts of physical disturbance from vessel anchoring, cable maintenance or seabed disturbance to seabed anomalies are negligible to minor, while the residual impacts to the wreck of the *Sarah* are minor.

Exclusion zones will remain in place to protect any confirmed sites heritage site or items. The Underwater Cultural Heritage Management Plan will manage maintenance activities such as cable maintenance and vessel anchoring.

7.17 Victorian marine environment

This assessment brings together information about how the project could affect the Victorian marine environment. Detailed assessments of the Commonwealth marine area is provided in the EIS.

More detail:

- **EES Chapter 23 – Victorian marine environment**

Study area and approach

The focus area for this assessment is the offshore export cable area within Victorian waters, in the context of the installation, operation and decommissioning of the shore crossing and cables.

It brings together findings for five marine environment study areas: coastal processes and sediment transport, benthic ecology, fish and invertebrates, offshore ornithology and bats, and marine mammals and turtles.

To study the Victorian marine environment, technical specialists:

- Reviewed existing literature and data
- Conducted field studies to collect site-specific and regional data
- Completed underwater noise modelling
- Consulted with scientific, environmental and community groups.

Existing environment

Shorelines in the study area are highly dynamic, shaped by natural processes and high sediment supply which supports broadly stable and resilient coastal systems.

The seafloor in the study area is primarily made up of soft sands, silt and gravels (92%), with patches of rocky reef (7%) and sparse and patchy seagrass (1%).

Field surveys identified 163 fish species across the broader offshore project area, although the study area in Victorian waters was found to be of low habitat value for fish, shark, ray and invertebrate species.

Vital shorebird habitats in the broader region include Corner Inlet and Gippsland Lakes. Jack Smith Lake and Ninety Mile Beach provide additional shorebird habitats. Together, these areas are situated along the East Asian-Australasian Flyway. Field surveys identified 11 shorebirds including the Hooded Plover, Red-capped Plover, and Masked Lapwing. Seabird species known to rely on coastal habitats which may use the study area include the Little Penguin, Greater Crested Tern, Black-faced Cormorant and Pacific Gull.

There are 19 marine mammal and turtle species that may use the broader offshore project area. The offshore export cable area in Victoria overlaps with biologically important areas for the Blue Whale (foraging) and Southern Right Whale (reproduction, May to September).

A Biologically Important Area (BIA) is a geographically defined area where a marine species protected under the EPBC Act is known to migrate, calve, breed or feed. BIAs are used to inform decision-making about managing impacts to these species.

Impacts, risks and mitigations

The key impacts, risks and mitigations identified for topics included in this assessment are outlined below by study area.

An extensive range of proven mitigations are proposed to avoid, minimise and manage impacts to the marine environment, with monitoring also proposed to ensure realised impacts are at or below predicted levels.

Coastal processes and sediment transport

Residual impacts are **negligible** across all phases. No risks have been identified.

Disturbance from cable and shore crossing construction activities will be localised with short-term recovery and no flow-on effects to broader coastal processes and sediment transport.

Benthic ecology

Residual impacts are **negligible to minor** and residual risks range from **low to medium** across all phases.

Residual impacts from seabed disturbance and changes to water quality during construction will be mitigated by siting cables to avoid sensitive habitats and implementing a Vessel Operations Framework to manage vessel activity and reduce the risk of collisions, spills and discharges.

Bird surveys

Benthic environment

Rare risks, such as the introduction of invasive marine species and oil spill from vessel activity, will be mitigated with strict operational frameworks and established biosecurity measures.

Fish and invertebrates

Residual impacts range from **negligible to minor** during construction and **negligible to moderate** during operation. Residual risks are **very low to low** across all phases.

Construction impacts from underwater noise, habitat change, seabed disturbance, light emissions and vessel discharge, are negligible for most species and negligible to minor for white sharks and syngnathids due to their conservation significance.

During operation, rock protection placed over export cables may generate new habitat that benefits reef species but could displace soft-sediment communities. The impact to white sharks and syngnathids is rated moderate due to their conservation significance and minor for all other species. A monitoring program will track any changes in habitat and species present.

Offshore ornithology and bats

Residual impacts range from **negligible to minor** and potential risks are **very low** across all phases.

Potential impacts from birds attracted to lighting on vessels will be mitigated by complying with the National Light Pollution Guidelines for Wildlife, routine monitoring and a handling program for any grounded birds, ensuring that any effects are limited to infrequent and highly localised instances.

Vessel controls will be implemented to manage negligible to minor impacts to birds during construction and operation.

Marine mammals and turtles

Residual impacts range from **negligible to minor** and potential risks are **very low to low** across all phases.

Underwater noise from vessels using dynamic positioning thrusters (which hold the vessel in one place) may generate noise that could impact sensitive whale species if they are in close range. Mitigations include continuous whale observations by trained marine fauna observers and species-specific precaution zones. If a specific whale is observed within this zone, thrusters will be reduced.

7.18 Victorian marine protected areas

This assessment considers how the works in Victoria could affect areas of the marine environment that are protected by Victorian law for their environmental, cultural biodiversity or natural resource values.

More detail:

- **EES Chapter 24 – Victorian marine protected areas**

Study area and approach

Marine protected areas in Victorian waters considered in the EES are the Corner Inlet Ramsar site, Marine National Park and Marine and Coastal Park, McLoughlins Beach - Seaspray Coastal Reserve, Ninety Mile Beach Marine National Park, Nooramunga Marine and Coastal Park and Wilsons Promontory Marine National Park and Marine Reserve.

Specialists reviewed legislation, identified existing values of these areas, and evaluated potential impacts from the project's construction, operation and decommissioning.

Existing environment

The McLoughlins Beach - Seaspray Coastal Reserve extends 200 m offshore between the Ninety Mile Beach Marine National Park and Woodside Beach. It is made up of sandy intertidal beach and sand dunes and provides important habitat to shorebirds, seabirds and waders. The reserve is largely unmapped but expected to host high biodiversity.

The other Victorian marine protected areas assessed include highly valued ecological communities, cultural heritage significance or recreational features.

Impacts, risks and mitigations

Residual impacts are **negligible** and residual risks are **very low to low** across all phases.

Construction

While no offshore construction will take place within Victorian marine protected areas, project vessels are expected to transit through or near some of them.

By complying with vessel passage and operations plans, designated vessel routes and relevant regulations, impacts such as physical disturbance, artificial lighting or underwater noise from transiting vessels will be negligible for all receptors.

The very low to low risk of introduction of invasive marine species, vessel collision or contamination of surface water will be managed with specifically developed operational management plans and oversight from a marine coordination centre.

Operations

Vessel activity has the potential to disrupt fish, seabirds or shorebirds using or supported by the marine protected areas. By using defined vessel routes, complying with international and maritime legislation, implementing 'no approach' and 'caution' zones, and light managing plans, these residual impacts are negligible.

With mitigations, there are very low to low residual risks from invasive marine species and accidental hydrocarbon spill.

Corner Inlet

8. ENVIRONMENTAL MANAGEMENT FRAMEWORK

A transparent governance framework for managing environmental effects during construction, operation and decommissioning

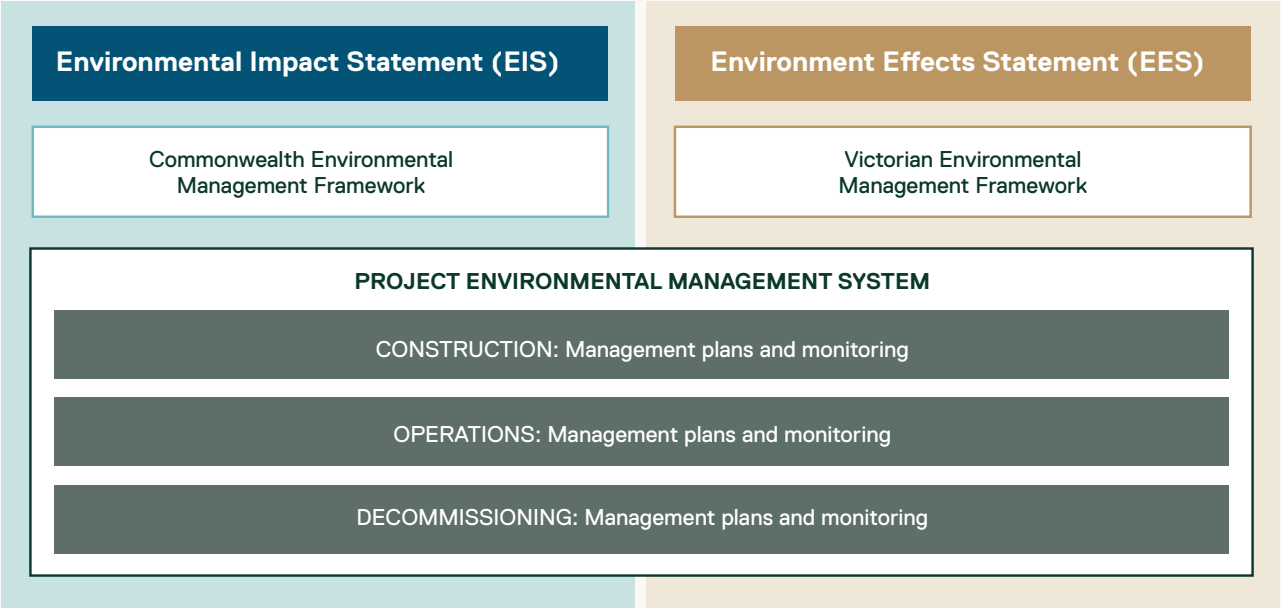
8.1 About the Framework

The Victorian Environmental Management Framework (EMF) sets out a governance framework for achieving statutory requirements and provides a structure for how Star of the South will avoid, minimise and manage impacts at each phase of the project's Victorian works.

This document is informed by the EES technical reports and reflects the requirements of relevant legislation, policies and guidelines. It includes a detailed list of mitigation and monitoring measures and outlines:

- Which approvals govern project activities
- Roles and responsibilities
- Required management plans
- How compliance is monitored and reported.

A Commonwealth EMF has also been prepared to manage Star of the South's responsibilities under Commonwealth legislation. For more information refer to the Commonwealth EIS.



8.2 How is it applied?

Star of the South is responsible for compliance with approval requirements and conditions.

An environmental management system will be implemented to manage compliance with environmental approvals and drive continuous improvement.

An environmental compliance plan will be in place for construction and operation.

This will bring together both the Commonwealth and Victorian EMFs to ensure the entire project meets all relevant approval conditions and legislative requirements.

Detailed information on environmental management is available in:

EES Chapter 26 – Victorian Environmental Management Framework

9. NEXT STEPS

Have your say

9.1 Review the documents

Star of the South's EES and draft PSA are available to read and download at **staroftheSouth.com.au**

A full set of documents is available to view in hard copy at the following locations during the public review period:

- **Star of the South office –** 310 Commercial Rd, Yarram
- **Sale Library –** 70 Foster St, Sale
- **Foster Library –** 9 Main St, Foster
- **Lakes Entrance Library –** 2 Mechanics St, Lakes Entrance
- **Yarram Library –** 156 Grant St, Yarram
- **Seaspray General Store –** 37 Foreshore Rd, Seaspray
- **State Library Victoria –** 328 Swanston Street, Melbourne.

Printed copies of this Summary Report will be available to view at these community venues during the public review period:

- **Port Albert Maritime Museum –** 78 Tarraville Rd, Port Albert
- **Traralgon Library –** 34-38 Kay St, Traralgon
- **Bairnsdale Library –** 22 Service St, Bairnsdale
- **Leongatha Library –** 2 Smith St, Leongatha.

If you're unable to access the online or hard-copies of the EES, contact Star of the South to arrange alternative access.

9.2 Making a submission

Anyone can make a submission on the EES or draft PSA for the works in Victoria.

Submissions must be made in writing during the public review period.

Submissions on the EES can be lodged via the online form on the Victorian Government's Engage Victoria website. By submitting through this online form you are only making a submission on the Victorian EES. If you are looking to make a submission on the draft Commonwealth EIS, these need to be lodged at staroftheSouth.com.au.

Only one submission from you is needed to address all your views about the project's effects on the Victorian environment, the EES and draft PSA.

If you are unable to lodge your EES submission online, contact Planning Panels Victoria (PPV) and request a hard copy submission coversheet.

Submissions will be treated as public documents and will be published on the Engage Victoria website.

9.3 Inquiry process

The Victorian Minister for Planning will appoint an independent Inquiry to consider the EES covering project works in Victoria. The scope of the Inquiry is limited to its Terms of Reference issued by the Minister.

The Inquiry will conduct a submitter conference on relevant key matters. A directions hearing will be held to consider the arrangements and timetable for the submitter conference and the process for submitters who want to be heard or provide further written material.

If you would like to participate in the Inquiry process you will need to make a written submission and mark this on the online submission form.

The Inquiry will review all EES submissions, the EES and draft PSA before providing advice to the Minister. It is not the role of the Inquiry to consider the draft Commonwealth EIS or Commonwealth matters.

Information on the Inquiry process will be published as it becomes available on the Engage Victoria website.

9.4 Concluding the assessment process

Victorian Minister's assessment

Following the public review period and Inquiry process, the Victorian Minister for Planning will issue a written assessment of the environmental effects of the project's works in Victoria.

The Minister will consider the EES, public submissions, Inquiry recommendations, and other relevant information.

The Minister's assessment may conclude that the works in Victoria are either acceptable, unacceptable, or would require major modifications to establish that acceptable outcomes will be achieved.

If the Minister's assessment concludes that the works are acceptable, Star of the South will address recommendations provided by the Minister. As part of this process, Star of the South will consider any recommendations and directions that form part of the Minister's Assessment and make any necessary updates to further planning and environmental approvals documentation.

Star of the South may then submit a final PSA application and seek the Victorian approvals required for the project.

9.5 Questions

For questions about the project works in Victoria, the EES and the draft PSA documents, contact **Star of the South** on 1800 340 340 or info@staroftheSouth.com.au

The submission process is managed by PPV. Any enquiries regarding the management of submissions or the Victorian Inquiry and Inquiry process should be directed to **PPV** on 136 186 (select option 6) or office@planningpanels.vic.gov.au

For questions about the EES process under the *Environment Effects Act*, contact the Impact Assessment Unit at the **Department of Transport and Planning** on (03) 8572 7980 or environment.assessment@transport.vic.gov.au

For questions about the PSA process under the Planning and Environment Act, contact Energy Assessment at the **Department of Transport and Planning** at energy.assessment@transport.vic.gov.au

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We acknowledge the people of the Gunaikurnai nation as the original custodians of Country and pay respect to Elders past and present.