



EES Technical Studies **Flora and Fauna**

This factsheet provides an overview of the Flora and Fauna based studies that will be assessed through our Environment Effects Statement (EES)



Port of Hastings Corporation (PoHC) is required to prepare an Environment Effects Statement (EES) for the Victorian Renewable Energy Terminal (the Terminal).

An EES is the most rigorous environmental impact assessment process in Victoria. There are 20 technical studies that are being prepared to investigate the potential impacts of the Terminal.

There are three EES studies that assess these potential impacts to Flora and Fauna:

- Onshore Ecology.
- Marine Ecology.
- Waterbirds.

Why is assessing flora and fauna important?

Western Port is home to many plant and animal species, including threatened and migratory species. The project is required to assess the potential impacts to flora and fauna as part of the environmental assessment process.

The proposed Terminal site is located within Western Port, a Ramsar-listed wetland of international significance. It is important to assess any impacts to the significant environmental values present in and around the site.

Our Onshore Ecology Impact Assessment considers how plants and animals on land could be impacted by the construction and operation of the Terminal.

As part of the assessment, we studied approximately 50 hectares of land, including the proposed Terminal site, its southern coastal intertidal zone, the road reserve along Long Island Drive, and the utility investigation corridors along Bayview Road and Barclay Crescent, Hastings.

What is being investigated?

We are completing a comprehensive assessment of the existing environment within the study area including a background review of relevant biodiversity databases and existing assessment reports, as well as site investigations.

Our assessment includes identifying any potential impacts to threatened species that may be present

in the study area, including the Swamp Skink and Glossy Grass Skink, Blue-winged Parrot, White-throated Needletail, and Grey-headed Flying-fox.

We are also assessing potential impacts to flora, including targeted surveys for particular species, such as Marsh Saltbush, Salt Blown-grass, Yellow Sea-Lavender and Creeping Rush.

How are we assessing impacts?

To understand the project's potential impacts on local plants and wildlife, our ecologists:

- Have conducted desktop studies (including biodiversity database searches and previous reports).
- Carried out on-ground field surveys to map native vegetation, wetlands and important habitats, and conducted targeted searches for threatened species
- Used risk based assessment method to identify the project's main impact pathways, such as vegetation removal, noise, lighting and changes to water or soil.
- Have identified and assessed how changes to the existing conditions caused by the proposed development and operation of the Terminal Project would impact ecological values, considering native vegetation, threatened species, threatened ecological communities, threatening processes (such as weeds and pests), ecosystem function, the Ramsar site, and groundwater dependent ecosystems.



Image: Surveying Swamp Skinks (*Lissolepis coventryi*) as part of Onshore Ecology assessments.

Waterbirds

Our Waterbird Assessments focus on understanding the abundance and diversity of species in and around the project site, including seabirds, nocturnal birds, and migratory waterbird species, including their breeding populations.

The Study Area considers a large area across the western region of Western Port, from Warneet in the north to the Nobbies in Phillip Island to the south. Specific surveys were undertaken, considering nocturnal, breeding and general abundance and diversity studies, as well as sea-watch surveys and tracking studies to better understand how waterbirds are distributed and use different habitats in Western Port.

How are we assessing impacts?

Our ecologist:

- Carried out a number of field studies around Western Port to better understand the diversity and abundance of waterbirds and how and when they use various habitats.
- Undertook desktop assessments and reviews to understand historic patterns of use by waterbirds in Western Port.
- Undertook an assessment of potential impacts arising from the development and operation of the Terminal project on waterbird populations. This includes consideration of factors such as light, noise and habitat disturbances or loss.
- Developed a suite of environmental management measures to mitigate or manage the identified potential impacts.



Image: Surveying birds as part of Waterbirds assessments.



Watch Biosis' video on *Biologging Habitat Use Assessments* to learn more about the Waterbird tracking for the project.



Case study – Waterbird tracking

For two years, from late 2024 to 2026, Biosis helped undertake a tracking survey of shorebird and seabird species in Western Port. The objective of the study was to provide a better understanding of the movements of key species, investigate foraging and roosting patterns, and further understand the relationships between species behaviour and the Western Port habitat.

Five bird species have been tracked as part of the study:

- Red-necked Stint (*Calidris ruficollis*)
- Australian Pied Oystercatcher (*Haematopus longirostris*)
- Black Swan (*Cygnus atratus*)
- Greater Crested Tern (*Thalasseus bergii*)
- Short-tailed Shearwater (*Ardenna tenuirostris*).

This study made a number of new findings around foraging and roosting patterns for each species.

One unexpected finding from the tracking study was that multiple Red-necked stints repeatedly travelled to the Eastern Treatment Plant in Carrum Downs for nocturnal roosting.



Image: Various waterbird species in Western Port.

Marine Ecology

The Marine Ecology Impact Assessment investigates the potential impacts of the Terminal Project on marine animals and plants. Importantly, it also considers findings from other reports and assessments, such as coastal processes, as well as noise and vibration studies, and how these may impact the marine environment in and around the project area.

What is being investigated?

Our assessments examine the current ecological conditions of the project site and evaluated how these conditions are expected to change following the construction and operation of the Terminal. The assessments are also considering any potential impacts to marine species including marine invertebrates such as ghost shrimp, seagrasses, and various fish species.

How are we assessing impacts?

To understand the potential marine ecology impacts, our ecologists:

- Undertook comprehensive monitoring surveys focused on environmental values such as intertidal and subtidal seagrass, sedimentation, water quality, fish, invertebrates, marine pests, underwater light, underwater noise and mangroves.
- Developed conceptual models to show how impact pathways could influence the existing marine environment.
- Considered how these impacts could affect both individual receptors, but also the ecosystem as a whole.
- Have determined appropriate mitigation and management strategies, as appropriate, to reduce potential impacts.



Image: Example of water quality monitoring buoy deployed in Western Port

Case study – Marine Ecology

As part of the Marine Ecology Impact Assessment, we developed a Project Habitat Map using a combination of aerial drone photography above the intertidal area, and a towed underwater camera.

We then used a machine-learning algorithm to map habitats based on collected samples, bathymetry, topography, water current speeds, and other variables, resulting in a complete map of the underwater marine environment, both in the Terminal Project Area, and for the broader parts of Western Port.

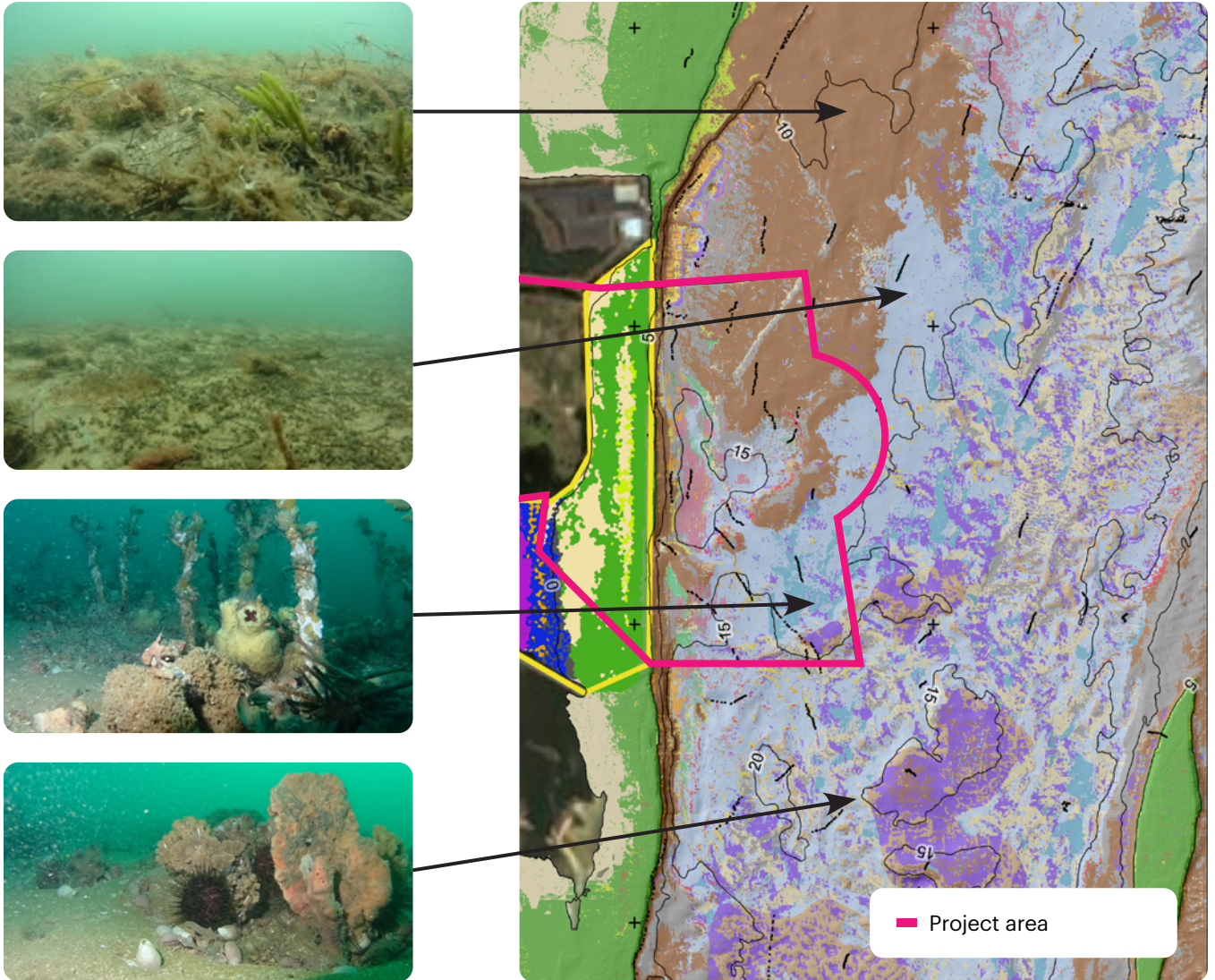


Image: Underwater marine fauna and flora such as Intertidal and subtidal seagrasses and other species

Learn more about our other EES study areas

Scan the QR code to view the other Environment Effects Studies fact sheets.

Environment and Water

These studies explore the potential impacts of the project on coastal processes such as tides, currents, and erosion, surface water and groundwater conditions, as well as soil and sediment quality and any contamination risks.

Western Port is an environmentally unique and sensitive area, and it is important that we fully understand ground and marine conditions and potential impacts so that we can ensure the proper mitigation measures are put in place.



People and Places

These studies explore potential impacts to local communities (commercial, recreational, residential), Historic and Aboriginal Cultural Heritage, and Land Use Planning.

Major projects, such as the Victorian Renewable Energy Terminal, can have an influence on the way we live, work and play in the local community. We need to assess how construction and operational activities affect areas like recreation, business, residences, and economic growth in the region.



Liveability and Amenity

These studies explore the potential impacts of noise, vibration, visual amenity, and air quality as a result of the project.

Constructing new infrastructure can cause noise, visual and other impacts, so we need to assess how these will affect the area surrounding the Project both during construction and ongoing.



Traffic, Transport and Aviation

These studies explore the impacts of additional traffic volumes on local road networks, as well as the potential impacts of the project on local aviation.

Trucks will be needed to bring materials to site, and construction worker vehicles will need to access site via local roads. It's important to assess any potential impacts this could have on the local road network, and ensure roads are safe and traffic is managed appropriately during this time.

From an aviation perspective, offshore wind towers will be up to 200m tall when assembled at the Terminal.



What we've heard so far

Community and stakeholder input continues to play an important role in shaping the Environment Effects Statement (EES) before it is finalised for exhibition.

Based on community engagement to date, several themes have emerged regarding our flora and fauna assessments.

We have received questions about the endangered swamp skink population, including whether relocation is possible and how any unavoidable impacts would be managed.

These matters are assessed in the Onshore Ecology report, and an offset strategy is being developed to compensate for residual impacts on swamp skink habitat that cannot be avoided.

There has also been interest in the surveys and environmental monitoring being undertaken for seabirds, shorebirds and migratory species.

Comprehensive bird studies have been carried out to understand existing behaviours, roosting areas and foraging patterns across the project area.



Image: Community Technical Roundtable session

Upcoming Exhibition of the EES (2027)

The project EES will be available for public review and comment for at least 30 business days.

The EES will include supporting technical documentation, including a detailed consultation report outlining how the project engaged with stakeholders and the community, and considered feedback as part of preparing the EES.

During this time, there will be an opportunity to review the full suite of technical studies and EES reports and make a submission to the Planning Minister in response to the project.

Details about the exhibition, how to access documents and how to make a submission will be published closer to the time. At this stage, EES public exhibition is expected to occur in 2027.

Stay informed and up to date about the EES exhibition process

Subscribe to our e-newsletter by scanning the QR code or visiting:
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