



Whaleback Ridge Renewable Energy Project

Matters of National Environmental Significance (MNES) Avifauna Report

Prepared for
Westcoast Renewable Energy Pty Ltd

July 2026
Report No. 20209.10 (2.0)



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Nature Advisory acknowledges the traditional owners and sovereign custodians of the land on which we work from—the Wurundjeri people of the Woi Wurrung language group and the Tasmanian Palawa people. We extend our respect to their Ancestors and all First Peoples and Elders past and present.

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Executive summary

Westcoast Renewable Energy Pty Ltd engaged Nature Advisory Pty Ltd to assess the impacts of the proposed Whaleback Ridge Renewable Energy Project (the 'proposed action') in relation to avifauna Matters of National Environmental Significance (MNES). These are matters listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The proposed action is a large-scale wind farm proposal located on Tasmania's West Coast. The project area covers approximately 40,500 ha, including areas around Lake Pieman (a hydroelectric water storage dam), south to Zeehan and Trial Harbour, west towards Granville Harbour, east towards Renison Bell and north towards Mt Livingston.

Within this area, the project would comprise up to approximately 280 wind turbine generators (WTGs), associated hardstands, access roads, electricity reticulation, substations, office and workshop facilities, temporary construction facilities including construction compounds, concrete batching plants, quarry and bunded refuelling facilities.

Vegetation in the project area consists mostly of Buttongrass moorland with areas of heathy vegetation and *Eucalyptus nitida* forest within gullies, interspersing the higher plateaus of Buttongrass moorland. Lake Pieman occurs in the centre of the project area and larger forest, and woodland areas are located adjacent to the lake and to the north west of the Project Area. The coastal area provides shrubby coastal heath and sand dune vegetation.

This report focuses on threatened and migratory avifauna species listed under the EPBC Act that are MNES to support a referral under the EPBC Act. If a project may potentially significantly impact an MNES, an application for a Referral under the EPBC Act should be considered. Any action that has the potential to, or is likely to have a significant impact on MNES requires the approval of the Australian Minister for the Environment. The Minister will decide whether the project will be a 'Controlled Action' under the Act, in which case it cannot be undertaken without ministerial approval.

Relevant Matters of National Environmental Significance

A review of MNES was undertaken to assess the potential for impacts to avifauna from the project. This included avifauna surveys and a likelihood of occurrence assessment, which identified a total of ten EPBC Act-listed avifauna species recorded or assessed as potentially or likely occurring within the project area as species of concern for impact assessment, including:

- White-throated Needletail (EPBC Act Vulnerable and Migratory);
- Fork-tailed Swift (EPBC Act Migratory);
- Blue-winged Parrot (EPBC Act Vulnerable);
- Tasmanian Wedge-tailed Eagle (EPBC Act Endangered);
- Azure Kingfisher (Tasmanian) (EPBC Act Endangered);
- Latham's Snipe (EPBC Act Vulnerable and Migratory);
- Masked Owl (Tasmanian) (EPBC Act Vulnerable);
- Orange-bellied Parrot (EPBC Act Critically Endangered);
- Swift Parrot (EPBC Act Critically Endangered); and
- Red-necked Stint (EPBC Act Migratory).

MNES significant impact assessment outcomes

The MNES assessment indicates that the proposed action is not expected to result in a significant impact on the following avifauna species:

- Fork-tailed Swift;
- Azure Kingfisher (Tasmanian);
- Latham's Snipe;
- Swift Parrot; and
- Red-necked Stint.

The proposed action is unlikely to significantly impact these species due to the project's avoidance of suitable habitat, the rarity of records, and low and spatially discrete occurrence.

However, the assessment identifies residual uncertainty regarding the potential for significant impacts on the following species without mitigation:

- White-throated Needletail;
- Blue-winged Parrot;
- Tasmanian Wedge-tailed Eagle (Tasmanian);
- Masked Owl (Tasmanian); and
- Orange-bellied Parrot.

The assessment, informed by the *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* (DoE 2013), determines a likelihood of triggering at least one of the significant impact criteria for these species. Accordingly, additional adaptive management measures are recommended to further mitigate the risk of significant impacts.

On this basis, a referral of the proposed action to the Australian Minister for the Environment is considered appropriate to determine whether it constitutes a Controlled Action under the EPBC Act.

Glossary and abbreviations

Term/Abbreviation	Definition
BBAMP	Bat and Avifauna Adaptive Management Plan.
BUS	Bird Utilisation Survey
CAMBA	China-Australia Migratory Birds Agreement
CEMP	Construction Environmental Management Plan
CRM	Collision risk modelling
DCCEEW	Department of Climate Change, Energy, Environment and Water (Commonwealth)
Indicative development area	The indicative area encompassing proposed and potential locations for project infrastructure, such as turbines, and ancillary facilities. This area does not yet include all linear infrastructure such as transmission lines and access tracks.
DNRE	Department of Natural Resources and Environment
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
ha	Hectare(s)
JAMBA	Japan-Australia Migratory Birds Agreement
PMST	Protected Matters Search Tool
PVA	Population viability analysis
Project Area	Approximately 40,500 ha which contains all the key components for the proposed wind energy facility, excluding the transport route
MNES	Matters of National Environmental Significance
ROKAMBA	Republic of Korea-Australia Migratory Bird Agreement
RSA	Rotor Swept Area
Search region	The project area and a surrounding 10 km buffer used for database searches, literature review and broader contextual assessment
Project area	The Project site within its defined broader boundary
Significant impact	An impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and

Term/Abbreviation	Definition
	quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts (DoE 2013)
TSP Act	Threatened Species Protection Act 1995 (Tasmania)
WBR	Whaleback Ridge Wind Farm Project
WTE	Wedge-tailed Eagle
WTG	Wind Turbine Generator
WTNT	White-throated Needletail

1. Introduction

Westcoast Renewable Energy Pty Ltd engaged Nature Advisory Pty Ltd to assess the impacts of the proposed action on avifauna Matters of National Environmental Significance (MNES) listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The project area comprises 40,500 ha of land between Zeehan and Granville Harbour. The construction of a wind farm with up to 280 WTGs and associated infrastructure is proposed for the project area (Figure 1).

This report focuses on threatened and migratory avifauna species listed under the EPBC Act that are MNES to support a referral under the EPBC Act. If a project may have a significant impact on an MNES, a Referral under the EPBC Act may be required. Any action with the potential to significantly impact an MNES requires the approval of the Australian Minister for the Environment. The minister will decide whether the project will be a 'Controlled Action' under the Act, in which case it cannot be undertaken without ministerial approval.

Nature Advisory has undertaken avifauna assessments, as outlined in Section 2. Field surveys have been undertaken and are ongoing, including Bird Utilisation Surveys (BUS), as well as targeted surveys for raptors, White-throated Needletail, Tasmanian Masked Owl, and Orange-bellied Parrot.

This report is divided into the following sections.

Section 2 describes the existing information and field surveys undertaken to date.

Section 3 presents the likelihood of occurrence of avifauna MNES.

Section 4 presents a preliminary assessment of potential for significant impacts.

Section 5 provides a conclusion and discusses implications for the Project.

This investigation was undertaken by a team from Nature Advisory comprising Dr Sergio Nolzco Plasier (Senior Zoologist), Brett Macdonald (Senior Ecologist), Andrew Lewis (Senior Ecologist & Project Manager), Mike Hitchcock (Senior Ecologist & Project Manager), Emma Wagner (GIS Analyst), and Dr Inga Kulik (Director).

Figure 1. EPBC Act-listed avifauna database records

Project No: 20209.10
Project location: Whaleback Ridge Wind Farm, TAS
Date: 28/07/2026

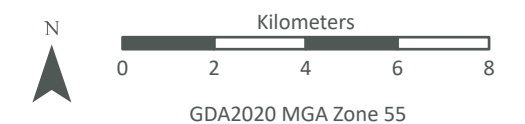
-  Project boundary
-  Search region (10km buffer of project boundary)
-  Indicative development area

Threatened Avifauna Database Records

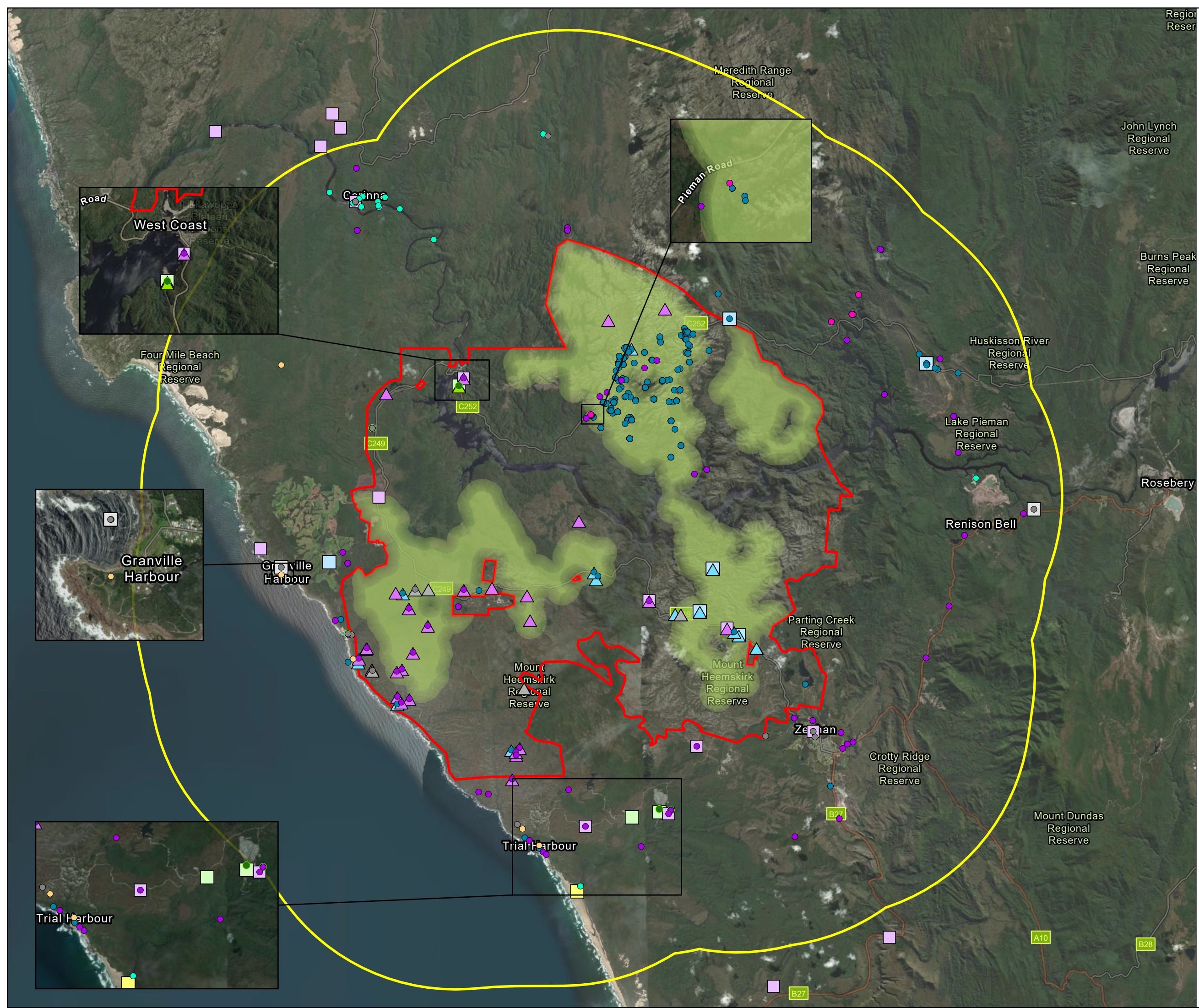
- NVA**
-  Blue-winged Parrot
 -  Latham's Snipe
 -  Orange-bellied Parrot
 -  Tasmanian Azure Kingfisher
 -  Tasmanian Masked Owl
 -  Tasmanian Wedge-tailed Eagle
 -  White-throated Needletail

- ALA**
-  Blue-winged Parrot
 -  Latham's Snipe
 -  Tasmanian Wedge-tailed Eagle
 -  White-throated Needletail

- Ebird**
-  Blue-winged Parrot
 -  Latham's Snipe
 -  Tasmanian Wedge-tailed Eagle
 -  Red-necked Stint
 -  White-throated Needletail



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1.1. Site description

The project area for this investigation (Figure 1) comprises 40,500 hectares located approximately between Zeehan and Granville Harbour, on the mid-west coast to north-west coast region of Tasmania. The majority of the north of the project area is situated within the Meredith Range Regional Reserve, and the majority of the south is within the Mount Heemskirk Regional Reserve. The remainder of the project area comprises other publicly administered land, such as timber production zones, Hydro Electric Corporation zoned land (Lake Pieman) and Crown land.

The topography and geology throughout the project area vary considerably. The granitic Heemskirk range in the south-west of the project area rises abruptly from the coastline to over 800 metres Above Sea Level (ASL) and is deeply incised by drainages. Lake Pieman (a large on-stream reservoir on the Pieman River) dissects the central-north of the project area, in an east-west orientation, at about 100 metres ASL. The majority of the project area is an undulating plateau between 200 metres and 400 metres ASL, which is extensively incised by drainages and composed of Quartzwacke turbidite (a quartz-rich sedimentary rock), with extensive rock outcropping and shallow peaty soils. There is also a large area in the centre of the project area, which is composed of Dolerite and the north-west is composed of schist, quartzite, gravels and sands. Soil types throughout the project area include organosol, rudisol, ferrosol and dermosol.

The main waterways within the project area include Lake Pieman, Tasman River, Heemskirk River and Stanley River, along with numerous creeks and tributaries. Average annual precipitation in the project area and surrounds is generally in the range of 2,000–2,500 millimetres per annum, and locally higher on exposed ridges and mountains.

Land uses in the project area and surrounds include nature conservation (regional reserves), forestry (inc. Future Potential Production Forests), mining, hydro energy storage (Lake Pieman), high voltage transmission, small areas of agriculture and the Granville Harbour Wind Farm to the west.

The vast majority of the project area comprises native vegetation, including several types of forest, rainforest, woodland, scrub, moorland, sedgeland and rushland. Wet eucalypt forest, rainforest and woodland communities occur mainly within gullies and lower-lying areas throughout the central and north-west parts of the project area. Areas dominated by scrub, heathland and coastal complexes occur predominantly closer to the coastline, at lower elevations, and the coastal area supports shrubby coastal heath and sand dune vegetation.

The majority of the eastern half and south-west of the project area supports largely treeless Buttongrass Moorland, interspersed with areas of low heathy vegetation and regenerating eucalypt forest within adjacent gullies, occasionally extending up to peaks and ridgelines. The proposed indicative development area is primarily situated on peaks, ridgelines and elevated plateaus, which almost exclusively support these vegetation communities (see photo below).



Typical Buttongrass moorland habitat, comprising the vast majority of the proposed indicative development area

Parts of the landscape which are dominated by Buttongrass moorland undergo periodic burning, both from natural causes (dry lightning strike) and planned fuel reduction burns. This creates a fire mosaic, in which highly flammable, fire-dependent Buttongrass moorland dominates exposed plateaus, while fire-sensitive wet forests and rainforest persist in sheltered gullies and drainage lines. Fire acts as the principal ecological process maintaining this pattern, repeatedly ‘resetting’ Buttongrass moorland vegetation while limiting forest expansion. The resulting landscape reflects a dynamic balance between vegetation that promotes fire and vegetation that seeks refuge from it.

A large and intense wildfire impacted approximately 25 percent of the project area in February 2025 (northern and central areas), primarily affecting Buttongrass moorland, but also affecting forested areas. Large areas of Buttongrass moorland in the north of the project area (Merideth Range) have also been subject to planned mosaic burning over the past five years and more.

Virtually all of the project area provides habitat for a large number of native fauna species, with a wide variety of landforms and associated vegetation communities, which are structurally connected, particularly via treed habitat corridors along gullies, creeks and rivers. Areas within the project area which would be considered to support the highest fauna diversity are generally not the open Buttongrass moorlands, but rather the ecotones and structurally complex habitats where different vegetation types meet, especially around watercourses and sheltered gullies.

The project area lies within the Tasmanian West bioregion and largely falls within the Pieman catchment. Southern edges of the project area fall marginally within the King-Henty catchment, comprising only a few small creeks.

2. Existing information and methods

Existing information used for this investigation is described below.

2.1. Sources of information

Relevant information has been obtained from the following:

- *Whaleback Ridge Renewable Energy Project: Desktop Flora and Fauna Assessment – Report No. 20209.11 (1.4)*, consultant report prepared for Westcoast Renewable Energy Pty Ltd (Nature Advisory 2023a);
- *Whaleback Ridge Wind Farm: Bird and Bat Assessments 2021–2022 – Report No. 20209.2 (1.3)*, consultant report prepared for Westcoast Renewable Energy Pty Ltd (Nature Advisory 2023b);
- *Whaleback Ridge Renewable Energy Major Project – Assessment Criteria*. Prepared by the Development Assessment Panel for the Whaleback Ridge Renewable Energy Major Project, 21 August 2024 (Tasmanian Planning Commission, 2024).
- *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* (DoE 2013);
- *Wind Farms and Birds: Interim Standards for Risk Assessment* (Australian Wind Energy Association 2005);
- *Onshore Wind Farm Guidance – Best practice approaches when seeking approval under Australia’s national environmental law* (DCCEEW 2024a);
- *Best Practice Guidelines for the implementation of wind energy projects in Australia* (CEC 2018);
- *TASVEG 4.0* administered by the Department of Natural Resources and Environment Tasmania (DPIPWE 2020);
- The Natural Values Atlas (NVA), a database administered by the Department of Natural Resources and Environment Tasmania (DNRE 2026);
- *eBird*: an online database of bird distribution and abundance administered by Cornell Lab of Ornithology (eBird 2026);
- The *Atlas of Living Australia* (ALA 2026); and
- The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) *Protected Matters Search Tool* (PMST; DCCEEW 2026).

Existing avifauna species records and information about the potential occurrence of listed matters were obtained from an area termed the ‘search region’, defined here as an area within a 10-km radius of the project area boundary.

A compilation of nationally listed avifauna species recorded within the search region was identified using the above-mentioned databases (NVA, eBird and ALA), supplemented by consultant expertise.

The online EPBC Act *PMST* (DCCEEW 2026) was consulted to identify nationally listed species and ecological communities that may occur in the search region based on broad-scale predictive distributions and known records.

2.2. Field assessments

A significant amount of field effort for avifauna surveys has already been completed for the project and is ongoing. Over 485 observer days in the field has been undertaken to date from 2021 to 2026 including Bird Utilisation Surveys, Targeted Raptor Surveys, Targeted Orange Bellied Parrot Surveys, Targeted White Throated Needletail Surveys, Helicopter Nest Searching, and passive acoustic and tracking surveys for Masked Owl and Orange Bellied Parrot. A summary of the field assessments conducted to date and their timing is detailed below.

2.2.1. Bird Utilisation Surveys

The bird utilisation survey (BUS), consistent with the guidance in *Wind Farms and Birds - Interim Standards for Risk Assessment* (AusWEA 2005), *Best Practice Guidelines for Wind Energy Developments in Australia* (CEC 2018), and the *Onshore Wind Farm Guidance* (DCCEEW 2024a).

BUSs were undertaken between 2021 and 2026 across the project area using a fixed-point bird count method to characterise the use of the area by the region's avifauna. Ten surveys were undertaken during the periods summarised in Table 1.

Table 1: Bird utilisation surveys timing and effort.

Survey	Season	Dates	No. of observers	Days	Effort (hrs)
1	Autumn	4–12 March 2021	2	9	52
2	Summer	19–26 January 2022	2	8	45.7
3	Autumn	17–25 April 2024	2	9	53.3
4	Winter	20–26 July 2024	2	7	53
5	Spring	8–16 July 2024	2	9	52.7
6	Summer	22–31 January 2025	2	10	53
7	Autumn	22 April – 1 May 2025	2	10	57.3
8	Winter	21–30 July 2025	2	9	58.7
9	Spring	8–16 October 2025	2	9	57
10	Summer	28 January – 2 February 2026	2	6	57.3
Total				86	540

BUSs involved fixed-point censuses of birds at 22 impact monitoring locations within 500m of the proposed turbines, and two at nearby non-impact reference locations at least 500m away from proposed impact areas, that were in similar landscape and habitat settings. Early surveys (2021 and 2022) used 20 locations, with the addition of 2 locations in Autumn 2025 in response to new changes in development areas, increasing coverage in the forested sections to the northwest, which were proposed for development (see).

Fixed-point survey locations were chosen to provide elevated vantage points that allow at least 180° (preferably >270°) field of view with few obstructions within 200 m (e.g. trees, cliffs, etc.). Survey locations were strategically located across the site to be accessible, provide reasonably even coverage of the development area and representative habitats, and to be approximately 2 km apart.

BUS fixed-point counts were undertaken by two experienced ornithologists during each seasonal survey round. At each survey location, an ornithologist carried out a survey for 20 minutes, with each survey site visited eight times across four periods of the day to account for time-of-day

differences in bird movements and activity (early and late morning, and early and late afternoon). During this time, ornithologists undertook a census of all bird species as far as observable with 10x binoculars. The species, the number of individuals and the height of the bird when first observed were documented. Observations included auditory and naked-eye observation in all directions, in addition to several scans below, at and above the horizon using binoculars.

Survey periods were conducted four times per year to capture seasonal variation in raptor use of the site. On some occasions, not all repetitions of survey locations were achievable due to safety and/or access issues (e.g. bushfire, gale force winds, flooded rivers preventing crossing).

For this report, flight height relative to the Rotor Swept Area (RSA) is described below. These heights were based on a turbine height of up to 250 m and an RSA diameter of 170 m.

- **A** = Below RSA (< 80 m Above Ground Level (AGL))
- **B** = At RSA (80 – 250 m AGL)
- **C** = Above RSA (> 250 m AGL)

Additionally, the area was surveyed using a roaming survey methodology. Under this method, ornithologists recorded all Species of Concern observed from a slow-moving vehicle while travelling between each survey location to record any incidental sightings. These surveys covered most of the Project Area.

2.2.2. Raptor surveys

Utilisation surveys

Surveys targeting raptor species were conducted following a vantage-point count methodology as described under the *Survey guidelines for Australia's threatened birds: Guidelines for detecting birds listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999* (DEWHA 2010).

Targeted raptor utilisation surveys were undertaken across the project area between 2021 and 2026 using a fixed-point bird count method. Ten surveys were undertaken during the periods summarised in Table 2.

Table 2: Raptor surveys timing and effort.

Survey	Season	Dates	No. of observers	Days	Effort (hrs)
1	Autumn	4–12 March 2021	2	9	52
2	Summer	19–26 January 2022	2	8	45.7
3	Autumn	7–15 May 2024	2	9	52.3
4	Winter	23–31 July 2024	2	9	64
5	Spring	18–27 October 2024	2	10	56
6	Summer	4–11 February 2025	2	8	52
7	Autumn	22–30 May 2025	2	9	63.3
8	Winter	6–14 August 2025	2	9	64.3
9	Spring	29 October – 5 November 2025	2	8	64
10	Summer	18 January – 26 February 2026	2	9	64
Total				88	577.6

Dedicated raptor surveys were undertaken in addition to BUSs to improve statistical robustness and to provide the highest-quality data for Collision Risk Modelling (CRM), following advice from Symbolix.

During seasonal surveys, up to eight counts were undertaken at each of the 24 survey points. The point count method followed the same methodology as BUS (Section 2.2.1). Survey points were selected across the project area to maximise coverage of proposed wind turbine locations, with some adjustments made to improve spatial representation (see). While most locations aligned with BUS impact points, several were added from 2024 onwards to adjust to alterations of the development area and to increase coverage of the coastal and eastern parts of the site and to improve visibility of forested areas and ridge lines, where collision risk may be higher due to eagles using these features for potential nesting and for soaring on updrafts.

The assessment primarily targeted the Tasmanian Wedge-tailed Eagle, but other raptor species were also recorded (e.g. Grey Goshawk and White-bellied Sea-eagle, among others), along with any other listed bird species detected, including White-throated Needletail and Blue-winged Parrot. Recorded data included species, number of individuals, age class, behaviour, distance and bearing from observer, direction of flight, flight height, and flight paths.

Additionally, the area was surveyed using a roaming survey methodology. Under this method, ornithologists recorded all raptors or other species of concern observed from a slow-moving vehicle while travelling between each survey location to record any incidental sightings. These surveys covered most of the Project Area.

Nest surveys

Targeted aerial nesting surveys for the Tasmanian Wedge-tailed Eagle were undertaken across the Project Area, with surveys also extended to potential nesting sites within 3 km of the Project Area and up to 5 km for historical nest records. Surveys were conducted in 2022 and 2025 to identify active nests and potential nesting habitat, which were led by experienced wildlife biologist Nick Mooney, using helicopter-based systematic searches with parallel transects spaced approximately 200–300 metres apart covering the entire project area. Survey effort included five days of searching in May–June 2022 and approximately 16.5 hours over five days of aerial searching in June and October 2025 from a B3 Eurocopter Squirrel helicopter (Mooney 2023, 2025a, 2025b).

2.2.1. White-throated Needletail surveys

Surveys targeting White-throated Needletails (WTNT) were conducted following a vantage-point count methodology as described under the *Survey guidelines for Australia's threatened birds: Guidelines for detecting birds listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999* (DEWHA 2010).

Targeted White-throated Needletail surveys were undertaken between 2024 and 2025 across the project area using a fixed-point bird count method, during the WTNT survey window. The aim of these surveys was to investigate the spatial utilisation of this species and, where sufficient data were obtained, to inform Collision Risk Modelling for WTNT. Four autumn surveys were undertaken during the periods summarised in Table 3. **Error! Reference source not found..**

Table 3: White-throated Needletail surveys timing and effort.

Survey	Dates	No. of observers	No. of days	Effort (hrs)
1	2–7 March 2024	2	9	74
2	19–27 March 2024	2	9	72

Survey	Dates	No. of observers	No. of days	Effort (hrs)
3	7–15 April 2024	2	10	67.3
4	24 March – 4 April 2025	2	9	90.7
Total			37	304

The targeted WTNT fixed-point bird count method comprised 33 survey points across the project area (see). Up to four counts were undertaken at each point per survey, at different times of day, so that time-of-day bird activity biases did not affect the pooled count data. The method involved an observer stationed at a survey point for 40 minutes. During this period, all birds of the target species that flew within view were recorded using 10X magnification binoculars (ZEISS Victory RF 10x42), including the number of individuals, time first observed, time the bird/s flew out of sight, distance from observer, flight behaviour, heights and flight paths.

The area was also surveyed using a roaming survey methodology. Under this method, ornithologists recorded all WTNT observed from a slow-moving vehicle while travelling between each survey location to record any incidental sightings. These surveys covered most of the Project Area.

In addition to the targeted WTNT surveys, observations of WTNT were also collected during BUS and Raptor fixed point count surveys where they overlapped with the WTNT survey window, to supplement data for this species.

2.2.2. Tasmanian Masked Owl surveys

Tasmanian Masked Owl acoustic surveys were undertaken within areas of potential habitat across the project area. Survey locations were selected to target mature forest patches, particularly where they interface with open areas, ridgelines, gullies, and riparian corridors, as these landscape features are considered to provide optimal foraging and movement habitat for the species.

Wildlife Acoustics Song Meters® (acoustic recording devices) were deployed at 40 locations within potential habitat near proposed infrastructure during two field trips between 2024 and 2025, with 20 sites per trip and locations shuffled between surveys (see). Song meters were programmed to record continuously overnight, from one hour before dusk to one hour after dawn.

However, during the 2025 survey, bushfires partially affected the project area, resulting in delayed retrieval of detectors, with 8 of the 20 deployed units being lost or destroyed. Consequently, survey coverage was reduced, and data from the affected detectors were not available for analysis. Deployments were undertaken during the periods summarised in Table 4. **Error! Reference source not found..**

Table 4: Tasmanian Masked Owl surveys timing and effort.

Survey	Season	Dates	No. of detectors	Effort (detector nights)
1	Spring	9–28 October 2024	20	335
2	Summer	21 January – 3 April 2025	12	pending analysis
Total				TBC

During the Spring 2024 survey, one song meter (M020) was inundated, resulting in the loss of both the recorder and all associated data. One recorder (M01b) experienced a battery failure and operated for only five nights. Another recorder (M011) experienced an unknown malfunction, resulting in the loss of data for several survey nights. All remaining recorders operated for the full scheduled recording period between deployment and retrieval, averaging 18.3 survey nights per unit.

Audio files were analysed using two methods. First, a cluster analysis and advanced classifier analysis. Cluster analysis was conducted using parameters consistent with known Tasmanian Masked Owls (Todd 2012, Gros et al. 2023). Results of cluster analyses were manually assessed for the top 10 to 20 detections, with any clusters of similar species (e.g. Barn Owl, Brush-tailed Possum, Tasmanian Devil, etc.) checked manually in full. Second, an advanced classifier trained on local Tasmanian Masked Owl recordings was used to detect recordings that matched known recordings.

Data from the Summer 2025 surveys is still pending analysis.

2.2.3. Orange-bellied Parrot surveys

Roaming and radio telemetry

Orange-bellied Parrot (OBP) surveys were undertaken across the project area during the OBP migration season, using a combination of roaming and radio telemetry. The initial survey comprised roaming only, and all subsequent surveys incorporated both roaming and radio telemetry from multiple point locations (see). The surveys aimed to identify the presence and locations of the species within areas of suitable habitat (primarily the coast but also around creek lines and gullies) and across the project area. Six autumn surveys were undertaken during the periods summarised in Table 5.

Table 5: Orange-bellied Parrot radio telemetry surveys timing and effort.

Survey	Dates	No. of observers	Days	Effort (hrs)
1	23 March 2021	1	1	undefined
2	12–15 April 2022	2	6	8
3	25–28 April 2022	2	3	5.6
4	19–26 March 2024	2	8	21.7
5	5–11 April 2024	2	7	15.6
6	18–25 April 2024	2	7	17.4
		Total	32	>68.3

Surveys involved an observer stationed at each of 95 survey points across the project area for 15 minutes, with the aim of maximising coverage of the surrounding area and using a handheld antenna to scan for frequencies from birds tagged by the Tasmanian Department of Natural Resources and Environment (DNRE) (DNRE 2024). During surveys, all individuals of the target species seen or heard, or detected via radio transmission, were recorded, including the number of individuals, time of first observation, time the individual(s) moved out of sight or landed, distance and bearing from the observer, direction of flight, behaviour, height, and flight path.

DNRE radio transmitter study

The *Department of Natural Resources and Environment Tasmania Orange-bellied Parrot (OBP) Migration Tracking Project* was established to investigate OBP migratory behaviour, including movement patterns, timing, and habitat use across the Tasmanian migratory flyway using VHF radio telemetry (DNRE 2024). WRE continue to be an active participant in the program with a receiver station installed on a meteorological monitoring mast within the project site. During the 2024 northbound migration season, 46 OBP individuals were fitted with VHF transmitters between late February and mid-March, comprising captive-released and wild-born juvenile birds, as well as one adult wild-born individual. Transmitters were attached to the central tail feathers, and birds

were subsequently detected via an array of 20 automated receiver stations deployed along the migration route (i.e. across the north and west coasts of Tasmania and adjacent islands, extending from Smoke Signal Hill in southern Tasmania to King Island). Four receiver stations (Granville West, Granville East, Granville Inland and Trial Harbour) were located near or within the Project Area and monitored movement pathways at the latitude of the project.

3. MNES Identification and likelihood of occurrence

The following section addresses the likelihood of occurrence of avifauna MNES within the project area.

3.1. Listed ecological communities

The *Protected Matters Search Tool* (DCCEEW 2026) did not identify any EPBC Act-listed threatened ecological communities relevant to avifauna within the search region.

3.2. Listed species

The EPBC *Protected Matters Search Tool* (DCCEEW 2026), together with records from the NVA (DNRE 2026), eBird (eBird 2026), and ALA (ALA 2026), indicated that the search region overlaps with records and/or modelled distribution ranges of 25 species listed under the EPBC Act, including 17 threatened species and 14 migratory species. The likelihood of occurrence of these species in the investigation area was assessed in Appendix 1.

The analysis of the potential occurrence of listed fauna species excludes:

- Seabird species (such as albatrosses and petrels) given the project area is inland of the coastline.

Species considered 'likely to occur' are those that have a very high chance of being in the project area given the existence of numerous records in the search region and suitable habitat in the project area. Using the precautionary approach, species considered to have the 'potential to occur' are where suitable habitat exists for the species, but recent records are scarce.

- A total of ten EPBC Act-listed threatened avifauna species have either been **recorded** or assessed as **potentially or likely to occur** within the project area, including:
 - Recorded in the project area:
 - White-throated Needletail *Hirundapus caudacutus* (EPBC Act Vulnerable and Migratory);
 - Latham's Snipe *Gallinago hardwickii* (EPBC Act Vulnerable and Migratory);
 - Blue-winged Parrot *Neophema chrysostoma* (EPBC Act Vulnerable);
 - Tasmanian Wedge-tailed Eagle *Aquila audax fleayi* (EPBC Act Endangered);
 - Potentially or likely to occur in the project area:
 - Fork-tailed Swift *Apus pacificus* (EPBC Act Migratory);
 - Azure Kingfisher (Tasmanian) *Ceyx azureus diemenensis* (EPBC Act Endangered);
 - Masked Owl (Tasmanian) *Tyto novaehollandiae castanops* (EPBC Act Vulnerable);
 - Orange-bellied Parrot *Neophema chrysogaster* (EPBC Act Critically Endangered);
 - Swift Parrot *Latamus discolor* (EPBC Act Critically Endangered); and
 - Red-necked Stint *Calidris ruficollis* (EPBC Act Migratory).
- Migratory and/or threatened shorebird species listed under the EPBC Act have not been recorded within the project area and are generally scarce in the surrounding search region based on database records. The project area lacks suitable habitat, as it does not include coastlines, mudflats, estuaries, or shallow, un-vegetated wetland margins required for foraging and roosting; the project layout also avoids the nearby coastline and river mouths. Inland waterbodies present are typically vegetated and/or too deep, and are therefore unsuitable for

these species. Listed shorebird species, predominantly migratory, were included in the assessment based on broad-scale modelled distributions from the Protected Matters Search Tool, which do not reflect local habitat availability. Accordingly, the following species are considered **unlikely to occur** and are not discussed further:

- Curlew Sandpiper *Calidris ferruginea* (Critically Endangered and Migratory);
 - Bar-tailed Godwit *Limosa lapponica baueri* (Endangered and Migratory);
 - Hooded Plover *Thinornis cucullatus cucullatus* (Vulnerable);
 - Greater Sand Plover *Charadrius leschenaultii* (Vulnerable and Migratory);
 - Sharp-tailed Sandpiper *Calidris acuminata* (Vulnerable and Migratory);
 - Red Knot *Calidris canutus* (Vulnerable and Migratory);
 - Common Sandpiper *Actitis hypoleucos* (Migratory);
 - Pectoral Sandpiper *Calidris melanotos* (Migratory); and
 - Double-banded Plover *Charadrius bicinctus* (Migratory).
- EPBC Act-listed species not recorded within the project area during surveys, and with few records in the surrounding search region that are largely associated with coastal habitats, lack suitable habitat within the project area. Accordingly, these species are considered **unlikely to occur** and are not discussed further. These include:
 - Australian Fairy Tern *Sternula nereis nereis* (Vulnerable);
 - Common Tern *Sterna Hirundo* (Migratory);
 - Caspian Tern *Hydropogone caspia* (Migratory); and
 - The Australasian Bittern *Botaurus poiciloptilus* (Endangered) has not been recorded within the project area during surveys and is scarce in the surrounding search region. The project area lacks suitable habitat, as it does not contain shallow freshwater wetlands with dense emergent vegetation required for foraging and breeding. Accordingly, this species is considered **unlikely to occur** and is not discussed further.

4. Significant impact assessment

Based on the likelihood of occurrence assessment (Appendix 1) and targeted surveys undertaken, ten MNES-listed bird species were identified for detailed assessment due to their known, likely or potential occurrence within the project area and their potential interaction with the proposed wind farm. Significant impact assessments for these species have been undertaken in accordance with the *EPBC Act Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* (DoE 2013) and the *Referral guidelines for 14 birds listed as migratory species under the EPBC Act* (draft) (DoE 2015), with the detailed assessment outcomes provided in Appendix 2.

A summary of these MNES species is provided in Table 6**Error! Reference source not found.**, including an overview of each species, potential impacts, embedded management measures, and additional recommended measures where applicable to mitigate the risk of significant impacts. This does not include measures to address unforeseen residual impacts after all feasible management measures have been exhausted through the mitigation hierarchy. Any remaining residual impacts would instead be managed through the Bird and Bat Adaptive Management Plan (BBAMP).

Table 6: Summary of MNES avifauna relevant to the proposed action

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
White-throated Needletail	VU, M	6 / 11	Present	Aerial over most habitats, particularly wooded areas, and less frequently over open treeless habitats such as grasslands, swamps and farmland. The nominate subspecies <i>caudacutus</i> breeds across northern Asia and migrates to Australasia during the non-breeding season. In Australia, the species is widespread across eastern and south-eastern regions, including Tasmania, typically arriving between September and November and departing between March and April, with peak abundance in southern regions occurring in March.	Y	N	Potential	304hrs over 37days (White-throated Needletail/Fork-tailed Swift)	Based on 304hrs over 37 days of targeted surveys along with incidental observation during broader Bird Utilisation Surveys WTNT was recorded as intermittently utilising the project area in flocks rather than regular daily activity. There was a widespread distribution of observations across the project area not showing any clear discrete areas of high use. Negligible impacts associated with habitat loss and modification are expected as WTNT are highly aerial non-breeding migrants that use the broader landscape opportunistically for foraging or passage, with no evidence of roosting. Overall collision risk is the primary potential impact as these species may fly at RSA height during foraging and migration. A recent study at a Tasmanian wind farm using an AI-based detection system (Reid and Rogers 2026), suggest high avoidance rates based on the species frequent flights at collision risk height and low observed incidents of collision. There however remains uncertainty given the potential for large aggregations. Preliminary assessment is that the Project may have potential likelihood of triggering at least one of the significant impact criteria and therefore as a precaution WTNT is expected to require further assessment and mitigation measures. Measures are being explored to mitigate potential collision risk impact. Additional mitigation and management measures currently being explored include: - Carcass Search and Mortality Reporting - Threshold based response

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
									- Adaptive management plan - Bird detection and collision mitigation systems
Fork-tailed Swift	M	0 / 0	Potential	Aerial over most habitats, including wet sclerophyll forest, but mainly associated with open forest and plains. The species may occasionally occur in mixed flocks with other aerial insectivores such as the White-throated Needle-tail. It is a non-breeding visitor to all Australian states and has several records in Tasmania, primarily from Bass Strait islands including King Island, Cape Barren Island and the Furneaux Group, but is less common on mainland Tasmania.	Y	N	Unlikely	304hrs over 37days	No Fork-tailed Swifts have been recorded during targeted or incidental surveys within the project site or surrounding landscape. The Fork-Tailed Swift is often observed together with WTNT. As Fork-tailed Swift was not recorded during the extensive survey effort it is considered that although they have potential to occur alongside WTNT their occurrence is likely to be very low. Mitigation measures being explored for WTNT will also mitigate any potential impact on Fork-tailed swift. For Fork-tailed swift it is considered that significant impacts are unlikely.
Blue-winged Parrot	VU	1,773 / 1,778	Present	Breeds in southern mainland Australia and across north-western, central and eastern Tasmania. The species is a partial migrant, with most Tasmanian birds moving in winter to mainland Australia across Bass Strait during the non-breeding season. Nests occur in hollows within live or dead trees in eucalypt forests and woodlands, while foraging habitat includes a broad range of open and semi-open environments such as pastures, grasslands, scrublands, heathlands, swamps, dunes and saltmarshes.	Y	Y	Potential	540hrs over 86days (no targeted survey; mainly covered during BUS)	The Blue-winged parrot was recorded in all seasons but most frequently during spring and summer and typically as single individuals or pairs. A small portion of flights observed during survey have been within the RSA. Flight observations have been widespread across open habitat within the project site with no discrete areas of elevated collision risk. Although this species is generally recorded flying below RSA, there remains some uncertainty on the significance of this risk. Preliminary assessment is that the Project therefore has a small likelihood of triggering at least one of the significant impact criteria and therefore as a precaution Blue Winged Parrot is expected to require further assessment and mitigation measures. Measures are being explored to mitigate potential collision risk impact. Additional mitigation and

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
									management measures currently being explored include: - Carcass Search and Mortality Reporting - Threshold based response - Adaptive management plan - Bird detection and collision mitigation systems
Tasmanian Wedge-tailed Eagle	EN	32 / 55	Present	The sub-species is endemic to Tasmania and occurs in a wide range of habitats including wooded and forested lands to open country. Their breeding sites are quite specific and require nests in emergent trees in sheltered patches of old-growth native forest .	Y	Y	Potential	578hrs over 88days	The project site currently has no WTE nests after three years of helicopter searching (Nick Mooney). Two nests are within 1km of the project area. The density of nesting and potential impact on nesting remains extremely low for the project. Targeted raptor surveys have shown that TWTE flight path and utilisation is broadly across the site. There is uncertainty around the degree of potential collision impacts as ongoing collision risk modelling analyses is underway. Accordingly, and applying the precautionary principle, the potential for a significant impact remains uncertain and cannot be confidently considered unlikely at this stage. Measures being explored to mitigate potential collision risk include: -Avoidance of mature forest and nesting trees - 1000m nesting exclusion buffer - Roadkill management and carrion prey removal program - Carcass Search and Mortality Reporting - Threshold based response - Adaptive management plan - Bird detection and collision mitigation systems

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
Azure Kingfisher (Tasmanian)	EN	0 / 0	Likely	In Tasmania, the Azure Kingfisher is an uncommon and localised resident, primarily associated with freshwater river systems in the south, west and north-west coasts, with scattered records in the north-east and central regions. Typically occurs in diverse vegetation at wetland edges, especially still or slow-flowing freshwater habitats. Forages in shallow water and nests in burrows above flood level, generally in banks adjacent to wetlands. In Tasmania, occurs along river systems .	Y	N	Unlikely	540hrs over 86days (no targeted survey; mainly covered during BUS)	The species has not been recorded within the project area, and there are no historical records in the surrounding area. In the design phase of the project, it is anticipated that habitat will be avoided to the degree possible, with turbines to be sited outside of riparian vegetation; however, linear infrastructure such as roads and transmission may not be able to completely avoid this habitat. While some overlap with riparian habitat is anticipated for linear infrastructure, impacts are expected to be limited and primarily associated with discrete watercourse crossings. Collisions are also considered unlikely, as the species is generally sedentary and largely associated with riparian vegetation along watercourses (Woodall 2020), which do not intersect the proposed turbine locations. For Azure Kingfisher (Tasmanian) it is considered that significant impacts are unlikely.
Latham's Snipe	VU, M	4 / 6	Present	Non-breeding visitor to south-eastern Australia, arriving between August and January and departing by late February to early March. In Australia, it is widespread in south-eastern regions, with the majority of the non-breeding population occurring in Victoria (excluding the north-west) and extending into southern New South Wales and Tasmania. In Tasmania, the species is widespread but scattered, with larger concentrations recorded in the Central Plateau region. It primarily inhabits a wide range of permanent and ephemeral freshwater wetlands, particularly open wetlands with	Y	Y	Unlikely	540hrs over 86days (no targeted survey; mainly covered during BUS)	Habitats within and surrounding the development area are not considered optimal for snipes in terms of extension and quality, consistent with the paucity of field and historical records. The paucity of sightings (a single record across multiple years of surveys), together with the limited number of historical records in the surrounding area, indicates that the project area does not constitute an important site or regularly support ecologically significant numbers. The potential of any indirect impact to habitat by effects on water quality and hydrogeological function at wetlands and waterways will be prevented through implementation of a CEMP. Infrastructure will also be micro sited with exclusion of works if areas are confirmed as regular use or high suitability habitat. The application of a minimum 100 m construction exclusion and disturbance buffer is proposed. It is therefore considered that significant impacts are unlikely.

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
				dense nearby cover, including the margins of rivers and creeks, swamps, bogs, waterholes and similar habitats.					
Masked Owl (Tasmanian)	VU	3 / 54	Potential	The subspecies is endemic to Tasmania and occurs mainly in habitats containing mature forest and tall woodland, typically below 600 m elevation. It is most strongly associated with open forest dominated by large hollow-bearing trees suitable for nesting and roosting, often adjacent to more open areas. It is more common in central and eastern Tasmania than in the west. Nests are located in large, deep hollows in living or dead trees.	Y	Y	Potential	335 detector-nights (first survey; second survey ongoing—analysis pending)	The species was not recorded during targeted field surveys within the project area, although there is at least one historical record and some records in the broader locality. While some potential habitat occurs within the broader landscape, the indicative development area largely avoids modelled suitable habitat and mature forest. Modelled habitat shows a patchy distribution of medium and low-quality habitat. Areas of habitat will be avoided to the degree possible, with turbines to be sited outside of this habitat; however, linear infrastructure such as roads and transmission may not be able to completely avoid this habitat. Collision risk is also expected to be low, as turbines are located outside forested areas and the species is unlikely to undertake frequent flights away from forest edges (e.g. only 9.2% of locations from radio-tracked individuals in Tasmania were recorded more than 100 m from a forest edge or clearing (Young et al. 2020). Management measures will include -Pre clearance surveys - Avoidance of mature forest and modelled suitable habitat (medium- and high-quality). - 300-m nesting exclusion buffers. - Vegetation clearing will be supervised, with any active nests managed in accordance with the CEMP, including avoidance and salvage where required. Preliminary assessment is that the Project may have potential likelihood of triggering at least one of the significant impact criteria and therefore as a precaution the Tasmanian Masked Owl is expected to require further assessment and mitigation measures.

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
Orange-bellied Parrot	CR	1 / 7	Potential	The species is endemic to south-eastern Australia and breeds at Melaleuca in Tasmania during spring and summer, inhabiting complex near-coastal buttongrass plains, moors and sedgelands, often with paperbark (<i>Melaleuca</i>) creeklines and patches of Smithton peppermint (<i>Eucalyptus nitida</i>) forest. During migration through western and north-western Tasmania, it may occur in coastal dunes, heathlands, grasslands and saltmarsh, within 10 km of the coast, most often within 200 m of coastal wetlands, with very few records beyond 5 km inland.	Y	N	Potential	68hrs over 31days	During the DNRE OBP migration tracking project, twelve tagged birds were detected across Tasmania following departure from the Melaleuca breeding grounds. The study demonstrated that nocturnal long-distance flight is an important component of OBP migration behaviour. Juvenile birds primarily moved along Tasmania's west coast during the first two weeks of April, with birds utilising a range of habitats including pasture, saltmarsh and heathland across northwest Tasmania, adjacent islands and King Island during migration and overwintering movements (DNRE 2024). Four different individuals were detected between 1 and 7 April 2024 passing around the area by fixed antennas installed around Granville Harbour (two antennas) and Trial Harbour (one antenna) (DNRE 2024). Radio-tracked individuals indicate that birds migrate along the coastal corridor at the latitude of the project area. Recent unpublished data revealed an individual using an inland route, potentially overlapping with inland sections of the project area. These detections, together with their timing and short-duration nocturnal passes, suggest the use of the area around this latitude is limited in duration, functioning primarily as a non-stop transit zone within the broader migration route (DNRE 2024). The exact locations of the birds in relation to the project area are unknown, with signal strength providing only an approximate potential location range for detected individuals. During the targeted field surveys undertaken by Nature Advisory, using handheld antennas, no radio-tagged birds were detected during surveys in the project area.

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
									A 1.5 km coastal buffer has been applied to reduce collision risk. Given the critically small population size, uncertainty in fine-scale flight paths relative to the project area, and modelling indicating sensitivity to even low additional mortality, uncertainty regarding impacts remains. However, the applied buffer and the species' brief (mostly nocturnal) transit behaviour may limit exposure. Overall, the potential for significant long-term population-level impacts remains uncertain and is dependent on the effectiveness of mitigation measures to be implemented during periods of migratory passage, or on confirmation of the degree of spatial overlap between migratory movements and the indicative development area. Management measures: - 1.5 km exclusion buffer from the coastline - Avoidance of potential suitable foraging habitat where present in large, continuous patches within the development area. Additional management measures (recommended): - Avoidance of <i>Melaleuca ericifolia</i> swamp forest (NME) removal. - Additional OBP monitoring program including installation of additional radio-receiver stations across the site to detect any nearby radio-tagged migrating OBPs. - Additional measures recommended for White-throated Needletail also apply to this species

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
Swift Parrot	CR	0	Potential	The Swift Parrot is a nomadic Australian migrant whose non-breeding range extends from Tasmania to the south-east mainland. Its breeding range is restricted to Tasmania, where individuals aggregate each summer. Within the state, the species generally occurs across eastern, southern, and north-western regions, but the precise location of breeding areas depends on the availability of flowering trees near mature, cavity-bearing forest areas. Its presence in non-breeding areas, both in Tasmania and on the mainland, is highly unpredictable, as the species continuously moves in search of nectar-rich patches of flowering Eucalypts (as reviewed in (Stojanovic and Bussolini 2026).	Y	Y	Unlikely	540hrs over 86days (no targeted survey; mainly covered during BUS)	The Swift Parrot has not been recorded within the project area during surveys and is not known from recent records within the surrounding 10km search region. The species is generally considered atypical for Western Tasmania. However, there are recent records beyond the search region near Roseberry. Potentially suitable foraging habitat may occur within wet and dry sclerophyll forest and eucalypt woodland. Though breeding is uncommon on the west coast of Tasmania, they have been found breeding in isolated patches near Zeehan (DCCEEW 2024b). Potential habitat exists within the project Site especially in E. brookeriana and E. ovata forests; however, impacts on these habitats are not anticipated. The action of all infrastructure will avoid these habitats. Few recent records from the search region. Not recorded during surveys. Significant impacts due to loss of habitat or collision are therefore considered unlikely. The species is known to collide with man-made structures such as windows, chain-link fences, and vehicles (Pfennigwerth 2008). Although it is considered a species of concern at wind farms, no collisions have been reported at such developments to date (DEECA 2025b). While collision-related mortality cannot be ruled out, the likelihood is considered low given the species' low likelihood of regular occurrence, high mobility, and absence of confirmed site use. It is considered unlikely that the project will lead to a long-term decrease in the size of a population of Swift Parrot.

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
									Management measures: - Avoidance of woodland/forested areas. - Pre-clearance surveys by a suitably qualified ecologist to identify active nests and implement avoidance measures where required. - Vegetation clearing managed under the CEMP, including fauna handling and salvage procedures. Additional management measures (recommended): - Additional measures recommended for White-throated Needletail also apply to this species to minimise potential collisions.

MNES	EPBC Act Status	NVA Records within 500m / 5km	Likelihood of occurrence	Distribution and Habitat	Direct Impact*	Indirect Impact*	Potential for Significant Impact†	Survey effort (to date)	Commentary
Red-necked Stint	M	0/0	Likely	The Red-necked Stint is a migratory shorebird that breeds in northern Siberia and occurs throughout coastal Australia during the non-breeding season. In Tasmania, it is most commonly associated with coastal and estuarine habitats, including mudflats, tidal wetlands, saltmarshes and sandy shorelines, although occasional records occur from inland wetlands, lakes and highland environments during migration and dispersal movements. Wetlands often have open fringing mudflats and low emergent or fringing vegetation (Higgins and Davies 1996)(Higgins & Davies 1996).	Y	N	Unlikely	540hrs over 86days (no targeted survey; mainly covered during other surveys)	Habitats within and surrounding the development area are not considered optimal for this species in terms of foraging and roosting habitat, consistent with the paucity of field and historical records away from the coast. However, to avoid unforeseen impacts, particularly from habitat removal and disturbance, or any overlooked areas, the additional measures outlined below are recommended. Management measures: - 1.5 km exclusion buffer from the coastline - Prevention of habitat-related effects on water quality and hydrological function at all wetlands and waterways through the CEMP.

Notes: Species shortlisted here were assessed as known, likely or potentially occurring within the project area. Other species were assessed as unlikely to occur (Appendix 1).

(*) Direct impact = Immediate physical effect on the animal or habitat; indirect impact = behavioural/indirect ecological effects.

(†) Potential for significant impacts considering embedded management measures but lowered to unlikely subject to further mitigation measures (see Commentary column).

5. Conclusions and Implications of the Proposed Action

Assessment of the proposed action's impacts on MNES avifauna found that the proposed action:

- Is considered unlikely to have a significant impact on the following species:
 - Fork-tailed Swift *Apus pacificus* (EPBC Act Migratory);
 - Azure Kingfisher (Tasmanian) *Ceyx azureus diemenensis* (EPBC Act Endangered);
 - Latham's Snipe *Gallinago hardwickii* (EPBC Act Vulnerable and Migratory);
 - Swift Parrot *Latamus discolor* (EPBC Act Critically Endangered); and
 - Red-necked Stint *Calidris ruficollis* (EPBC Act Migratory).
- Is considered to have the potential to trigger at least one of the significant impact criteria on the following species without mitigation:
 - White-throated Needletail *Hirundapus caudacutus* (EPBC Act Vulnerable and Migratory);
 - Blue-winged Parrot *Neophema chrysostoma* (EPBC Act Vulnerable); and
 - Tasmanian Wedge-tailed Eagle *Aquila audax fleayi* (EPBC Act Endangered);
 - Masked Owl (Tasmanian) *Tyto novaehollandiae castanops* (EPBC Act Vulnerable)
 - Orange-bellied Parrot *Neophema chrysogaster* (EPBC Act Critically Endangered).

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Appendix 1: Likelihood of occurrence of EPBC Act-listed bird species

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
Known or may occur within indicative development area									
Blue-winged Parrot	<i>Neophema chrysostoma</i>	VU	VU		Blue-winged parrots breed on mainland Australia south of the Great Dividing Range in southern Victoria from Port Albert in Gippsland west to Nelson, and sometimes in the far south-east of South Australia, and the north-western, central and eastern parts of Tasmania (Emison et al. 1987; Higgins 1999). A partial migrant, variable numbers of birds migrate across Bass Strait in winter, apparently making the flight non-stop based on the scarcity of records from the Bass Strait islands. During the non-breeding period, from autumn to early spring, birds are recorded from northern Victoria, eastern South Australia, south-western Queensland and western New South Wales, with some birds reaching south-eastern New South Wales and eastern Victoria, particularly on the southern migration (Higgins 1999).	PMST & NVA	20-Oct-2025	1786	This species has been recorded during surveys in low numbers in the project area. Known to occur.
Fork-tailed Swift	<i>Apus pacificus</i>			M (CAMBA, ROKAMB A, JAMBA)	The species can occur in wet sclerophyll forest but mainly prefers open forest or plains. It is almost exclusively aerial and feeds up to hundreds of metres above the ground, but can feed among open forest canopy. The species breeds internationally and seldom roosts in trees (Higgins 1999).	PMST	N/A	N/A	Can occur over most habitats, but no records from the search region. Not recorded during surveys. Potential to occur as a flyover.
Tasmanian Wedge-tailed Eagle	<i>Aquila audax subsp. fleayi</i>	EN	EN		Inhabits a wide range of open to lightly timbered habitats suitable for foraging and where there are trees suitable for nesting (Marchant & Higgins 1993).	PMST & NVA	9-Feb-2026	76	Recorded in low numbers and low utilisation across the project area. Foraging range could occur across project area. Known to occur.

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
White-throated Needletail	<i>Hirundapus caudacutus</i>		VU	M (CAMBA, ROKAMB A, JAMBA)	Aerial, over all habitats, but probably more over wooded areas, including open forest and rainforest. Often over heathland and less often above treeless areas such as grassland and swamps or farmland (Higgins 1999).	PMST & NVA	18-Feb-2025	14	Recorded across the project area flying over a variety of habitats. Known to occur.
Swift Parrot	<i>Lathamus discolor</i>	EN	CR		In Tasmania, mainly in east, with some breeding in north and unconfirmed small numbers breeding on west coast (Higgins 1999). Prefers grassy forest and woodland dominated by Tasmanian Blue Gum but will use areas dominated by other species with clumps of Tasmanian Blue Gum (Higgins 1999). Can occur in wet sclerophyll forest, but rare in temperate rainforest or subalpine habitat (Higgins 1999). Often in rural and urban areas with scattered or isolated Tasmanian Blue Gum, and in exotic and street trees, orchards, vineyards and sometimes artificial structures, but urban breeding rare (Hindwood 1938, Hindwood and Sharland 1964, Ratkowsky and Ratkowsky 1977, 1980, Higgins 1999). Nests in tree hollows in dead or over-mature <i>Eucalyptus</i> trees (usually Tasmanian Blue Gum, Messmate, or White Peppermint with DBH >0.7 m), <5 km from feeding sites (Higgins 1999). Typically breeds from sea level to 500 m a.s.l. in open scrubby or grassy eucalypt forest dominated by Messmate, and sometimes also Swamp Gum on dry slopes and ridges subject to burning (Higgins 1999). Feeds on nectar, especially from Tasmanian Blue Gum and Swamp Gum when breeding, Messmate, Alpine Ash, Mountain and Snow Gum (Legge 1929, Higgins 1999). Also feeds from outer foliage of psyllid-infested eucalypts, flower-spikes of grass trees, on ground among seeding grasses, in orchards or gardens with fallen fruit or lerp, and flowering, fruiting, and seeding exotic trees and shrubs (Batey 1907, Barnard and Barnard 1925, Hindwood and Sharland 1964, Higgins	PMST & NVA	23-Feb-1994	5	Potential habitat exists in the project area within wet and dry sclerophyll forest and eucalypt woodland in gullies. However, no recent records occur within the search region, with all records exceeding 32 years in age (up to ~50 years). Not recorded during surveys. There are some recent records outside of the search region near Roseberry. Potential to occur.

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
					1999). In temperate rainforest, may feed from Sassafras or Leatherwood (Higgins 1999). Roosts in dense eucalypt clumps, usually in topmost or outer dead branches of tall trees (Mellor and White 1913, Hindwood 1939, Hindwood and Sharland 1964, Higgins 1999).				
May occur within the broader project area									
Azure Kingfisher (Tasmania)	<i>Ceyx azureus subsp. diemenensis</i>	EN	EN		Typically found in a diverse range of vegetation (including trees, reed beds and bamboo) at edges of wetlands (Roberts and Ingram 1976, Higgins 1999), particularly with still or slow-flowing water (Crawford 1972, Leach 1988), preferring freshwater habitats in the southern parts of its range. Can forage in shallow water (a few centimetres deep) (Marshall 1931). Nests above flood line in burrows excavated into various banks adjacent to wetlands, or sometimes cuttings, rubbish tips, graded roads or in earth among roots of large fallen trees (Higgins 1999). In Tasmania, found along several river systems in south, west, and north-west coasts, and potentially in several isolated areas in the north-east and centre (DEWHA 2010).	PMST & NVA	10-Jul-2024	30	There are no records of this species within the project area. There are records of this species 7km to the north of the project area. This species was not recorded during surveys. Suitable habitat may occur in the project area adjacent to rivers and creeks. Likely to occur.
Latham's Snipe	<i>Gallinago hardwickii</i>		VU	M (Bonn A2H, ROKAMB A, JAMBA)	Occurs in wide variety of permanent and ephemeral wetlands; it prefers open freshwater wetlands with dense cover nearby, such as the edges of rivers and creeks, bogs, swamps, waterholes. The species is widespread in southeast Australia and most of its population occurs in Victoria, except in the northwest of the state (Naarding 1983; Higgins & Davies 1996).	PMST & NVA	29-Nov-2023	6	Recorded once within the project area as a group of three individuals. Some potential habitat occurs in shallow, vegetated swamps and in adjacent moorland areas with seasonally wet soils. Known to occur.

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
Masked Owl (Tasmanian)	<i>Tyto novaehollandiae castanops</i>	EN	VU		Occurs in a variety of wooded habitats with tall or dense mature trees with large hollows for nesting and roosting, and nearby open areas for foraging (Peake et al. 1993, Higgins 1999). In Tasmania, mainly in old-growth open dry sclerophyll forest, tall open forest, woodland and tall woodland dominated by Manna Gum (DEWHA 2010). Nests in large hollows and near-vertical spouts of trees, usually living but sometimes dead (Higgins 1999). In Tasmania, mostly nests near edge of dry open forest (Higgins 1999). Widespread and abundant in mainland Tasmania, mainly in east (although absent from far northeast) (Higgins 1999). Scattered records along north coast, but rarely recorded from west or southwest coast (although this may be due to low survey effort) (Higgins 1999, DEWHA 2010).	PMST & NVA	23-Feb-2025	57	Potential habitat on site in treed gullies, as well as immediately adjacent to site in large, forested areas. Known habitat from the surrounding region is connected to potential habitat within the project area. Records occur within 10 km of the project area but not within it. Potential to occur.
Orange-bellied Parrot	<i>Neophema chrysogaster</i>	EN	CR		The Orange-bellied Parrot is endemic to south-eastern Australia. It breeds at Melaleuca in Tasmania during the spring/summer months (DELWP 2016a), where they may be found in vegetable gardens near breeding sites (Higgins 1999). It usually occurs within 10km of coast, inhabiting complex, near-coastal buttongrass plains, moors and sedgeland, with creek-lines dominated by paperbarks (<i>Melaleuca</i>) and patches of Smithton Peppermint (<i>Eucalyptus nitida</i>) forest present in the landscape (Higgins 1999). When migrating through west and northwest Tasmania, can occur in dunes, heathland, coastal grasslands and saltmarsh (Higgins 1999). On islands within the Bass Strait: occurs in low estuarine saltmarsh dominated by Beaded Glasswort and Shrubby Glasswort, with scattered reeds and adjacent dense Swamp Paperbark scrub (Higgins 1999); also in grassy areas, including pasture and golf courses (Jarman 1965, Higgins 1999), as well as on beaches (Higgins 1999).	PMST & NVA	23-Mar-2021	7	Radio-tracked individuals indicate that birds migrate along the coastal corridor at the latitude of the project area, with one unpublished record of an individual migrating via an inland route, potentially overlapping with inland sections of the project. It is also possible some individuals may migrate through the project area. These detections, together with their timing and short-duration nocturnal

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
									passes, suggest the use of the area around this latitude is limited in duration, functioning primarily as a non-stop transit zone within the broader migration route (DNRE 2024). The exact locations of the birds in relation to the project area are unknown, with signal strength providing only an approximate potential location range for detected individuals. Likely to occur.
Red-necked Stint	<i>Calidris ruficollis</i>			M (Bonn A2H, ROKAMB A, JAMBA, CAMBA)	Inhabit shallow fresh to saline wetlands, usually coastal to near-coastal, but occasionally farther inland. Wetlands often have open fringing mudflats and low emergent or fringing vegetation (Higgins & Davies 1996).	eBird	1-Feb-2026	1	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Potential to occur.
No suitable habitat / unlikely to occur									
Australian Fairy Tern	<i>Sternula nereis subsp. nereis</i>	VU	VU		Generally restricted to sheltered coasts both on the mainland, and inshore and offshore islands. Occurs in embayment, such as harbours, inlets, bays, estuaries, lagoons, and ocean beaches. Also found on lakes and salt ponds (Higgins & Davies 1996).	PMST & NVA	17-Nov-2009	5	No suitable habitat in project area. Not recorded during surveys. Unlikely to occur.
Australasian Bittern	<i>Botaurus poiciloptilus</i>		EN		Terrestrial wetlands, including a range of wetland types but prefers permanent water bodies with tall dense vegetation, particularly those dominated by sedges, rush, reeds or cutting grass (Marchant & Higgins 1990).	PMST	N/A	N/A	No suitable habitat in project area as this species prefers shallow wetlands with dense vegetation. Not recorded during surveys. Unlikely to occur.

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
Curlew Sandpiper	<i>Calidris ferruginea</i>		CR	M (Bonn A2H, ROKAMB A, JAMBA, CAMBA)	Inhabits wide range of coastal or inland wetlands with varying levels of salinity; mainly muddy margins or rocky shores of wetlands (Higgins & Davies 1996).	PMST	N/A	N/A	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.
Bar-tailed Godwit	<i>Limosa lapponica baueri</i>		EN	M (Bonn A2H, ROKAMB A, JAMBA, CAMBA)	Mainly coastal species, usually in sheltered bays, estuaries and lagoons with large intertidal mudflats or sandflats (Higgins & Davies 1996).	PMST & NVA	13-Feb-1978	1	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.
Hooded Plover	<i>Thinornis cucullatus cucullatus</i>		VU		Inhabits sandy ocean beaches, especially those that are broad and flat, with a wide wave-wash zone for feeding. Widespread and scattered across coastal Victoria. Numbers reduced due to disturbance by recreational activities on beaches (Marchant & Higgins 1993).	PMST & NVA	28-Feb-2025	34	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.
Greater Sand Plover	<i>Charadrius leschenaultii</i>		VU	M (Bonn A2H, ROKAMB A, JAMBA, CAMBA)	Entirely coastal; mainly on sheltered sandy, shelly or muddy beaches with large intertidal mudflats or sandbanks. In Vic. Mostly in Corner inlet, Westernport and Port Phillip Bay (Marchant & Higgins 1993).	PMST	N/A	N/A	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>		VU	M (Bonn A2H, ROKAMB A, JAMBA, CAMBA)	Inhabit shallow fresh to saline wetlands, usually coastal to near-coastal, but occasionally farther inland. Wetlands often have open fringing mudflats and low emergent or fringing vegetation (Higgins & Davies 1996).	PMST	N/A	N/A	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.
Red Knot	<i>Calidris canutus</i>		VU	M (Bonn A2H, ROKAMB A,	In Australasia, the Red Knot mainly inhabits intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or	PMST	N/A	N/A	Coastal and/or associated with mudflats. Inland wetlands unsuitable

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
				JAMBA, CAMBA)	shallow pools on exposed wave-cut rock platforms or coral reefs. They are occasionally seen on terrestrial saline wetlands near the coast, such as lakes, lagoons, pools and pans, and recorded on sewage ponds and saltworks, but rarely use freshwater swamps. They rarely use inland lakes or swamps (DAWE 2020).				(vegetated/deep). Unlikely to occur.
Common Sandpiper	<i>Actitis hypoleucos</i>			M (Bonn A2H, ROKAMB A, JAMBA, CAMBA)	Inhabits a wide range of coastal or inland wetlands with varying levels of salinity; mainly muddy margins or rocky shores of wetlands. In Victoria, mostly found Westernport and Port Phillip Bay (Higgins & Davies 1996).	PMST	N/A	N/A	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.
Pectoral Sandpiper	<i>Calidris melanotos</i>			M (ROKAMBA, JAMBA)	Wooded lands and terrestrial freshwater wetlands and pasture, in association with cattle (Marchant & Higgins 1990).	PMST	N/A	N/A	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.
Common Tern	<i>Sterna hirundo</i>			M (Bonn A2S)	Coastal species that forages in nearshore waters extending beyond the surf zone, and roosts on ocean beaches, rock platforms and man-made structures (Menkhorst et al. 2019).	eBird	21-Feb-2022	1	Coastal species. No suitable habitat within the project area. Unlikely to occur.
Caspian Tern	<i>Hydropogone caspia</i>			M (JAMBA)	Sheltered coastal embayment, including harbours, lagoons, inlets, estuaries and river deltas, usually with sandy or muddy margins (Higgins & Davies 1996).	eBird	23-Apr-2025	22	Coastal species. No suitable habitat within the project area. Unlikely to occur.
Double-banded Plover	<i>Charadrius bicinctus</i>			M (Bonn A2H)	Inhabits wide range of coastal or inland wetlands with varying levels of salinity; mainly muddy margins or rocky shores of wetlands (Marchant & Higgins 1993).	eBird	5-Apr-2002	2	Coastal and/or associated with mudflats. Inland wetlands unsuitable (vegetated/deep). Unlikely to occur.

Common Name	Scientific name	TSP	EPBC - Thrt	EPBC - Mig	Habitat	Source	Date of last record	Records within 10 km	Likelihood of occurrence
Australian Fairy Tern	<i>Sternula nereis nereis</i>	VU	VU		The Fairy Tern occurs in the following Natural Resource Management (NRM) regions North, North West and South Tasmania. The subspecies occurs in the following Interim Biogeographic Regionalisation for Australia (IBRA) Bioregions across Australia: Tasmanian South East; Tasmanian West; Tasmanian Southern Ranges; Tasmanian Northern Slopes and King (DCCEW 2023).	PMST & NVA (>100 years old; low relevance)	1-Jan-1900	1	Coastal species. No suitable habitat within the project area. Unlikely to occur.

Notes: EPBC-T = threatened species status under EPBC Act (VU = Vulnerable; EN = Endangered; CR = Critically Endangered); EPBC-M = migratory status under the EPBC Act (M = listed migratory taxa; Bonn Convention (A2H) - Convention on the Conservation of Migratory Species of Wild Animals – listed as a member of a family; Bonn Convention (A2S) - Convention on the Conservation of Migratory Species of Wild Animals - species listed explicitly; CAMBA - China- Australia Migratory Birds Agreement; JAMBA - Japan-Australia Migratory Birds Agreement; ROKAMBA - Republic of Korea Australia Migratory Birds Agreement); TSP = threatened species status under the TSP Act.

Appendix 2. Assessment against the EPBC Act Significant Impact Guidelines

Table A2 - 1: Assessment of White-throated Needletail against MNES Impact Criteria for Vulnerable species

Significant impact criterion	Assessment	Significant impact likelihood
Lead to a long-term decrease in the size of an important population	The proposed action is a large project which increases collision risk. However, the species is highly mobile, migratory aerial species that is not site-dependent, with individuals seasonally occurring in the Project Area forming part of a broader, highly connected non-breeding population during seasonal migration (generally November to April in Tasmania). The species has a large population (~41,000; Garnett and Baker 2021) and is not known to breed or roost within the project area. It exhibits wide-ranging movements across eastern Australia, including Tasmania, with variable spatiotemporal use and no consistent abundant pattern at the project area. During a recent study at Cattle Hill Wind Farm, in Tasmania's central highlands, 2,982 WTNT flights were recorded using the Identiflight system over 5 years, with 53% of flights within RSA. Thirteen WTNT carcasses were detected during that 5-year period. The paper cautiously proposes that considering the limitations of the study, the frequency of occurrence at collision-risk height and apparent low incidence of collisions, suggests a high rate of avoidance by Needletail when passing through that Wind Farm (Reid and Rogers 2026). While these characteristics suggest generally transient and intermittent use of the airspace there remains uncertainty in the degree of potential collisions. This may be elevated during weather fronts and other environmental conditions that can concentrate movement through the region. Accordingly, and applying the precautionary principle, the potential for a significant impact remains uncertain and cannot be confidently considered unlikely.	Potential
Reduce the area of occupancy of an important population	The species occurs as a highly mobile aerial migrant across the broader region and uses the project area as a transient foraging area, with no evidence of consistent aggregation or movement bottlenecks constraining its distribution around the site. Therefore, the proposed action is not expected to reduce the area of occupancy of an important population.	Unlikely
Fragment an existing population into two or more populations	The proposed action will not fragment the population. Even where birds fly across the site, they are known to typically fly well above the RSA, and the spaced indicative development area is unlikely to restrict movement through the area.	Unlikely
Adversely affect habitat critical to the survival of a species	No critical habitat has been formally identified in government guidance. However, habitat critical to the survival of the species are breeding grounds in Asia and some forested habitats with high reporting rates. Vegetation removal may also affect foraging habitat through reduced invertebrate abundance, as well as the availability of hollow-bearing trees for roosting, which may be considered habitat critical to the survival of the species within the non-breeding range. However, given the limited extent of vegetation removal and avoidance of forested habitat, the proposed action is unlikely to adversely affect habitat critical to the survival of the species.	Unlikely

Significant impact criterion	Assessment	Significant impact likelihood
Disrupt the breeding cycle of an important population	Breeding grounds are located in Asia. The proposed action will not disrupt the breeding cycle.	Unlikely
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Given the limited extent of vegetation removal and avoidance of forested habitat in relation to the species known foraging range, the proposed action is unlikely to modify, destroy, remove, isolate or decrease the availability or quality to the extent that the species is likely to decline.	Unlikely
Result in invasive species that are harmful to a Vulnerable species becoming established in the Vulnerable species' habitat	The WTN is largely aerial, only interacting with terrestrial habitats when roosting high-up in trees. They therefore rarely interact with invasive plants or animals. Regardless, the proposed action will involve construction and operation activities in accordance with a detailed Environmental Management Plan, including measures for monitoring and adaptive management of weed and pest animal infestations and plant diseases. These measures are designed to prevent the introduction or spread of invasive species and diseases at the site.	Unlikely
Introduce disease that may cause the species to decline	The proposed action will be undertaken in accordance with an Environmental Management Plan to control the spread of invasive species and disease.	Unlikely
Interfere substantially with the recovery of the species	The species is a highly mobile with no breeding or roosting identified within or near the project area. The proposed action would not impact key recovery areas or recovery actions for the species. Therefore, it is not considered to interfere substantially with the recovery of the species.	Unlikely
Overall assessment of likelihood of significant impact		Potential

Table A2 - 2: Assessment of White-throated Needletail and Fork-tailed Swift against MNES Impact Criteria for Migratory species

Significant Impact criterion	Assessment	Significant Impact likelihood
Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species	The proposed action will not impact important habitat for these species as they are predominately aerial (Higgins 1999). Their breeding habitat exists internationally.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species.	As these species is almost exclusively aerial (Higgins 1999), the proposed works will not result in any invasive species that is harmful to these species becoming established in an area of important habitat. The temporary and short-term nature of the species' occurrence on the site means any infestations of invasive species would have a negligible impact on them. Regardless, the adoption of best-practice environmental management measures during construction and operation of the wind farm will ensure monitoring and adaptive control of any potential invasive plant or animal species during construction and operations.	Unlikely
Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.	These species do not breed in Australia, and the proposed action does not represent a particularly important non-breeding area relation to these species' known foraging range.	Unlikely
Overall assessment of likelihood of significant impact		Unlikely

Table A2 - 3: Assessment of Blue-winged Parrot against MNES Impact Criteria for Vulnerable species

Significant Impact criterion	Assessment	Significant Impact likelihood
Lead to a long-term decrease in the size of an important population of a species.	No important populations of Blue-winged Parrot have been formally identified in government guidance. The species is widespread in Tasmania and on-site detections indicate that the species is likely to occur at low densities and use the area opportunistically rather than as a core habitat. The BWP population is roughly estimated at 10,000 mature individuals (Holdsworth et al. 2021). Observed flight behaviour, largely below the RSA, and low density and low flight observations suggest that collision risk is low and that any collisions, if they occur, would be infrequent and represent a small proportion of the overall population. However, given the regular occurrence of the species on site, potential local breeding, and its use of open areas within the indicative development area, there is uncertainty regarding the degree of potential collisions. Accordingly, and applying the precautionary principle, the potential for a significant impact remains uncertain and cannot be confidently considered unlikely.	Potential

Significant Impact criterion	Assessment	Significant Impact likelihood
Reduce the area of occupancy of an important population.	Reductions in area of occupancy are more critical in relation to breeding habitats, where large-scale land clearance and transformation is a major threat, and therefore, conservation efforts prioritise woodland protection (Holdsworth et al. 2021). Given that the planned removal of native woodland and forest vegetation is minimal and dispersed across the site relative to the broader landscape, it is unlikely to have an impact on the BWP occupancy.	Unlikely
Fragment an existing important population into two or more populations.	The BWP vulnerability to habitat fragmentation is most critical during the breeding season, where the loss of woodland directly impacts nesting sites and reproductive success and represents the major threat to this species (reviewed in DCCEEW 2023). Given that the planned removal of native woodland and forest vegetation is minimal and dispersed across the site relative to the broader landscape, and considering the species' high mobility (DCCEEW 2023) across extensive areas including disturbed habitats, it is highly unlikely that the proposal would disrupt population connectivity.	Unlikely
Adversely affect habitat critical to the survival of a species.	According to the conservation advice for this species (DCCEEW 2023), no critical habitat as defined under section 207A of the EPBC Act has been identified or included in the register of critical habitat. Given that the species is common and widespread across most of Tasmania, combined with the scarcity of records within the project site and no evidence that the area represents a species hotspot, it is unlikely that any habitat critical to its survival will be affected by the development.	Unlikely
Disrupt the breeding cycle of a population.	Given that the BWP is widespread and highly mobile, and that the project involves only limited vegetation removal relative to the total potential breeding habitat, with no known breeding hotspots, the development is highly unlikely to disrupt the breeding cycle of local populations. Any disturbance from construction or operational activities is expected to be limited and transient.	Unlikely
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	Given that removal of native vegetation will be minimal and dispersed across the site, and that the species is widespread and highly mobile, habitat is not expected to be altered to an extent that would measurably reduce the availability or quality of BWP habitat or contribute to a population decline.	Unlikely
Result in invasive species that are harmful to a vulnerable species	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
becoming established in the vulnerable species' habitat.	It is unlikely that the proposed action will introduce invasive species that may cause the species to decline.	
Introduce disease that may cause the species to decline.	The proposed action is not expected to result in activities that would introduce disease harmful to this species. The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. It is unlikely that the proposed action will introduce disease that may cause the species to decline.	Unlikely
Interfere substantially with the recovery of the species.	No recovery plan is in place for the species. Given the anticipated negligible impacts on habitat, the proposed action is not expected to increase existing threats to the species or compromise its recovery.	Unlikely
Overall assessment of likelihood of significant impact		Potential

Table A2 - 4: Assessment of Tasmanian Wedge-tailed Eagle against MNES Impact Criteria for Endangered species

Significant Impact criterion	Assessment	Significant Impact likelihood
Lead to a long-term decrease in the size of a population.	The project site currently has no WTE nests after three years of helicopter searching (Nick Mooney). Two nests are within 1km of the project area. The density of nesting and potential impact on nesting remains extremely low for the project. Targeted raptor surveys have shown that TWTE flight path and utilisation is broadly across the site. There is uncertainty around the degree of potential collision impacts as ongoing collision risk modelling analyses is underway. Accordingly, and applying the precautionary principle, the potential for a significant impact remains uncertain and cannot be confidently considered unlikely. Measures being explored to mitigate potential collision risk include: - Avoidance of mature forest and nesting trees - 1000m nesting exclusion buffer - Roadkill management and carrion prey removal program - Carcass Search and Mortality Reporting - Threshold based response - Adaptive management plan - Bird detection and collision mitigation systems	Potential

Significant Impact criterion	Assessment	Significant Impact likelihood
Reduce the area of occupancy of the species.	The WTE has a broad area of occupancy, utilises modified landscapes, and is not generally displaced by wind farm developments (Debus and Kirwan 2025). The primary factor influencing the species' occupancy is the loss or disturbance of breeding sites. The proposed action largely avoids potential breeding habitat and known nesting sites; therefore, the proposed action is unlikely to reduce the WTE overall area of occupancy.	Unlikely
Fragment an existing population into two or more populations.	The proposed action is unlikely to fragment habitat or restrict movement as WTE is wide-ranging, highly mobile, and often flies at heights well over RSA.	Unlikely
Adversely affect habitat critical to the survival of a species.	Habitat critical to the survival of the WTE is defined by nesting habitat, as forests of predominantly old growth trees greater than 10ha in area and occurring on sites sheltered from prevailing strong winds (TSS 2006). Trees selected for nesting are greater than 27m in height, with few exceptions (TSS 2006). The footprint has been adjusted to avoid potential breeding habitat and known nesting sites; therefore, the proposed action is unlikely to adversely affect WTE habitat critical for survival.	Unlikely
Disrupt the breeding cycle of a population.	The proposed action will not disrupt the breeding cycle of these species, as the footprint avoid potential breeding habitat and known nesting sites. 3 years of helicopter nest searching have been undertaken and no active nests are within the project site.	Unlikely
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	The proposed action will not modify, destroy, remove or isolate or impact the habitats of this species as it avoids nesting sites and potential nesting habitat, and no large-scale foraging habitat will be impacted.	Unlikely
Result in invasive species that are harmful to an endangered or critically endangered species becoming established in the endangered or	There are no known invasive predators in Tasmania that regularly kill WTEs. The proposed action is unlikely to bring any new invasive species.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
critically endangered species' habitat.		
Introduce disease that may cause the species to decline.	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. It is unlikely that the proposed action will introduce disease that may cause the species to decline.	Unlikely
Interfere with the recovery of the species.	The Recovery Plan for the species (TSS 2006) identifies key objectives including protection of nesting habitat, minimisation of foraging habitat modification, and reduction of human-related mortality. The proposed project is unlikely to interfere with the recovery of the species, as known and potential nesting habitat is largely avoided, large-scale foraging habitat modification will not occur, and collision risk will be minimised through the implementation of smart curtailment.	Unlikely
Overall assessment of likelihood of significant impact		Potential

Table A2 - 5: Assessment of Azure Kingfisher against MNES Impact Criteria for Endangered species

Significant Impact criterion	Assessment	Significant Impact likelihood
Lead to a long-term decrease in the size of a population.	The Tasmanian Azure Kingfisher population is thought to number fewer than 250 mature individuals (TSS 2012). The primary threat to the species is the clearing and modification of riparian vegetation, with extensive clearing along major river systems attributed to localised extinctions (TSS 2012). The species has not been recorded within the project area, and there are no historical records in the surrounding area. In the design phase of the project, it is anticipated that habitat will be avoided to the degree possible, with turbines to be sited outside of riparian vegetation; however, linear infrastructure such as roads and transmission may not be able to completely avoid this habitat. While some overlap with riparian habitat is anticipated for linear infrastructure, impacts are expected to be limited and primarily associated with discrete watercourse crossings. Collisions are also considered unlikely, as the species is generally sedentary and largely associated with riparian vegetation along watercourses (Woodall 2020), which do not intersect the proposed turbine locations. Accordingly, it is	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
	unlikely that the proposed action would lead to a long-term decrease in the size of a population.	
Reduce the area of occupancy of the species.	The species has a widespread range, primarily occurring in central and western coastal and near-coastal regions, with a patchy distribution across its area of occupancy (TSS 2012). Due to its habitat specialisation, the condition of riparian systems and associated watercourses and wetlands is likely to be the key factor influencing the species' occupancy (Threatened Species Section 2012, Woodall 2020). The proposed action is unlikely to reduce the area of occupancy of the species, as although there is some overlap with riparian habitat, impacts are expected to be limited and primarily associated with discrete watercourse crossings. Any potential impacts to water quality during construction will be managed through the CEMP.	Unlikely
Fragment an existing population into two or more populations.	The Azure Kingfisher depends on continuous riparian habitat; however, the proposed action is limited to discrete watercourse crossings and is not expected to fragment populations or reduce connectivity at a landscape scale, given the species' dispersal capacity and some seasonal movements in Tasmania (Woodall 2020).	Unlikely
Adversely affect habitat critical to the survival of a species.	No habitat critical for survival has been formally defined for this species under the EPBC Act. Important habitat is associated with riparian vegetation adjacent to watercourses and wetlands. The proposed action is unlikely to adversely affect habitat critical for the survival of the species, as impacts are limited to discrete watercourse crossings, and the CEMP will be implemented to prevent impacts on water quality and hydrology.	Unlikely
Disrupt the breeding cycle of a population.	The proposed action will not disrupt the breeding cycle of the species, as impacts are limited to discrete watercourse crossings and do not involve longitudinal clearing of riparian vegetation.	Unlikely
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	The proposed action will not modify, destroy, remove, or isolate habitat or reduce its availability or quality to the extent that the species is likely to decline, as impacts are limited to discrete watercourse crossings and the CEMP will be implemented to manage potential impacts on water quality and hydrology.	Unlikely
Result in invasive species that are harmful to an endangered or critically endangered species becoming	There are no known invasive predators in Tasmania that are likely to regularly predate kingfishers or their nests. Nest entrances are typically narrow tunnels in vertical or steep banks (Woodall 2020), which generally provide protection from many terrestrial predators. The proposed action is not expected to introduce invasive species that could predate upon, compete with, or otherwise adversely affect the Azure Kingfisher or its habitat.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
established in the endangered or critically endangered species' habitat.		
Introduce disease that may cause the species to decline.	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. It is unlikely that the proposed action will introduce disease that may cause the species to decline.	Unlikely
Interfere with the recovery of the species.	No recovery plan is in place for the species. Given the anticipated negligible impacts on the species and its habitat, the proposed action is not expected to increase existing threats to the species or compromise its recovery.	Unlikely
Overall assessment of likelihood of significant impact		Unlikely

Table A2 - 6: Assessment of Latham's Snipe against MNES Impact Criteria for Vulnerable species

Significant Impact criterion	Assessment	Significant Impact likelihood
Lead to a long-term decrease in the size of an important population of a species.	The species' population is estimated at 35,000 individuals (van Swinderen et al. 2025). An ecologically significant proportion is defined as 1% for internationally significant populations or 0.1% for nationally significant populations, corresponding to 350 and 35 individuals, respectively (DoE 2015). This same document considers a site to be important where it supports at least 18 individuals. The paucity of sightings (a single record across multiple years of surveys), together with the limited number of historical records in the surrounding area, indicates that the project area does not constitute an important site or regularly support ecologically significant numbers. Accordingly, the proposed action is unlikely to result in a long-term decrease in the size of an important population of the species.	Unlikely
Reduce the area of occupancy of an important population.	No important population is expected to occur within the project area. The species occurs in Australia as a transient non-breeding visitor, and records in the surrounding area indicate only scattered occurrence. Further, habitat impacts are largely avoided and managed through micro-siting away from suitable habitat and wetland buffers and implementation of the CEMP to minimise potential effects on water quality and hydrological function. Accordingly, the proposed action is unlikely to reduce the area of occupancy of an important population.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
Fragment an existing important population into two or more populations.	The species has a widespread but scattered distribution in Australia, generally occurs at low densities, and is highly mobile, readily moving between locations as conditions become more or less favourable (DoE 2026). It is therefore unlikely that the proposed action would fragment an existing population.	Unlikely
Adversely affect habitat critical to the survival of a species.	The Conservation Advice (DCCEEW 2024c) identifies 'habitat critical to the survival' or important habitats of the species refers to areas that are necessary: • for activities such as foraging, breeding, roosting, or dispersal • for the long-term maintenance of the species (including the maintenance of species essential to the survival of the species, such as macrobenthos (sediment-dwelling invertebrate prey) • to maintain genetic diversity and long-term evolutionary development, or • for the reintroduction of populations or recovery of the species. It is unlikely that the proposed action would affect the species' critical habitat, as the area is only used transiently by this highly mobile species, with records indicating low numbers and a scattered distribution. Any potential impacts on critical habitat are primarily associated with foraging and transient habitat use, and will be managed through the CEMP to maintain water quality and hydrological function.	Unlikely
Disrupt the breeding cycle of a population.	The species is a non-breeding migrant to Australia; therefore, the proposed action will not disrupt the breeding cycle of the species.	Unlikely
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	The proposed action will not modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline as wetlands will not be affected, including any impacts on water quality and hydrology. Although the species has been recorded once in Buttongrass moorland, any potential impacts to this habitat type are expected to be minor, given its limited extent within the indicative development area and its generally suboptimal suitability compared to wetland habitats.	Unlikely
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat.	No invasive species harmful to the species are expected to become established in its habitat. The project will implement an Environmental Management Plan to manage and minimise the introduction and spread of any invasive species and disease.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
Introduce disease that may cause the species to decline.	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. It is therefore unlikely that the proposed action will introduce disease that may cause the species to decline.	Unlikely
Interfere substantially with the recovery of the species.	No recovery plan is in place for the species. Given the anticipated negligible impacts on the species and its habitat, the proposed action is not expected to increase existing threats to the species or compromise its recovery.	Unlikely
Overall assessment of likelihood of significant impact		Unlikely

Table A2 - 7: Assessment of Latham's Snipe against MNES Impact Criteria for Migratory species

Significant Impact criterion	Assessment	Significant Impact likelihood
Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species	The proposed action is not expected to substantially impact important habitat for this species as wetlands will not be affected, including any impacts on water quality and hydrology.	Unlikely
Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species.	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease.	Unlikely
Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.	The species does not breed in Australia, and limited records and observations within the site indicate that the area does not regularly support large numbers or an ecologically significant proportion of the population at any one time. In addition, wetlands and associated water quality and hydrology will not be affected by the proposed action.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
Overall assessment of likelihood of significant impact		Unlikely

Table A2 - 8: Assessment of Masked Owl (Tasmanian) against MNES Impact Criteria for Vulnerable species

Significant Impact criterion	Assessment	Significant Impact likelihood
Lead to a long-term decrease in the size of an important population of a species.	No important populations of Masked Owl have been formally identified in government guidance. In general, an 'important population' is one that is necessary for a species' long-term survival and recovery, including key source populations for breeding or dispersal, populations contributing to genetic diversity, or those occurring near the edge of the species' range. The Tasmanian Masked Owl population is estimated at approximately 500 breeding pairs (around 1,000 mature individuals) (TSS 2026). The species was not recorded during targeted field surveys within the project area, although there is at least one historical record and some records in the broader locality. While some potential habitat occurs within the broader landscape, the indicative development area largely avoids modelled suitable habitat and mature forest. Collision risk is also expected to be low, as turbines are located outside forested areas and the species is unlikely to undertake frequent flights away from forest edges (e.g. only 9.2% of locations from radio-tracked individuals in Tasmania were recorded more than 100 m from a forest edge or clearing (Young et al. 2020). However, as detailed ground searches for potential hollow-bearing trees have not yet occurred, there is current uncertainty around the extent of potential impacts to these habitat features. It is considered that there is some potential for a significant impact to occur through habitat loss due to the current uncertainty around extent of habitat loss including of hollow bearing trees. Accordingly, and applying the precautionary principle, the potential for a significant impact remains uncertain and cannot be confidently considered unlikely at this stage.	Potential
Reduce the area of occupancy of an important population.	Reductions in area of occupancy can result from habitat loss through clearing of forest habitat and disturbance to nesting sites (TSS 2026). However, the planned removal of native woodland and forest vegetation is minimal, will not affect large continuous forest patches, and largely avoids modelled suitable habitat. It is therefore unlikely that the proposed action would adversely affect the species' occupancy.	Unlikely
Fragment an existing important population into two or more populations.	The planned removal of native woodland and forest vegetation is minimal, will not affect large continuous forest patches, and largely avoids modelled suitable habitat. Given this, and the species' ability to move across open areas and habitat edges (Young et al. 2020),	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
	the proposed action is unlikely to fragment populations or disrupt landscape connectivity.	
Adversely affect habitat critical to the survival of a species.	No critical habitat has been formally identified in government guidance. However, based on the species' ecology and habitat requirements, large hollow-bearing trees and mature forest are considered important breeding and core habitat for the survival of the species. Given that mature forest and modelled suitable habitat have been largely avoided, and no turbines will be located within forested areas, the proposed action is unlikely to adversely affect habitat critical to the survival of the species.	Unlikely
Disrupt the breeding cycle of a population.	Given that mature forest and modelled suitable habitat have been largely avoided, and no turbines will be located within forested areas, the proposed action is unlikely to disrupt the breeding cycle of a population.	Unlikely
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	Given that removal of woodland vegetation will be minimal and mostly restricted to water crossings, with mature forest and modelled suitable habitat largely avoided, the landscape is not expected to be altered to an extent that would measurably reduce the availability or quality of Masked Owl habitat or contribute to a population decline.	Unlikely
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat.	No invasive species harmful to the species are expected to become established in its habitat. The project will implement an Environmental Management Plan to manage and minimise the introduction and spread of any invasive species and disease.	Unlikely
Introduce disease that may cause the species to decline.	The proposed action is not expected to result in activities that would introduce disease harmful to this species. The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. It is unlikely that the proposed action will introduce disease that may cause the species to decline.	Unlikely
Interfere substantially with the recovery of the species.	No recovery plan is in place for the species. Given the avoidance of potential suitable habitat, the proposed action is not expected to increase existing threats to the species or compromise its recovery.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
Overall assessment of likelihood of significant impact		Potential

Table A2 - 9: Assessment of Orange-bellied Parrot against MNES Impact Criteria for Critically Endangered species

Significant Impact criterion	Assessment	Significant Impact likelihood
Lead to a long-term decrease in the size of a population.	The Orange-bellied Parrot (OBP) population is estimated as less than 100 mature individuals (Bussolini et al. 2026). Due to the migratory nature of the species and its single breeding area centred on Melaleuca in southwest Tasmania, the species is considered to comprise a single population (Bussolini et al. 2026). A recent study by Stojanovic and Bussolini (2026) using population modelling suggests that the current population is only marginally stable due to ongoing supplementation of in situ populations with captive-bred individuals. Model simulations indicate that even low levels of additional annual mortality (≤ 20 individuals per year), above background rates, can result in population decline under some scenarios, including those representing changes in management and the introduction of new renewable energy infrastructure. Radio-tracked individuals indicate that birds migrate along the coastal corridor at the latitude of the project area. These detections, together with their timing and short-duration nocturnal passes, suggest the use of the area around this latitude is limited in duration, functioning primarily as a non-stop transit zone within the broader migration route (DNRE 2024). The exact locations of the birds in relation to the project area are unknown, with signal strength providing only an approximate potential location range for detected individuals. It is possible some individuals may migrate through the project area. A 1.5 km coastal buffer has been applied to reduce collision risk. Given the critically small population size, uncertainty in fine-scale flight paths relative to the project area, and modelling indicating sensitivity to even low additional mortality, some uncertainty regarding impacts remains. However, the applied buffer and the species' brief (mostly nocturnal) transit behaviour may limit exposure. Overall, the potential for significant long-term population-level impacts remains uncertain and is dependent on the effectiveness of mitigation measures to be implemented during periods of migratory passage, or on confirmation of the degree of spatial overlap between migratory movements and the indicative development area.	Potential

Significant Impact criterion	Assessment	Significant Impact likelihood
Reduce the area of occupancy of the species.	Results from a limited size study of juvenile radio-tracked OBPs indicate that birds pass through the latitude of the project area at night without remaining in the area (DNRE 2024). It is therefore unlikely that the proposed action would reduce the overall area of occupancy.	Unlikely
Fragment an existing population into two or more populations.	The proposed action is unlikely to fragment habitat or restrict movement as OBPs are not resident in the area and occur only as transient migrants passing through at this latitude, with no evidence of local foraging or roosting.	Unlikely
Adversely affect habitat critical to the survival of a species.	The proposed action is unlikely to adversely affect OBP habitat critical for survival, as the species is not known to utilise terrestrial habitat within the project development area, with detections limited to transient migratory passage at this latitude.	Unlikely
Disrupt the breeding cycle of a population.	The proposed action will not disrupt the breeding cycle of this species, as OBPs do not breed in this region.	Unlikely
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	The proposed action will not modify, destroy, remove, isolate, or impact habitat for this species, as OBPs do not utilise terrestrial habitat locally, with detections limited to transient migratory passage at this latitude.	Unlikely
Result in invasive species that are harmful to an endangered or critically endangered species becoming established in the endangered or critically endangered species' habitat.	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. No invasive species are expected to interact with OBPs as the species is not known to utilise terrestrial habitat locally, with detections limited to transient migratory passage at this latitude.	Unlikely
Introduce disease that may cause the species to decline.	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. It is unlikely that the proposed action will introduce disease that may cause the species to decline as the species is not known to utilise terrestrial habitat locally.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
Interfere with the recovery of the species.	The Recovery Plan for the species (DELWP 2016) identifies key objectives including stabilising or increasing the population, strengthening the captive population to support future releases and provide an insurance population, and protecting and enhancing habitat. The proposed action is unlikely to interfere with the recovery of the species, subject to the implementation of additional mitigation measures during periods of migratory passage, or where it is demonstrated that migratory passage does not overlap with the indicative development area.	Unlikely
Overall assessment of likelihood of significant impact		Potential

Table A2 - 10: Assessment of Swift Parrot against MNES Impact Criteria for Critically Endangered species

Significant Impact criterion	Assessment	Significant Impact likelihood
Lead to a long-term decrease in the size of a population.	The most likely impact pathways that would lead to a decrease in the Swift Parrot population as a result of the project is through turbine collision. The Swift Parrot has not been recorded within the project area during surveys and is not known from recent records within the surrounding 10km search region. The species is generally considered atypical for Western Tasmania. However, there are recent records beyond the search region near Roseberry. Potentially suitable foraging habitat may occur within wet and dry sclerophyll forest and eucalypt woodland. Though breeding is uncommon on the west coast of Tasmania, they have been found breeding in isolated patches near Zeehan (DCCEW 2024b). Potential habitat exists within the project Site especially in <i>E. brookeriana</i> and <i>E. ovata</i> forests; however, impacts on these habitats are not anticipated. The action of all infrastructure will avoid these habitats. There are few recent records from the search region and the species was not recorded during surveys. Significant impacts due to loss of habitat or collision are therefore considered unlikely. The species is known to collide with man-made structures such as windows, chain-link fences, and vehicles (Pfennigwerth 2008). Although it is considered a species of concern at wind farms, no collisions have been reported at such developments to date (DEECA 2025b). While collision-related mortality cannot be ruled out, the likelihood is considered low given the species' low likelihood of regular occurrence, high mobility, and absence of confirmed site use. It is considered unlikely that the project will lead to a long-term decrease in the size of a population of Swift Parrot.	Unlikely
Reduce the area of occupancy of the species.	Given that occurrence of the species in the area is rare, and the planned removal of native woodland and forest vegetation is minimal and	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
	dispersed across the site relative to the broader landscape, it is unlikely to have an impact on Swift Parrot occupancy.	
Fragment an existing population into two or more populations.	Given that the planned removal of native woodland and forest vegetation is minimal and dispersed across the site relative to the broader landscape, and considering the species' high mobility across extensive areas including disturbed habitats, it is highly unlikely that the proposal would disrupt population connectivity.	Unlikely
Adversely affect habitat critical to the survival of a species.	The proposed action is unlikely to adversely affect Swift Parrot habitat critical for survival, as the species is not known to regularly utilise terrestrial habitat within the project development area.	Unlikely
Disrupt the breeding cycle of a population.	The site is outside of the known potential Swift Parrot breeding range (DCCEEW 2024b). Though breeding is uncommon on the west coast of Tasmania, they have been found breeding in isolated patches near Zeehan (DCCEEW 2024b). The proposed action is not expected to disrupt the breeding cycle of this species, as Swift Parrot are not known to breed within the project area, and potential breeding habitat will largely be avoided.	Unlikely
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	Given that removal of native vegetation will be relatively minimal and dispersed across the site, and that the species is widespread and highly mobile, habitat is not expected to be altered to an extent that would measurably reduce the availability or quality of Swift Parrot habitat or contribute to a population decline.	Unlikely
Result in invasive species that are harmful to an endangered or critically endangered species becoming established in the endangered or critically endangered species' habitat.	The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease. It is unlikely that the proposed action will introduce invasive species that may cause the species to decline.	Unlikely
Introduce disease that may cause the species to decline.	The proposed action is not expected to result in activities that would introduce disease harmful to this species. The project will implement an Environmental Management Plan to control the spread and proliferation of invasive species and disease.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
	It is unlikely that the proposed action will introduce disease that may cause the species to decline.	
Interfere with the recovery of the species.	Given the minimal impacts to Swift Parrot habitat and low likelihood of turbine collision due to the project area being in an area where they appear to occur infrequently at most, the project is unlikely to interfere with recovery of the Swift Parrot	Unlikely
Overall assessment of likelihood of significant impact		Unlikely

Table A2 - 11: Assessment of Red-necked Stint against MNES Impact Criteria for Migratory species

Significant Impact criterion	Assessment	Significant Impact likelihood
Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species	Important habitat is determined as that which is utilised occasionally or periodically within the region that supports an ecological significant proportion of the population of the species. The East Asian-Australasian flyway population of Red-necked Stints is estimated at 475,000 (Wetlands International 2021), with a nationally important number of 480 birds (DEE 2017). The highest counts in the local region were of 187 birds, with other observations generally below 40 birds. The coastal area adjacent to the proposed Project is there not meeting the criteria as an important habitat. Despite this, the Project will have no material impact on any of the coastal habitats suitable for this species due to the 1.5 km buffer placed along the coast.	Unlikely
Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species.	As all coastal habitats are avoided within the design, the proposed works will not result in any invasive species that is harmful to these species becoming established in an area of important habitat. The temporary and short-term nature of the species' occurrence on the site means any infestations of invasive species would have a negligible impact on them. Regardless, the adoption of best-practice environmental management measures during construction and operation of the wind farm will ensure monitoring and adaptive control of any potential invasive plant or animal species during construction and operations.	Unlikely

Significant Impact criterion	Assessment	Significant Impact likelihood
Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.	These species do not breed in Australia, and the proposed action does not represent an important non-breeding area in relation to these species' known range.	Unlikely
Overall assessment of likelihood of significant impact		Unlikely