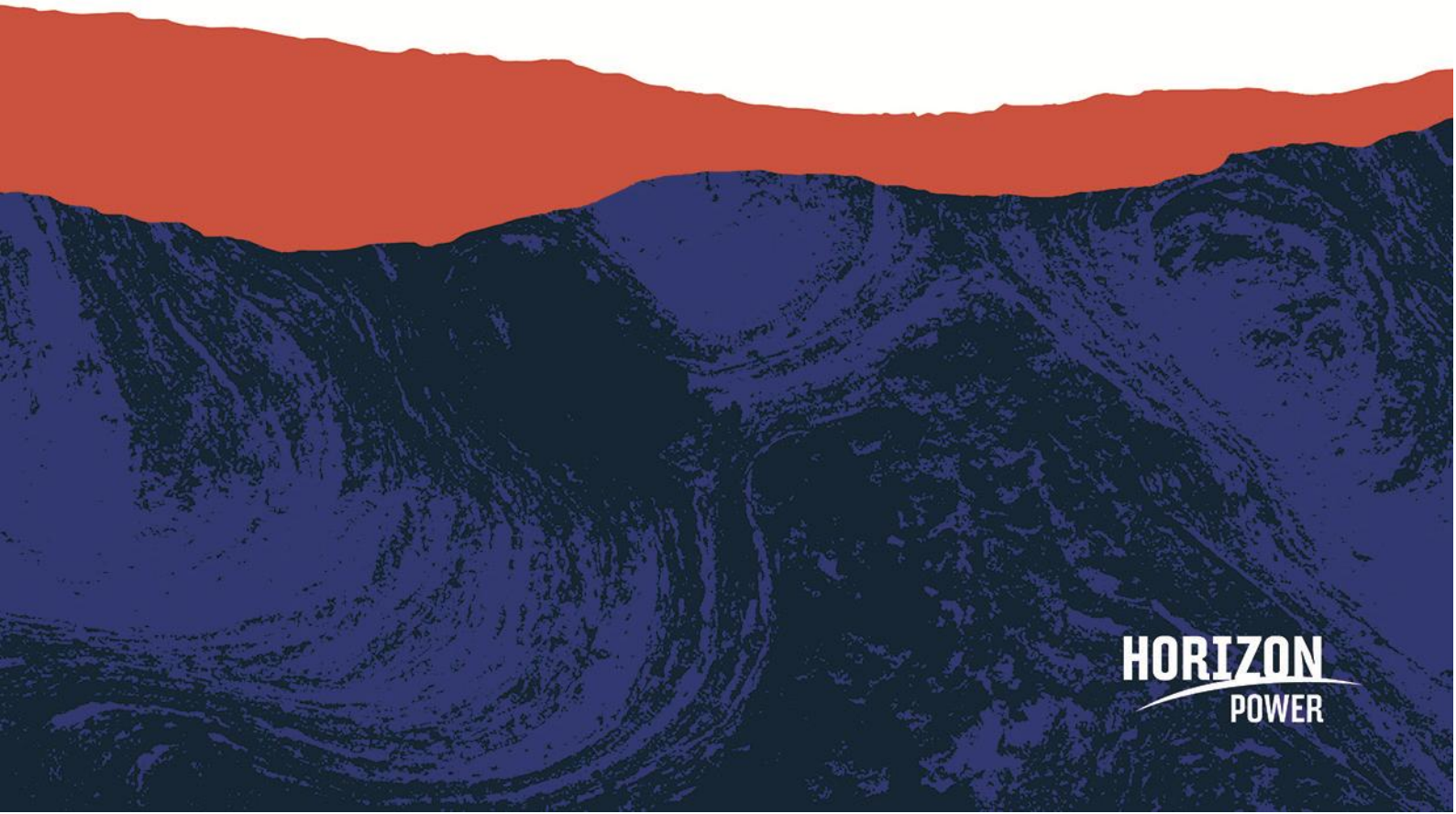
PROTECTED

# Denham Power Project - Native Vegetation Clearing Permit

## Supporting Document

February 2026



# Contents



**Figures**

# 1 Introduction

## 1.1 Project Context

Horizon Power is a Western Australian (WA) Government Trading Enterprise (GTE) and the state's regional and remote energy utility. Horizon Power operates under the *Electricity Corporations Act 2005* and is governed by a Board of Directors accountable to the Minister for Energy. Horizon Power is an experienced asset manager undertaking active management of vast electricity networks and generation assets across WA, utilising mature and robust operational, health and safety, and environmental systems.

Horizon Power is committed to supporting the State's target of achieving an 80% reduction in emissions through a low-cost and capital-efficient approach. A key strategy in meeting this ambition is renewable energy sources and the reduced reliance on delivery of fossil fuels to remote locations.

In Denham, the existing wind turbines play a critical role in delivering renewable energy to the town, making it essential that they remain operational or are replaced with a suitable alternative. The solar farm and wind turbines are located within Horizon Power's existing lease areas on Lot 3004 on Deposited Plan 54344, Lot 12 on Deposited Plan 419413, and Lot 344 on Deposited Plan 193644, approximately 1 km north/north-east of the Denham townsite. Four wind turbines and a small solar farm currently occupy the site. Expansion of the solar farm is currently being considered and will be undertaken utilising CPS 8823/2.

The four wind turbines supplying power to Denham are now in deteriorated condition and approaching the end of their operational life, with only two turbines remaining in service. Wind turbines typically have a design life of around 20 years, and the units in Denham are nearing this threshold, as summarised in Table 1.

*Table 1 Turbine model, output and installation year*

| Wind Turbine No | Model | Rated Power | Installation Year |
|---|---|---|---|
| **WEC 1** | Enercon E30 50m HH | 230 kW | 1997 |
| **WEC 2** | Enercon E30 50m HH | 230 kW | 1997 |
| **WEC 3** | Enercon E30 50m HH | 230 kW | 1999 |
| **WEC 4** | Enercon E33 50m HH | 330 kW | 2007 |

Without replacement, the decommissioning of these turbines would increase emissions and raise the cost of energy supply, as Denham's electricity system would become more reliant on diesel generation.

By replacing the aging turbines with more efficient and modern renewable energy solutions, Horizon Power can maintain—and potentially enhance—the renewable energy contribution to the Denham power system, while ensuring ongoing reliability and system optimisation. The replacement turbines will not exceed the existing height range of 60 to 66 metres, ensuring that the new units remain consistent with the current visual and environmental profile of the site. This upgrade will enable continued delivery of reliable, low-emission renewable energy to the Denham community while supporting Western Australia's long-term decarbonisation objectives.

The Project will require the clearing of no more than 2 ha within a Development Envelope (DE) 73.9 ha in size (Figure 1). A Native Vegetation Clearing Permit (NVCP) will be required from the Department of Water and Environment Regulation (DWER) to facilitate the clearing for the Project.

## 1.2 Scope and Purpose

This document has been prepared to support a Native Vegetation Clearing Permit (NVCP) application for the Project. It provides detailed information on the proposed activities (Section 2) and the associated vegetation clearing requirements (Section 3).

To inform the environmental approvals process, Horizon Power commissioned a biological survey undertaken by SLR (2025). The findings of this survey are summarised in Section 4 of this document. The survey was commissioned specifically to support the planned replacement of the four existing wind turbines and the investigation of additional renewable energy infrastructure options in Denham.

An assessment of the 10 Clearing Principles as outlined in '*A guide to the assessment of applications to clear native vegetation'* (DER, 2014) has also been undertaken and is presented in Section 8.

A Environment Management Plan (EMP) has also been prepared in support of the NVCP Application and is provided in Appendix A.

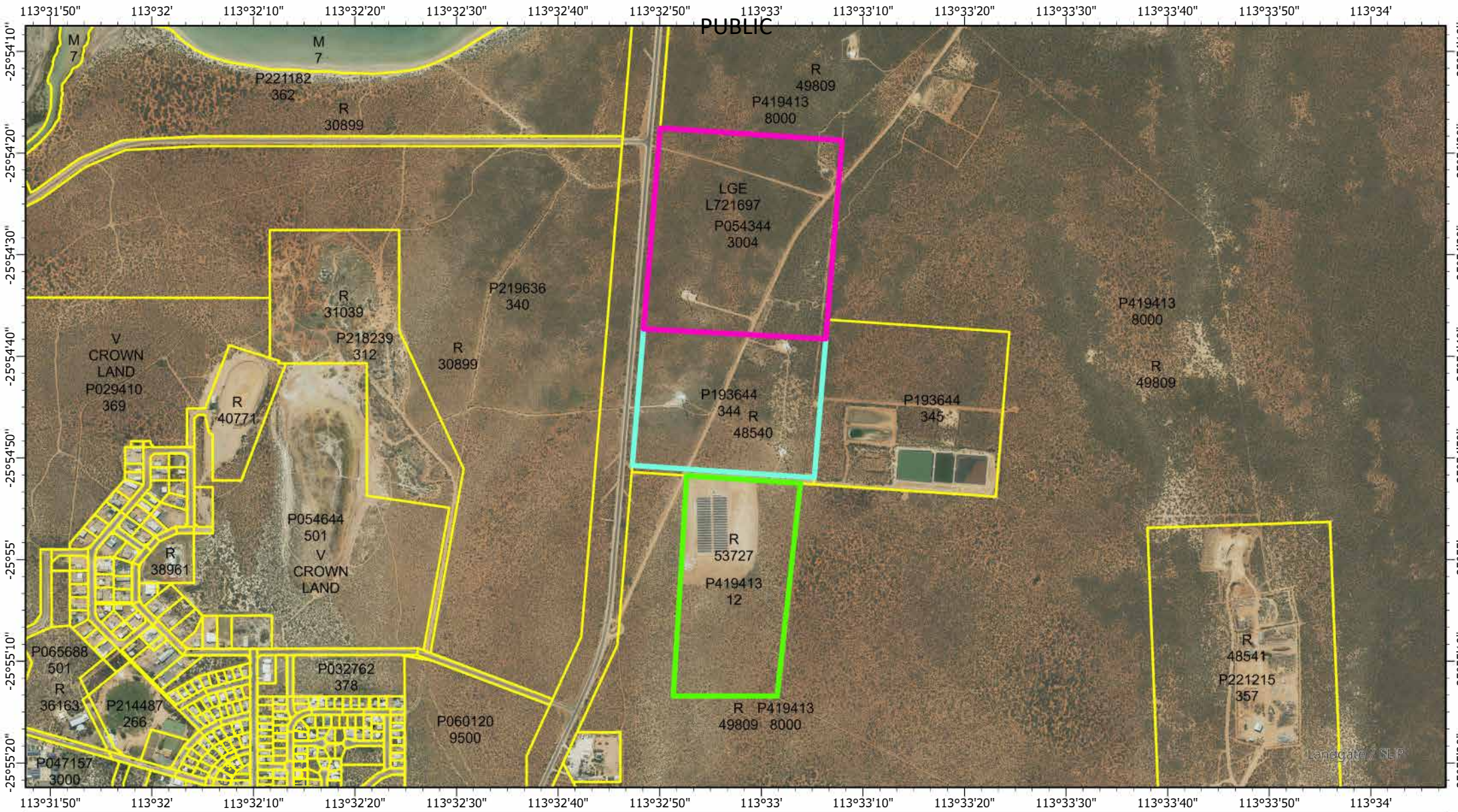
# 2 Description of the Activity

## 2.1 Project Location

The Project is located off Monkey Mia Road, within Denham, Western Australia. Land details of the DE are provided in Table 2 and the DE is shown in Figure 1.

*Table 2 Development Envelope Location*

| Size of Development Envelope (ha) | Development Envelope location | Shire | Neighbouring land uses |
|---|---|---|---|
| 73.9 | Lot 3004 on Deposited Plan 54344<br>Lot 12 on Deposited Plan 419413<br>Lot 344 on Deposited Plan 193644<br>Road | Shire of Shark Bay | Reserve, Road,<br>Historically, land within the Survey Areas has been used for pastoral purposes. |




Map | Figure 1 - Denham Development Envelope

For reference only.
Last updated by H181908 on 10/2/2026

N

0 0.13 0.25 0.5
Kilometres

**Lot 3004 P054344**

Lease: L721697
Lessee: Regional Power Corporation
Lessor: State of Western Australia

**Lot 344 DP193644**

Crown Reserve: 48540
Managed by: Regional Power Corporation
Purpose: Aerogeneration and Access

**Lot 12 DP54344**

Crown Reserve: 53727
Managed by: Regional Power Corporation
Purpose: Power Generation Site and Associated Infrastructure

HORIZON POWER

## 2.2 Activity Overview and Timelines

The Project will consist of the replacement of two to four existing wind turbines with modern, higher-efficiency like-for-like units, along with the potential installation of a new 550 kW Battery Energy Storage System (BESS) to enhance system stability and renewable energy integration.

A five-year clearing permit is requested to allow for procurement lead times, supplier availability, and construction scheduling. Vegetation clearing will be undertaken within approximately three months of construction commencement to ensure site readiness and compliance with environmental requirements.

A preliminary geotechnical investigation was undertaken in October 2020 to support the construction of the existing solar farm near Denham. The assessment included excavation of test pits and hand-auger boreholes to depths of 2.5–3.0 metres, along with laboratory analysis of soil samples. Overall, the geotechnical conditions were considered suitable for typical shallow foundations and driven pile systems, with collapsible sandy soils noted as a potential consideration for future structural works. The findings provided confidence in the soil's bearing characteristics and confirmed that the depth to groundwater was well below typical construction excavation depths, meaning dewatering was not anticipated. Horizon Power will engage an engineering consultant to determine whether a dedicated geotechnical investigation is required for the proposed turbine replacement works within the remaining lease areas on Lot 3004 on Deposited Plan 54344 and Lot 344 on Deposited Plan 193644. This assessment will confirm whether the findings from the 2020 investigation can be relied upon for these additional parcels or whether new, site-specific testing is necessary. If required, geotechnical investigations will be undertaken at the locations where the turbines will be installed, and no clearing is expected as a result.

## 2.3 Land Access

The works will be undertaken at the existing Horizon Power renewable energy precinct. The area is under lease to Horizon Power for the purposes of power generation and associated infrastructure, aerogeneration and access, and windfarm.

# 3 Description of Proposed Clearing

## 3.1 Proposed Clearing Area

The final design and footprint required for the Project, is guided by the location of existing assets, but will be determined once all due diligence activities are completed, and will also depend on the engineering, environmental and social constraints of the site. The Project will clear no more than 2 ha of native vegetation within the DE. Clearing is required for the following:

- Two to four wind turbines
- Cable trenches
- Winch sites
- Battery Energy Storage System of 550 kW
- Widening of access roads if required.

## 3.2 Proposed Clearing Method

Clearing will be undertaken predominantly through mechanical methods, using graded and controlled approaches suited to the scale of works. Mechanical clearing may include the use of light to medium-duty machinery such as graders, loaders, excavators, and slashing equipment to remove above-ground vegetation within the defined clearing footprint. Where feasible, vegetation will be pushed to the side rather than fully removed, to reduce soil disturbance and allow for natural regeneration.

Some driving over and parking on native vegetation will occur, particularly during mobilisation of construction equipment, crane operations, and access to turbine foundations. These activities will be restricted to designated access routes and work pads to minimise compaction and disturbance.

Clearing may also be required to establish temporary laydown areas for delivery and storage of turbine components, including tower sections, nacelles, blades, and crane pads. These areas will be sited to minimise vegetation impact,

including utilising the already cleared areas around each turbine. Temporary clearing areas will be rehabilitated where practicable following completion of works.

Where trenching or minor excavation is required for electrical cabling or for the installation of the Battery Energy Storage System (BESS), ground disturbance will be limited to the minimum area needed to safely undertake the works. All clearing will follow Horizon Power's environmental management procedures, including delineation of boundaries, avoidance of unnecessary disturbance, and topsoil preservation where applicable.

# 4 Biological Survey

To inform the Project, a detailed (single season) flora and vegetation survey and a basic and targeted fauna survey has been undertaken by SLR (2025) on 2 to 6 March 2025. The biological survey was undertaken in accordance with the Environmental Protection Authority (EPA) guidelines (EPA, 2016 and EPA, 2020) and is summarised in Table 3.

Table 3 Summary of Biological Surveys Relevant to the DE

| Survey | Summary of Findings |
|---|---|
| Denham Biological Surveys Flora, Vegetation and Fauna (SLR, 2025)<br><br>(IBSA Number: IBSA-2025-0363) | **Survey Dates:** 2 to 6 March 2025<br>**Survey Area:** 73.9 ha, as shown in Figure 1.<br>**Flora / Vegetation Findings**:<br>– A total of 58 vascular flora taxa were recorded from 49 genera and 27 families.<br>– Ten introduced flora taxa were recorded within the Survey Area, including two Weeds of National Significance (WoNs): **Opuntia stricta* (Erect prickly pear), and **Lycium ferocissimum* (African boxthorn). **Opuntica stricta* is also a Declared Pest (DP).<br>– No flora taxa listed as Threatened under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) and Biodiversity Conservation Act Act 2016 (BC Act) were recorded within the Survey Area.<br>– Two Priority flora taxa were recorded: *Triodia plurinervata* (Priority (P) 3) and *Olearia occidentissima* (P2).<br>• 885 individuals of *Triodia plurinervata* (P3) were recorded from nine locations within the Survey Area. These individuals do not represent the full extent of the population of *Triodia plurinervata* (P3) within the Survey Area, as this taxon dominated the lower stratum of vegetation type AlTp.<br>• Seventy-three individuals of *Olearia occidentissima* (P2) were recorded from 13 locations within the Survey Area. *Olearia occidentissima* (P2) was recorded across both vegetation types within the Survey Area.<br>– Six taxa were considered to have a medium likelihood of occurrence. This was due to the presence of supporting habitat within the Survey Area and the species not being recorded during the field survey. The six taxa are:<br>• *Acanthocarpus rupestris* (P2)<br>• *Chthonocephalus muellerianus* (P2)<br>• *Acanthocarpus parviflorus* (P3)<br>• *Lepidium biplicatum* (P3)<br>• *Grevillea rogersoniana* (P3)<br>• *Anthocercis intricata* (P3)<br>– Two vegetation types were recorded (excluding cleared areas):<br>1. AlTp – *Acacia ligulata*, *Exocarpos aphyllus* and *Rhagodia latifolia* subsp. *latifolia* mid-open shrubland over *Triodia plurinervata* (P3) low-open hummock grassland.<br>2. AlAp – *Acacia ligulata*, *Acacia tetragonophylla* and *Exocarpos aphyllus* mid-open shrubland over *Maireana stipitata*, *Atriplex paludosa* subsp. *moquiniana* and *Ptilotus divaricatus* low-sparse shrubland.<br>– No vegetation commensurate with Threatened or Priority ecological communities was identified.<br>– Vegetation condition ranged from Completely Degraded to Good within the Survey Area. The majority of the Survey Area was assessed to be in Good condition. Disturbance within the Survey Area was primarily associated with introduced flora taxa, grazing, vehicle tracks, infrastructure, and litter.<br>**Fauna / Fauna Habitat Findings**:<br>– Two fauna habitats were mapped within the Survey Area: Acacia Shrubland over Triodia and Acacia Shrubland. Both habitats present within the Survey Area are widespread and abundant at a regional scale. |

| Survey | Summary of Findings |
|---|---|
| | – The survey identified 69 species (45 birds, 17 mammals, 6 reptiles and 1 amphibian). Of these, three are introduced species (the Dingo (*Canis familiaris*), the Cat (*Felis catus*) and the Cane Toad (*Rhinella marina*)).<br>– A total of 25 fauna taxa from 23 families were recorded, comprising 14 birds, seven mammals, and four reptiles. No significant taxa were recorded during the fauna survey under the BC or EPBC Act.<br>– Five significant fauna species were identified as likely to occur<br>• Malleefowl (*Leipoa ocellata*), listed as Vulnerable (V) under the BC Act and EPBC Act.<br>• Bilby (*Macrotis lagotis*), listed as Vulnerable under the BC Act and EPBC Act.<br>• Western Spiny-tailed Skink (*Egernia stokesii badia*), listed as Vulnerable under the BC Act and Endangered under the EPBC Act.<br>• Shark Bay Keeled Legless Gecko (*Pletholax edelensis*), listed as Priority 3 by DBCA.<br>• Shark Bay Western Grasswren (*Amytornis textilis textilis*), listed as Priority 4 by DBCA.<br>– Two are considered to have a medium likelihood of occurrence:<br>• Chuditch (*Dasyurus geoffroii fortis*) listed as Vulnerable under the BC Act and EPBC Act.<br>• Javelin Lizard (*Delma concinna major*), listed as Priority 1 by DBCA.<br>– Both Acacia Shrubland and Acacia Shrubland over Triodia habitats within the Survey Area constitute potential core habitat for Malleefowl (*Leipoa ocellata*) (VU – BC and EPBC Act), Shark Bay Western Grasswren (*Amytornis textilis textilis*) (Priority 4 - DBCA), Bilby (*Macrotis lagotis*) (VU – BC and EPBC Act), Western Spiny-tailed Skink (*Egernia stokesii badia*) (VU – BC and EPBC Act), and Shark Bay Keeled Legless Gecko (*Pletholax edelensis*) (Priority 3 - DBCA), Javelin Lizard (*Delma concinna major*) (Priority 1 – DBCA) and the Chuditch (*Dasyurus geoffroii fortis*) (VU – BC and EPBC Act).<br>– Five introduced taxa were recorded during the survey, Goat (*Ca*pra aegagrus hircus)*, Dingo/Dog (**Canis familiaris*), Horse (**Equus ferus caballus*), Cat (**Felis catus*), and Rabbit (**Oryctolagus cuniculus*). |

# 5 Existing Environment

The existing environment is summarised in Table 4.

*Table 4 Existing environment*

<table>
<tr><th>Environmental value</th><th>Assessment</th></tr>
<tr><td>Vegetation associations and condition</td><td>The Project is located within Pre-European Vegetation Associations 1101 and 112. More than 95% of these vegetation associations remain at the state, bioregion, subregion and local government authority (LGA) scale.
<table>
<tr><th>Vegetation association</th><th>Scale</th><th>Pre-European extent (ha)</th><th>Current extent (ha)</th><th>% Remaining</th><th>% of current extent in all DBCA managed land (proportion of current extent)</th></tr>
<tr><td rowspan="4">1101</td><td>State: WA</td><td>12,601.25</td><td>12,597.77</td><td>99.97</td><td>78.24</td></tr>
<tr><td>Interim Biogeographic Regionalisation for Australia (IBRA) Bioregion: Carnarvon</td><td>11,926.16</td><td>11,926.16</td><td>100</td><td>78.03</td></tr>
<tr><td>IBRA Subregion: Wooramel Subregion</td><td>11,926.16</td><td>11,926.16</td><td>100</td><td>78.03</td></tr>
<tr><td>LGA: Shire of Shark Bay</td><td>12,601.25</td><td>12,597.77</td><td>99.97</td><td>78.24</td></tr>
<tr><td rowspan="4">112</td><td>State: WA</td><td>26,116.34</td><td>24,812.18</td><td>95.01</td><td>0.16</td></tr>
<tr><td>Interim Biogeographic Regionalisation for Australia (IBRA) Bioregion: Carnarvon</td><td>26,116.34</td><td>19,921.06</td><td>99.55</td><td>0.19</td></tr>
<tr><td>IBRA Subregion: Wooramel Subregion</td><td>20,012.09</td><td>19,921.06</td><td>99.55</td><td>0.19</td></tr>
<tr><td>LGA: Shire of Shark Bay</td><td>26,116.34</td><td>24,812.18</td><td>95.01</td><td>0.16</td></tr>
</table>
Two vegetation types were identified in the Development Envelope, ranging from Completely Degraded to Good with the majority being in Good condition.
<table>
<tr><th>Vegetation type</th><th>Condition</th><th>Extent (ha) within DE</th><th>Extent (%) within DE</th></tr>
<tr><td rowspan="2">AITp</td><td>Good</td><td>42.71</td><td>57.8</td></tr>
<tr><td>Poor</td><td>2.5</td><td>3.4</td></tr>
<tr><td rowspan="2">AIAp</td><td>Degraded</td><td>3.1</td><td>4.2</td></tr>
<tr><td>Good</td><td>19.27</td><td>26.1</td></tr>
<tr><td colspan="2">Cleared</td><td>6.32</td><td>8.5</td></tr>
<tr><td colspan="2">Total</td><td>73.9</td><td>100%</td></tr>
</table></td></tr>
<tr><td>Fauna habitat</td><td>Two fauna habitats were identified in the DE, Acacia Shrubland and Acacia Shrubland over Triodia habitat.
<table>
<tr><th>Fauna habitat</th><th>Condition</th><th>Extent (ha) within DE</th><th>Extent (%) within DE</th></tr>
<tr><td rowspan="2">Acacia shrubland</td><td>Degraded</td><td>3.1</td><td>4.2</td></tr>
<tr><td>Good</td><td>19.3</td><td>26.1</td></tr>
<tr><td rowspan="2">Acacia shrubland over triodia</td><td>Good</td><td>42.7</td><td>57.8</td></tr>
<tr><td>Poor</td><td>2.5</td><td>3.4</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Environmental value</th><th>Assessment</th></tr>
<tr><td></td><td>
<table>
<tr><td>Cleared</td><td>6.3</td><td>8.5</td></tr>
<tr><td>Total</td><td>73.9</td><td>100%</td></tr>
</table>
These habitats are considered to be of ‘High’ value to fauna.
</td></tr>
<tr><td>Significant fauna</td><td>
No significant taxa were recorded during the fauna survey under the BC or EPBC Act.<br>
Five significant fauna taxa were assessed as having a high likelihood of occurrence, and two significant fauna taxa were assessed as having a medium likelihood of occurrence.
<table>
<tr><th>Fauna species</th><th>Conservation status</th><th>Preferred habitat in DE</th></tr>
<tr><td>Malleefowl (Leipoa ocellata)</td><td>VU – BC and EPBC Act</td><td>Acacia Shrubland and Acacia Shrubland over Triodia</td></tr>
<tr><td>Shark Bay Western Grasswren (Amytornis textilis textilis)</td><td>Priority 4 - DBCA</td><td>Acacia Shrubland and Acacia Shrubland over Triodia</td></tr>
<tr><td>Bilby (Macrotis lagotis)</td><td>VU – BC and EPBC Act</td><td>Acacia Shrubland and Acacia Shrubland over Triodia</td></tr>
<tr><td>Western Spiny-tailed Skink (Egernia stokesii badia)</td><td>VU – BC and EPBC Act</td><td>Acacia Shrubland and Acacia Shrubland over Triodia</td></tr>
<tr><td>Shark Bay Keeled Legless Gecko (Pletholax edelensis)</td><td>Priority 3 - DBCA</td><td>Acacia Shrubland and Acacia Shrubland over Triodia</td></tr>
<tr><td>Javelin Lizard (Delma concinna major)</td><td>Priority 1 – DBCA</td><td>Acacia Shrubland and Acacia Shrubland over Triodia</td></tr>
<tr><td>Chuditch (Dasyurus geoffroii fortis)</td><td>VU – BC and EPBC Act</td><td>Acacia Shrubland and Acacia Shrubland over Triodia</td></tr>
</table>
</td></tr>
<tr><td>Significant ecological linkage</td><td>The proposed area is not part of a significant ecological linkage.</td></tr>
<tr><td>Ecological communities</td><td>No State or Federally listed Threatened Ecological Communities (TECs) were recorded within the Survey Area. No Threatened or Priority ecological communities are expected to occur.</td></tr>
<tr><td>Significant flora</td><td>
No flora taxa listed as Threatened under the EPBC Act and BC Act were recorded within the Survey Area. Two Priority flora taxa were recorded: Triodia plurinervata (P3) and Olearia occidentissima (P2). 885 individuals of Triodia plurinervata (P3) were recorded from nine locations within the Survey Area. These individuals do not represent the full extent of the population of Triodia plurinervata (P3) within the Survey Area, as this taxon dominated the lower stratum of vegetation type AlTp. Seventy-three individuals of Olearia occidentissima (P2) were recorded from 13 locations within the Survey Area. Olearia occidentissima (P2) was recorded across both vegetation types within the Survey Area.<br>
Six taxa were considered to have a medium likelihood of occurrence. This was due to the presence of supporting habitat within the Survey Area and the species not being recorded during the field survey. The six taxa are:<br>
– Acanthocarpus rupestris (P2)<br>
– Chthonocephalus muellerianus (P2)<br>
– Acanthocarpus parviflorus (P3)<br>
– Lepidium biplicatum (P3)<br>
– Grevillea rogersoniana (P3)<br>
– Anthocercis intricata (P3)<br>
The National Groundwater Dependent Atlas as having a moderate potential to support terrestrial Groundwater Dependent Ecosystems (BoM, 2025b).
</td></tr>
<tr><td>Wetlands and/or waterways</td><td>No Rights in Water and Irrigation Act 1914 (RIWI Act) Rivers overlap the DE (GoWA, 2026).<br>
No significant or nationally important wetlands, rivers or watercourses were identified, and no RAMSAR-listed wetland ecosystems or communities were found in the DE.</td></tr>
</table>

| Environmental value | Assessment |
|---|---|
| | No hydrographic features intersect the Survey Area. The nearest hydrographic feature to the Survey Area is the Little Lagoon, a non-perennial lake, located 500 m northwest of the Survey Area. |
| Water resources | The DE does not overlap a mapped Public Drinking Water Source Areas (PDWSA) (GoWA, 2026). Denham North Water Reserve (P1) is the closest PDWSA and is located approximately 750 m from the DE. Standard mitigation measures are outlined in the EMP and no additional impacts are expected to the water reserve.<br>The DE overlaps the RIWI Act Gascoyne Groundwater Area. Depth to groundwater is recorded as 21m (Horizon Power, 2020). A previous geotechnical investigation conducted in October 2020 at the nearby solar farm site (Lot 12 on Deposited Plan 419413) did not encounter groundwater to a depth of 3.0 metres, with groundwater expected to range from 15 to 25m. Given the similar soil profile and elevation at the proposed wind turbine locations, groundwater interaction and dewatering are not anticipated during construction.<br>Water required for construction activities (e.g., dust suppression) is expected to be sourced via trucking in water from local or regional sources, or groundwater bores. |
| Conservation Reserves | No conservation reserves or estates were identified within the DE. Three conservation areas are within 1.5 km of the Development Envelope:<br>– Shark Bay Marine Park, vested under the Marine Parks and Reserves Authority is located approximately 500 m to the northwest of the Survey Area.<br>– Nanga National Park, vested under the Conservation Commission of Western Australia, is located approximately one kilometre east of the Survey Area.<br>– Francois Peron National Park, vested under the Conservation Commission of Western Australia, is located approximately 1.5 km north of the Survey Area. |
| Environmentally Sensitive Areas (ESAs) | The DE is located within an Environmentally Sensitive Area (ESA). |
| Land and soil quality | One soil type was identified in the DE (SLR, 2025), sub-coastal undulating dunes on orange sandy clay soils. The geotechnical investigations at the existing dsoalr farm identified that subsurface conditions across the site comprised of fine to medium-grained sands with minor silt and limestone gravel, transitioning from loose near the surface to medium dense or dense at depth. |
| Environmental heritage | There are no National Heritage Area or World Heritage Areas mapped as overlapping the DE (DCCEEW, 2026). The Shark Bay World and National heritage site is located adjacent to the wind farm, and the existing solar farm is within the buffer zone of the World Heritage Area. No impacts to World Heritage are expected. |
| Air quality | The wind turbine replacement is unlikely to contribute significantly to dust. Dust will be managed during construction in accordance with the EMP. No significant receptors are directly adjacent to the Project and no significant air emissions are expected that would impact the airshed. |
| Amenity values | The most recent noise data available for the Denham Wind Farm relates to the original wind turbine installation completed around 1996 At that time, noise was assessed using the New Zealand Standard NZS 6808:1998. Both predicted and measured noise levels demonstrated minimal to no impact on nearby residents, with turbine noise effectively blending into background levels beyond 200 metres. Based on this, the wind farm was not expected to cause noise-related disturbance to the Denham community.<br>Horizon Power has engaged a third-party engineering consultant to undertake desktop noise modelling for the proposed replacement turbines. This modelling will ensure compliance with the Environmental Protection (Noise) Regulations 1997. A copy of the noise assessment report can be provided upon request.<br>No heritage buildings are present that may be impacted by construction vibration. |

# 6 Avoidance, Mitigation and Management Measures

## 6.1 Avoidance

The Project has been designed to avoid and minimise native vegetation clearing wherever practicable, consistent with the requirements of the *Environmental Protection Act 1986* and the WA Native Vegetation Clearing Principles.

A key avoidance measure was the decision to locate all works within the existing Denham Wind Farm asset area, utilising previously cleared or disturbed locations wherever possible. This includes:

- Existing turbine hardstands and cleared turbine footprints,

- Existing access tracks,
- Existing underground and overhead connection infrastructure, and
- Disturbed areas associated with historic site establishment and maintenance.

By containing works within these areas, the Project avoids the need for additional footprint expansion and significantly reduces impacts to native vegetation, fauna habitat, and surface-soil integrity.
This approach aligns with best-practice avoidance principles by containing all works within the existing operational footprint and minimising the need for additional native vegetation clearing.

## 6.2 Mitigation and Management

An Environmental Management Plan (EMP) has been prepared for the Project (refer to Appendix A). The EMP outlines clear and enforceable mitigation and management measures to ensure clearing is minimised and conducted in accordance with the granted permit and best-practice environmental standards. Key management measures include:

- No clearing is permitted outside the DE.
- Clearing will be minimised through the preferential use of existing hardstands, access tracks, and disturbed areas.
- Systematic work sequencing will be adopted to avoid unnecessary multiple passes, reducing disturbance and compaction of access tracks and adjacent areas.
- Clearing boundaries will be clearly demarcated using flagging tape, GPS delineation or similar methods prior to commencement.
- All proposed clearing areas will be verified by an Environmental Specialist or Site Supervisor prior to commencement to ensure total clearing does not exceed 2 ha for the Project.
- A pre-clearing environmental toolbox meeting will be conducted to ensure all personnel understand obligations under the clearing permit and are aware of environmental sensitivities.
- Fauna-sensitive clearing practices will be implemented, including slow, progressive clearing in a single direction to encourage fauna to move away from the activity.
- Vehicle and machinery movement will be restricted to existing access tracks and conducted in convoy wherever practical to prevent encroachment into adjacent vegetation.
- All machinery will arrive clean, with weed hygiene measures enforced. Post-construction weed monitoring and management will be undertaken as required under the EMP.

# 7 Stakeholder Engagement

Horizon Power has undertaken consultation with a number of key stakeholders, including the Shire of Shark Bay (the local aerodrome operator), Airservices Australia, Airport Development, Malgana Aboriginal Corporation, Bureau of Meteorology and members of the local Shark Bay community.

# 8 Assessment Against the 10 Clearing Principles

An assessment against the 10 Clearing Principles has been undertaken to support the NVCP application for the Project, as presented in Table 5. The assessment found that the proposed clearing of native vegetation for the Project will not be at variance with the 10 Clearing Principles.

*Table 5 Assessment Against the 10 Clearing Principles*

| Principle | Assessment | Outcome |
|---|---|---|
| (a) Native vegetation should not be cleared if it comprises a high level of biological diversity. | Up to 2 ha of native vegetation is proposed to be cleared for the Project within the DE.<br>**Vegetation**<br>The DE is located in the Carnarvon bioregion and the Wooramel sub-region as described by IBRA. Two vegetation types were recorded (excluding cleared areas):<br>1. AITp – *Acacia ligulata*, *Exocarpos aphyllus* and *Rhagodia latifolia* subsp. *latifolia* mid-open shrubland over *Triodia plurinervata* (P3) low-open hummock grassland.<br>2. AIAp – *Acacia ligulata*, *Acacia tetragonophylla* and *Exocarpos aphyllus* mid-open shrubland over *Maireana stipitata*, *Atriplex paludosa* subsp. *moquiniana* and *Ptilotus divaricatus* low-sparse shrubland.<br>No TECs listed under the EPBC Act or BC Act were identified within the DE. This vegetation type is representative of the vegetation associations in the region, with over 95% of pre-European extents remaining.<br>Vegetation condition ranged from Completely Degraded to Good.<br>**Flora**<br>Fifty eight vascular flora taxa were recorded from 49 genera and 27 families (SLR, 2025). No EPBC Act or BC Act listed flora were recorded. Two Priority flora taxa were recorded: *Triodia plurinervata* (Priority (P) 3) and *Olearia occidentissima* (P2).<br>• 885 individuals of *Triodia plurinervata* (P3) were recorded from nine locations within the Survey Area. These individuals do not represent the full extent of the population of *Triodia plurinervata* (P3) within the Survey Area, as this taxon dominated the lower stratum of vegetation type AlTp.<br>• Seventy-three individuals of *Olearia occidentissima* (P2) were recorded from 13 locations within the Survey Area. *Olearia occidentissima* (P2) was recorded across both vegetation types within the Survey Area.<br>Six taxa were considered to have a medium likelihood of occurrence. This was due to the presence of supporting habitat within the Survey Area and the species not being recorded during the field survey. The six taxa are:<br>• *Acanthocarpus rupestris* (P2)<br>• *Chthonocephalus muellerianus* (P2)<br>• *Acanthocarpus parviflorus* (P3)<br>• *Lepidium biplicatum* (P3)<br>• *Grevillea rogersoniana* (P3)<br>• *Anthocercis intricata* (P3)<br>Ten introduced flora taxa were recorded within the DE, including two Weeds of National Significance (WoNs) in four locations: **Opuntia stricta* (Erect prickly pear), and **Lycium ferocissimum* (African boxthorn). **Opuntica stricta* is also a Declared Pest (DP).<br>**Fauna and fauna habitat**<br>Two fauna habitat types were identified in the DE, Acacia Shrubland over Triodia and Acacia Shrubland. Both habitats present within the Survey Area are widespread and abundant at a regional scale. This fauna habitat is considered to be of 'High' value habitat for fauna (SLR, 2025). | Unlikely to be at variance |

| Principle | Assessment | Outcome |
|---|---|---|
| | 25 fauna taxa from 23 families were recorded, comprising 14 birds, seven mammals, and four reptiles. No significant taxa were recorded during the fauna survey under the BC or EPBC Act. Seven significant fauna species were considered likely to occur as detailed in Principle b).<br>Up to 2 ha of native vegetation is proposed to be cleared for the Project. This vegetation is considered to be well represented locally and regionally. Given the small scale of proposed clearing, the works are unlikely to be at variance to this principle. | |
| (b) Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous Western Australia. | Two fauna habitat types were identified in the DE, Acacia Shrubland over Triodia and Acacia Shrubland. Both habitats present within the Survey Area are widespread and abundant at a regional scale. This fauna habitat is considered to be of 'High' value habitat for fauna (SLR, 2025).<br>25 fauna taxa from 23 families were recorded, comprising 14 birds, seven mammals, and four reptiles.<br>Five significant fauna species were identified as likely to occur:<br>• Malleefowl (*Leipoa ocellata*), listed as Vulnerable under the BC Act and EPBC Act.<br>• Bilby (*Macrotis lagotis*), listed as Vulnerable under the BC Act and EPBC Act.<br>• Western Spiny-tailed Skink (*Egernia stokesii badia*), listed as Vulnerable under the BC Act and Endangered under the EPBC Act.<br>• Shark Bay Keeled Legless Gecko (*Pletholax edelensis*), listed as Priority 3 by DBCA.<br>• Shark Bay Western Grasswren (*Amytornis textilis textilis*), listed as Priority 4 by DBCA.<br>Two are considered to have a medium likelihood of occurrence:<br>• Chuditch (*Dasyurus geoffroii fortis*) listed as Vulnerable under the BC Act and EPBC Act.<br>• Javelin Lizard (*Delma concinna major*), listed as Priority 1 by DBCA.<br>Both Acacia Shrubland and Acacia Shrubland over Triodia habitats within the Survey Area constitute potential core habitat for Malleefowl (*Leipoa ocellata*) (VU – BC and EPBC Act), Shark Bay Western Grasswren (*Amytornis textilis textilis*) (Priority 4 - DBCA), Bilby (*Macrotis lagotis*) (VU – BC and EPBC Act), Western Spiny-tailed Skink (*Egernia stokesii badia*) (VU – BC and EPBC Act), and Shark Bay Keeled Legless Gecko (*Pletholax edelensis*) (Priority 3 - DBCA), Javelin Lizard (*Delma concinna major*) (Priority 1 – DBCA) and the Chuditch (*Dasyurus geoffroii fortis*) (VU – BC and EPBC Act).<br>The conservation significant species including habitat preferences are described below.<br>**Malleefowl**<br>The Malleefowl is found in semi-arid to arid shrublands and low woodlands, especially those dominated by Mallee and/or Acacia. Sandy substrates and an abundance of leaf litter are required for breeding (Department of the Environment and Energy, 2018). Densities of these bird species are generally higher in areas with higher rainfall and more fertile soils, where habitats are denser and food plants are more abundant. A targeted search did not identify any Malleefowl or mounds, however this species has been recorded recently in the area and is likely to occur. Both the Acacia Shrubland and Acacia Shrubland over Triodia vegetation types may provide habitat for the Malleefowl because of its value for foraging and dispersal. Broadscale mapping identified 21,451.88 ha of Acacia and Acacia over hummock grassland vegetation types within 10km of the DE. Clearing 2 ha of native vegetation constitutes 0.007% of available habitat and is unlikely to significantly impact the Malleefowl.<br>**Shark Bay Western Grasswren**<br>The range and habitat of the Shark Bay Western Grasswren does not overlap with any other Grasswren. This species prefers Acacia Shrublands with dense areas of shrubs and lower recumbent shrubs less than 1 m in height, and forages on the ground around the | Unlikely to be at variance. |

| | | |
|---|---|---|
| | base of shrubs (Menkhorst et al., 2019). The species typically occurs in pairs and in small family groups (Menkhorst et al., 2019). Shark Bay Western Grasswrens have been recorded frequently and recently within the area and is likely to occur. Both the Acacia Shrubland over Triodia and Acacia Shrubland habitats constitute core habitat for the Shark Bay Western Grasswren because of their value for foraging and nesting. Broadscale mapping identified 21,451.88 ha of Acacia and Acacia over hummock grassland vegetation types within 10km of the DE. Clearing 2 ha of native vegetation constitutes 0.007% of available habitat and is unlikely to significantly impact this species.<br><br>**Bilby**<br><br>The range of the Bilby has declined northwards, with wild subpopulations now restricted predominantly to the Tanami Desert in the Northern Territory and the Gibson, Little Sandy and Great Sandy Deserts as well as parts of the Pilbara region in Western Australia (DBCA, 2017a; Southgate, 1990). The Bilby is described as occupying a wide range of vegetation types, including open tussock grassland on upland hills, Mulga woodland/shrubland growing on ridges and rises and spinifex growing on sandplains and dunes, drainage systems, salt lake systems, and other alluvial areas (DBCA, 2017a; Pavey, 2006). The Bilby has been recorded recently within the area and is likely to occur within the Survey Area. Both the Acacia Shrubland and Acacia Shrubland over Triodia habitats constitute potential core habitat for Bilby because of their value for breeding, burrowing, and foraging. No evidence of Bilby was recorded in the survey. Broadscale mapping identified 21,451.88 ha of Acacia and Acacia over hummock grassland vegetation types within 10km of the DE. Clearing 2 ha of native vegetation constitutes 0.007% of available habitat and is unlikely to significantly impact the Bilby.<br><br>**Western Spiny-tailed Skink**<br><br>A brown form of the Western Spiny-tailed Skink occurs in the Wheatbelt and Shark Bay area and inhabits tree hollows and fallen logs, capable of providing a combination of basking and shelter sites. This is distinct from the black form of the species which occurs in the Murchison region and inhabits rocky outcrops with crevices and boulders (DAWE, 2020). The species leaves distinctive clusters of faecal droppings outside refuges (How et al., 2003). No evidence of Western Spiny-tailed Skink was found, however this species has been recorded in the past and is likely to occur within the Survey Area. Both the Acacia Shrubland over Triodia and Acacia Shrubland habitats constitute potential core habitat providing basking, foraging, and sheltering sites. This habitat may also be used by the Western Spiny-tailed Skink for dispersal into the surrounding landscape. Broadscale mapping identified 21,451.88 ha of Acacia and Acacia over hummock grassland vegetation types within 10km of the DE. Clearing 2 ha of native vegetation constitutes 0.007% of available habitat and is unlikely to significantly impact this species.<br><br>**Shark Bay Keeled Legless Gecko**<br><br>The Shark Bay Keeled Legless Gecko occurs on Edel Land Peninsula, Peron Peninsula and Dirk Hartog Island within the Shark Bay region. This species inhabits Acacia shrubs, Triodia, coastal spinifex, and heath associated with coastal dunes and sandplains (Wilson and Swan, 2021). Shark Bay Keeled Legless Gecko is likely to occur within the Survey Area. Both the Acacia Shrubland over Triodia and Acacia Shrubland habitats constitute core habitat, providing basking, foraging, and sheltering sites. This habitat may also be used by the species for dispersal into the surrounding landscape. Broadscale mapping identified 21,451.88 ha of Acacia and Acacia over hummock grassland vegetation types within 10km of the DE. Clearing 2 ha of native vegetation constitutes 0.007% of available habitat and is unlikely to significantly impact this species.<br><br>**Javelin Lizard**<br><br>This species occurs in the Shark Bay region with a distribution from Kalbarri to Shark Bay and inhabits dense low coastal heath and associated leaf litter (Wilson and Swan, 2021). The Javelin Lizard has been recorded within the region and may occur within the Survey Area. Both the Acacia Shrubland over Triodia and Acacia Shrubland habitats constitute core habitat providing basking, foraging, and sheltering sites. This habitat may also be used by the species for dispersal into the surrounding landscape. Broadscale mapping | |

| Principle | Assessment | Outcome |
|---|---|---|
| | identified 21,451.88 ha of Acacia and Acacia over hummock grassland vegetation types within 10km of the DE. Clearing 2 ha of native vegetation constitutes 0.007% of available habitat and is unlikely to significantly impact this species.<br>**Chuditch**<br>The Chuditch inhabits areas dominated by sclerophyll forest or drier woodland, heath, and Mallee shrubland (Baker and Gynther, 2023). The species is generally highly mobile and uses bush remnants as corridors (Woinarski et al., 2012). The Chuditch is a largely nocturnal animal, feeding on a carnivorous diet of mammals, birds, lizards, and frogs. However, they have been also recorded foraging during the day during the breeding season or when cold and wet weather restricts their nocturnal movements (Baker and Gynther, 2023). Most diurnal denning sites in sclerophyll forest consist of hollow logs or earth burrows, although Quenda nests and hollow tree bases may be used (Baker and Gynther, 2023). The Chuditch was abundant prior to European settlement, and it is now largely restricted to the southwest of WA, with small numbers in the Midwest, Wheatbelt and South Coast Regions (DBCA, 2017b). The Chuditch was not recorded during the field survey, however the species has been infrequently recorded within the area and may occur. Records of this species within the Desktop Study Area may be related to the reintroduction of the species to the Francois Peron National Park area as part of Project Eden (Government of Western Australia, 2011; Johnson and Morris, 2011). Both Acacia Shrubland and Acacia Shrubland over Triodia habitats constitute supporting habitat for Chuditch because of their value for foraging and dispersal. Broadscale mapping identified 21,451.88 ha of Acacia and Acacia over hummock grassland vegetation types within 10km of the DE. Clearing 2 ha of native vegetation constitutes 0.007% of available habitat and is unlikely to significantly impact this species.<br>Overall, the fauna values of the DE are highly represented on a local and regional scale (SLR, 2025) and clearing of up to2 ha of fauna habitat is not considered significant for any specific species. The Project is therefore unlikely to be at variance with this principle. | |
| (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora. | SLR (2025) undertook a detailed assessment for flora and vegetation in March 2025. The survey timing (March) is appropriate for the Northern botanical province (January to March). No flora species listed under the EPBC Act or BC Act were recorded during the survey. SLR (2025) undertook a likelihood of occurrence assessment post-field survey and concluded that no Threatened flora were considered likely to occur within the Survey Area.<br>Native vegetation necessary for the continued existence of rare flora is not considered to occur within the Survey Area. The proposed clearing of native vegetation for the Project is therefore not considered to be at variance with this principle. | Unlikely to be at variance. |
| (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community. | The survey by SLR (2025) did not record any threatened ecological communities listed under the EPBC Act, BC Act or by DBCA, nor were any considered likely to occur.<br>Therefore, the proposed clearing of native vegetation for the Project is not considered to be at variance with this principle. | Unlikely to be at variance. |
| (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area | The two vegetation associations within the DE have more than 95% pre-European extent remaining. The DE is not considered to be within an area that has been extensively cleared. This vegetation forms part of a large continuous tract of habitat and has a high degree of habitat connectively with surrounding vegetation, which has similar or better condition vegetation. The vegetation type identified during the survey is not confined to the Survey Area and is considered well represented in the local and regional area. | Unlikely to be at variance. |

| Principle | Assessment | Outcome |
|---|---|---|
| that has been extensively cleared. | Therefore, it is considered that the native vegetation proposed to be cleared for the Project is not significant as a remnant of native vegetation within an area that has been extensively cleared. | |
| (f) Native vegetation should not be cleared if it is growing in or in association with a watercourse or wetland. | There are no wetland features overlapping the DE.<br>No significant or nationally important wetlands, rivers or watercourses were identified, and no RAMSAR-listed wetland ecosystems or communities were found in the survey area.<br>The nearest hydrographic feature to the Survey Area is the Little Lagoon, a non-perennial lake, located 500 m northwest of the Survey Area.<br>There will be no clearing of native vegetation associated with a watercourse or wetland and no indirect impacts are expected from the Project. The proposed clearing of native vegetation for the Project is not considered to be at variance with this principle. | Unlikely to be at variance. |
| (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation. | The DE contains soils which may be susceptible to erosion. The Project will incorporate standard construction management measures to reduce the risk of soil erosion as a result of ground disturbance and clearing (Appendix A). Any dust produced during construction will also be managed through the implementation of a EMP. Given the small area to be cleared, it is not likely that the clearing will cause appreciable land degradation. Based on the above, the proposed clearing of native vegetation for the Project is not considered to be at variance with this principle. | Unlikely to be at variance. |
| (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area. | There are no conservation areas overlapping the DE. Three conservation areas are within 1.5 km of the Development Envelope. No impacts to conservation areas are anticipated in association with the Project.<br>No off-site impacts are anticipated as a result of the proposed clearing of native vegetation within the DE. It is noted that weed management weeds will be implemented to ensure that weeds are not spread as a result of clearing activities (Appendix A). The proposed clearing is not expected to impact any adjacent conservation areas. | Unlikely to be at variance. |
| (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water. | No RIWI Act Rivers overlap the DE (GoWA, 2025). The DE does not overlap a mapped Public Drinking Water Source Areas (PDWSA) (GoWA, 2026). Denham North Water Reserve (P1) is the closest PDWSA and is located approximately 750 m from the DE. Standard mitigation measures are outlined in the EMP and no additional impacts are expected to the water reserve. There are no wetland features overlapping the DE. No significant or nationally important wetlands, rivers or watercourses were identified, and no RAMSAR-listed wetland ecosystems or communities were found in the survey area.<br>The DE does not overlap a mapped Public Drinking Water Source Areas (PDWSA) (GoWA, 2026). Denham North Water Reserve (P1) is the closest PDWSA and is located approximately 750 m from the DE. Standard mitigation measures are outlined in the EMP and no additional impacts are expected to the water reserve.<br>The DE overlaps the RIWI Act Gascoyne Groundwater Area. Depth to groundwater is recorded as 21m (Horizon Power, 2020). Geotechnical investigations by Horizon Power for the existing solar farm indicate groundwater between 15 and 25m.<br>Water required for construction activities (e.g., dust suppression) is expected to be sourced via trucking in water from local or regional sources, or temporary groundwater bores licenced by DWER. | Unlikely to be at variance. |

| Principle | Assessment | Outcome |
|---|---|---|
| | Potential impacts to surface water quality from erosion, sedimentation or hydrocarbons are unlikely. Clearing within the DE is unlikely to cause deterioration in the quality of surface or underground water, therefore the Project is unlikely to be at variance to this principle. | |
| (j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the intensity of flooding. | No impacts to flood risk are expected as a result of the proposed clearing. Therefore, the proposed clearing of native vegetation for the Project is not considered to be at variance with this principle. | Unlikely to be at variance. |

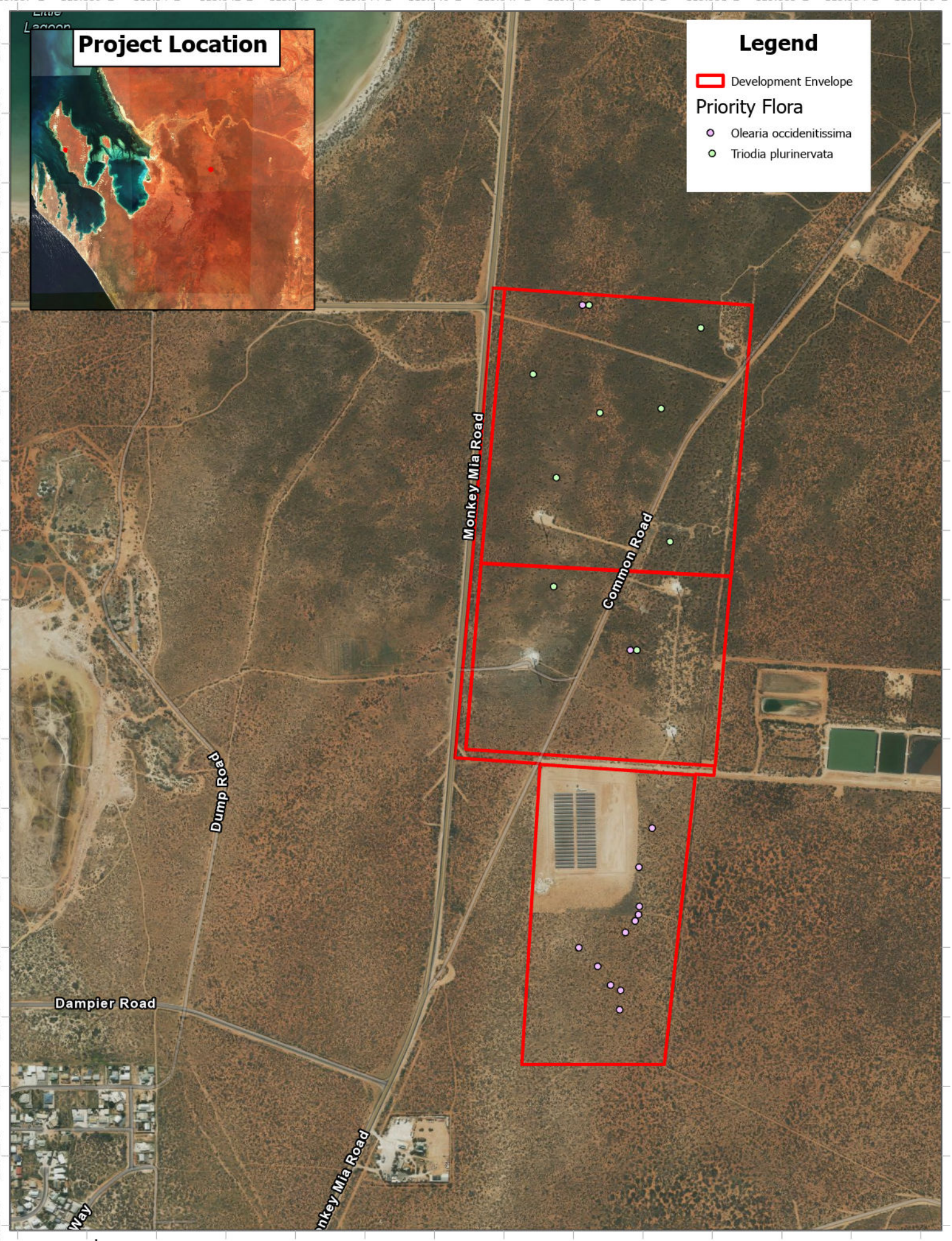



Figure 2 | Constraints Map

N

0 50 100 200 300 Meters

Scale: 1:10,437

HORIZON POWER

# 9 Other matters

## 9.1 Land Planning

The Project will be considered Public Works and is expected to be exempt from development approval under Section 6 of the *Planning and Development Act 2005*, however, due regard is required with respect to:

- The purpose and intent of any planning scheme that has effect in the locality where, and at the time when, the right is exercised;
- The orderly and proper planning, and the preservation of the amenity, of that locality at that time; and
- Any advice provided by the responsible authority in the course of the consultation required.

Consultation with the Shire of Shark Bay is ongoing.

## 9.2 Other Approvals

In considering a clearing matter under section 51O of the *Environmental Protection Act 1986* (EP Act), the Department of Water and Environmental Regulation (DWER) CEO shall have regard to any planning instrument and other relevant matters when making decisions as to clearing permits. 'Other matters' are not defined in the *Environmental Protection Act 1986* (EP Act), and consequently are any matters the CEO considers relevant. Other matters are generally environmental issues not directly within the scope of the clearing principles, but within the object and principles of the Act. Other approvals that may apply to this Project are detailed Table 6. Land access is detailed in Section 2.3.

*Table 6 Other approvals*

| Other approvals | Assessment |
|---|---|
| Referral to Environmental Protection Authority | Due to the small scale of the Project in a remote location, and replacement of existing turbined with like-for-like units, it is considered that all environmental impacts can be managed under Part V of the EP Act and referral to the EPA is not considered necessary. |
| Referral to Department of Climate Change, Energy, the Environment and Water (DCCEEW) | *Threatened flora, fauna and ecological communities*<br>A search of the DCCEEW PMST identified 48 Threatened fauna species within 20 km of the DE. Habitat for Malleefowl, Bilby, Western Spiny-tailed Skink and Chuditch is present in the DE. No TECs were recorded in the DE or surrounds. Habitat for Threatened fauna is widespread within a 10 km radius of the DE.<br>Overall, the fauna values of the DE are highly represented on a local and regional scale (GHD, 2024) and clearing of fauna habitat for the Project is not considered significant for biodiversity of any specific species. Given the replacement with like for like turbines in the same locations and number as existing, significant impacts to aerial fauna is not expected. The proposed clearing is small, within an area of extensive available habitat and therefore proposed works are considered unlikely to trigger a significant impact under the Significant Impact 1.1 Guidelines (DoE, 2013). Referral to DCCEEW is not considered to be required.<br>*Migratory fauna*<br>A search of the DCCEEW PMST identified 57 Migratory species within 20 km of the DE, 29 of which are known to occur. Migratory species have a wide-ranging habitats, and no significant habitat for Migratory species is likely to be removed by the project. Given the replacement with like for like turbines in the same locations and number as existing, significant impacts to aerial fauna is not expected. Referral to DCCEEW is not considered to be required.<br>*National and World heritage*<br>There are no National Heritage Area or World Heritage Areas mapped as overlapping the DE (DCCEEW, 2026). The Shark Bay World and National heritage site is located adjacent to the DE. No impacts to the heritage site is expected to result from the works.<br>*Wetlands of international importance*<br>No Ramsar Wetlands overlap the DE and none are expected to be impacted by the Project.<br>Based on the above, the Project is unlikely to result in a significant impact to Matters of National Environmental Significance (MNES). |
| Works Approval or Licence under EP Act | No works approvals or licences are expected to be required. If any works approvals or licences are needed for construction, these will be sourced by the construction contractor. |

| Other approvals | Assessment |
|---|---|
| Groundwater or surface water licence under the *Rights in Water and Irrigation Act 1914* | Horizon Power is permitted to access water under Section 42 and 49 of the *Electricity Operator (Powers) Act 1979*. Any licences required for construction water will be acquired by the construction contractor. |
| Notice of Intent to Clear system under the *Soil and Land Conservation Act 1945* | Not Applicable. |
| State and municipal heritage | There are no known municipal or State heritage sites within or adjacent to the DE (GoWA, 2025). The Project is not expected to impact municipal or State heritage. |
| Native title | The DE is located within the external boundaries of the Malgana Part A Determination (WCD2018/012, WAD6236/1998), which holds that native title exists within parts of the determination area. The Registered Native Title Body Corporate is Malgana Aboriginal Corporation RNTBC.<br>The DE is located on land where native title has been determined not to exist. |
| Aboriginal Sites of Significance under the *Aboriginal Heritage Act 1972* | A search of the Aboriginal Cultural Heritage Inquiry System (ACHIS) shows that the DE does not intersect any registered, lodged or historic Aboriginal Heritage sites.<br>Horizon Power had undertaken an Aboriginal heritage survey over part of the DE previously for another project, and is currently in negotiations with Malgana Aboriginal Corporation for a new Heritage Protection Agreement to facilitate further Aboriginal heritage surveys as required.<br>Horizon Power has an external Aboriginal Heritage Management Policy, that details our commitment to *avoid impacting on Aboriginal Cultural Heritage whenever and wherever possible*.<br>A Heritage Protection Plan will be developed based on the Heritage Protection Agreement with Malgana (once negotiated), as well as the outcomes of any Aboriginal heritage surveys.<br>As appropriate, management measures will be implemented during activities. |

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*RIWI Act, Rivers (DWER-036)*

*RIWI Act Surface Water and Irrigation District (DWER-037)*

*DBCA Legislated Lands and Waters (DBCA-011)*

*Soil Landscape Mapping – Systems (DPIRD-064)*

*Heritage Council WA - State Register (DPLH-006)*

*Soil Landscape Mapping - Best Available (DPIRD-027)*

*Pre-European Vegetation (DPIRD-006)*

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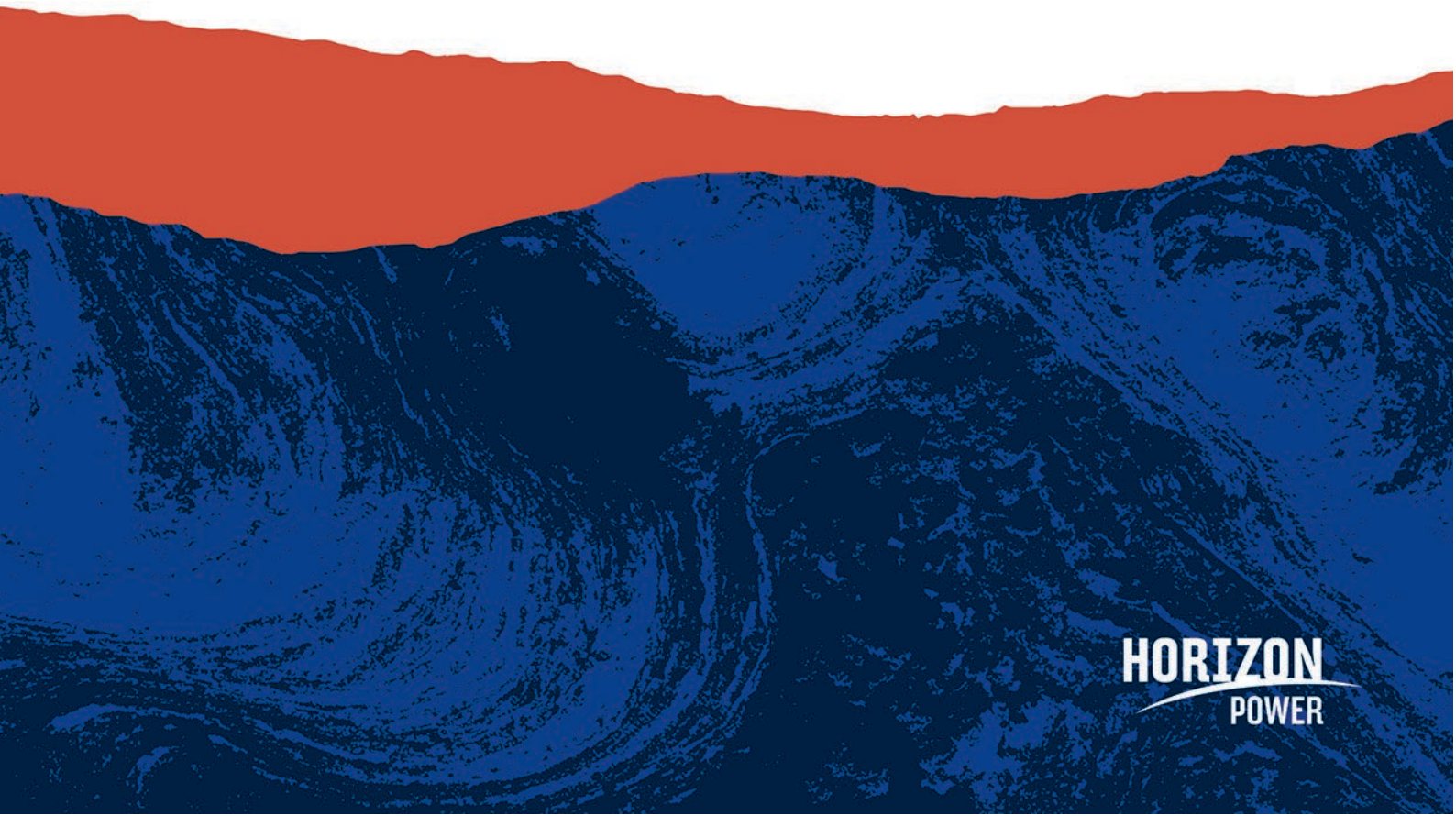
# Appendix A: Environmental Management Plan

PROTECTED

# Denham Power Project

## Environmental Management Plan

March 2026



# Contents

# 1 Introduction

## 1.1 Project Context and Scope

Horizon Power is a Western Australian (WA) Government Trading Enterprise (GTE) and the state's regional and remote energy utility. Horizon Power operates under the *Electricity Corporations Act 2005* and is governed by a Board of Directors accountable to the Minister for Energy. Horizon Power is an experienced asset manager undertaking active management of vast electricity networks and generation assets across WA, utilising mature and robust operational, health and safety, and environmental systems.

Horizon Power is committed to supporting the State's target of achieving an 80% reduction in emissions through a low-cost and capital-efficient approach. A key strategy in meeting this ambition is renewable energy sources and the reduced reliance on delivery of fossil fuels to remote locations.

In Denham, the existing wind turbines play a critical role in delivering renewable energy to the town, making it essential that they remain operational or are replaced with a suitable alternative. The solar farm and wind turbines are located within Horizon Power's existing lease areas on Lot 3004 on Deposited Plan 54344, Lot 12 on Deposited Plan 419413, and Lot 344 on Deposited Plan 193644, approximately 1 km north/north-east of the Denham townsite. Four wind turbines and a small solar farm currently occupy the site.

The four wind turbines supplying power to Denham are now in deteriorated condition and approaching the end of their operational life, with only two turbines remaining in service. Wind turbines typically have a design life of around 20 years, and the units in Denham are nearing this threshold, as summarised in Table 1.

*Table 1 Turbine model, output and installation year*

| Wind Turbine No | Model | Rated Power | Installation Year |
|---|---|---|---|
| **WEC 1** | Enercon E30 50m HH | 230 kW | 1997 |
| **WEC 2** | Enercon E30 50m HH | 230 kW | 1997 |
| **WEC 3** | Enercon E30 50m HH | 230 kW | 1999 |
| **WEC 4** | Enercon E33 50m HH | 330 kW | 2007 |

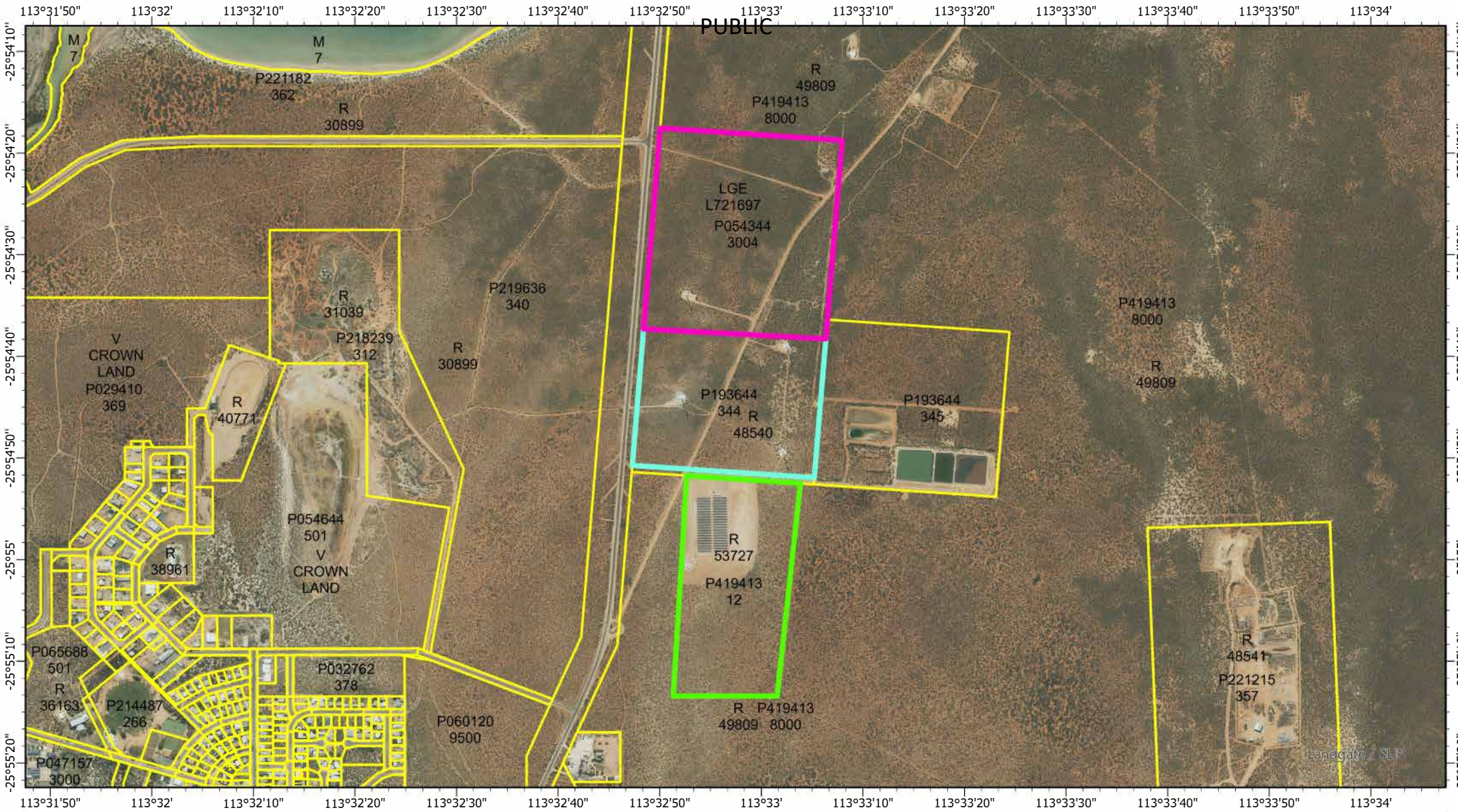
Without replacement, the decommissioning of these turbines would increase emissions and raise the cost of energy supply, as Denham's electricity system would become more reliant on diesel generation.

By replacing the aging turbines with more efficient and modern renewable energy solutions, Horizon Power can maintain—and potentially enhance—the renewable energy contribution to the Denham power system, while ensuring ongoing reliability and system optimisation. The replacement turbines will not exceed the existing height range of 60 to 66 metres, ensuring that the new units remain consistent with the current visual and environmental profile of the site. A small expansion of the existing solar farm is also being considered and will be undertaken utilising CPS 8823/2. This upgrade will enable continued delivery of reliable, low-emission renewable energy to the Denham community while supporting Western Australia's long-term decarbonisation objectives.

The Project will require the clearing of no more than 2 ha within a Development Envelope (DE) 73.9 ha in size (Figure 1).

## 1.2 Scope and purpose

This Environmental Management Plan (EMP) has been developed to outline environmental management measures to be implemented by Horizon Power and its contractors during the construction of the Project. This includes, but is not limited to, measures to manage dust, erosion and spread of weeds during clearing of native vegetation.




Map | Figure 1 - Denham Development Envelope

For reference only.
Last updated by H181908 on 10/2/2026

N

0 0.13 0.25 0.5
Kilometres

**Lot 3004 P054344**

Lease: L721697
Lessee: Regional Power Corporation
Lessor: State of Western Australia

**Lot 344 DP193644**

Crown Reserve: 48540
Managed by: Regional Power Corporation
Purpose: Aerogeneration and Access

**Lot 12 DP54344**

Crown Reserve: 53727
Managed by: Regional Power Corporation
Purpose: Power Generation Site and Associated Infrastructure

HORIZON POWER

# 2 Description of the Activity

## 2.1 Activity Overview

The final design and footprint required for the Project, is guided by the location of existing assets, but will be determined once all due diligence activities are completed, and will also depend on the engineering, environmental and social constraints of the site. The Project will clear no more than 2 ha of native vegetation within the DE via mechanical removal and minor driving on vegetation. Clearing is required for the following:

- Two to four wind turbines
- Cable trenches
- Winch sites
- Battery Energy Storage System of 550 kW
- Widening of access roads if required.

Clearing of native vegetation within the DE will only be undertaken as specified by the Clearing Permit, including the extent and method of clearing to be undertaken and any specific management measures outlined in the permit conditions.

# 3 Avoidance Measures

The Project has been designed to avoid and minimise native vegetation clearing wherever practicable, consistent with the requirements of the *Environmental Protection Act 1986* and the WA Native Vegetation Clearing Principles.

A key avoidance measure was the decision to locate all works within the existing Denham Wind Farm asset lease area, utilising previously cleared or disturbed sections wherever possible. This includes:

- Existing turbine hardstands and cleared turbine footprints,
- Existing access tracks,
- Existing underground and overhead connection infrastructure, and
- Disturbed areas associated with historic site establishment and maintenance.

By containing works within these areas, the Project avoids the need for additional footprint expansion and significantly reduces impacts to native vegetation, fauna habitat, and surface-soil integrity.

# 4 Management Measures

The management measures listed in Table 2 will be implemented during construction of this Project. Clearing of native vegetation will occur as per the conditions in the Native Vegetation Clearing Permit (NVCP) issued by the Department of Water and Environmental Regulation (DWER).

*Table 2 Management Measures to be Implemented During Construction*

| Aspect | Management Measure |
|---|---|
| Extent of Clearing | – No clearing is permitted outside the DE (Figure 1).<br>– Clearing will be minimised through the preferential use of existing hardstands, access tracks, and disturbed areas. Replacement turbines will be placed at the same locations as existing. Existing access tracks will be utilised.<br>– Systematic work sequencing will be adopted to avoid unnecessary multiple passes, reducing disturbance and compaction of access tracks and adjacent areas.<br>– Clearing boundaries will be clearly demarcated using flagging tape, GPS delineation or similar methods prior to commencement.<br>– All proposed clearing areas will be verified by an Environmental Specialist or Site Supervisor prior to commencement to ensure total clearing does not exceed 2 ha for the Project. |

| Aspect | Management Measure |
|---|---|
| | – A pre-clearing environmental toolbox meeting will be conducted to ensure all personnel understand obligations under the clearing permit and are aware of environmental sensitivities. |
| Flora and vegetation | – Areas of degraded, sparsely vegetated and/or previously cleared areas will be preferentially selected for the location of laydown areas.<br>– Trees and tall shrubs will be avoided, where possible.<br>– Driving over native vegetation will be restricted to the minimum necessary to undertake the works.<br>– No clearing of Priority flora will be undertaken.<br>– Vehicle and machinery movements will be restricted to existing access tracks or designated routes and will not encroach into adjacent native vegetation. |
| Fauna | – Clearing of native vegetation will be undertaken in a slow, progressive manner in one direction to allow fauna to move away from the clearing area.<br>– Construction personnel will not touch, feed or otherwise directly interact with fauna.<br>– Vehicle and machinery speeds within the DE will be restricted to reduce the likelihood of fauna strike. |
| Weeds | – Identified Weeds of National Significance within the DE will be treated using an approved herbicide in accordance with relevant guidelines, and eradication of these infestations will be undertaken as part of the works<br>– The Contractor will ensure that no weed-affected soil, mulch, fill or other material is brought into the DE.<br>– Vehicles and machinery will arrive clean, and weed control will be undertaken at the site post-construction as required.<br>– Movement of vehicles and machinery will be restricted to the DE or established tracks and roads. |
| Erosion and soils | – The site is also known to be sensitive to wind erosion, design considerations will include measures to prevent wind erosion.<br>– Standard construction measures regarding erosion and sediment control will be implemented during construction works.<br>– Designated access tracks will be applied to prevent additional disturbance.<br>– Erosion and surface-water management controls will be incorporated into the project design to reduce the potential for soil loss and prevent erosion. |
| Dust | – Standard construction dust control and mitigation measures will be implemented during clearing. This may include the use of a water trucks, or similar.<br>– Ground disturbance and clearing of vegetation will be restricted during high winds if dust cannot be adequately controlled.<br>– Reduced vehicle speed limits will be applied in areas of unconsolidated soil.<br>– Use of defined routes for machinery/ vehicles travelling on unsealed roads. |
| Noise | – The contractor will comply with the Environmental Protection (Noise) Regulations 1997Complaints regarding noise will be recorded and investigated by Horizon Power and the Contractor. |
| Waste | – Rubbish will be disposed of in appropriate containers and all waste will be removed from the site. |
| Contamination | – An unexpected finds protocol will be implemented by the Contractor.<br>– Works are to immediately cease if hydrocarbons affected soil are seen or smelled, or if suspected asbestos containing materials are uncovered during works.<br>– Works may recommence once the contamination status has been determined and the contamination is addressed. |
| Hydrocarbons and chemicals | – Hydrocarbons and chemicals will be appropriately managed on site to prevent spills, including maintaining equipment in good working order in accordance with manufacturers specifications.<br>– No refuelling will be undertaken within 50 m of a waterway, drain or drainage line.<br>– Hydrocarbons will be appropriately stored at least 50 m away from drainage lines and stored in an appropriate bunded container.<br>– Refuelling will be undertaken on hardstand or using catch trays only. Uncontrolled refuelling is not permitted. |

| Aspect | Management Measure |
|---|---|
| | – Chemicals will be appropriately stored. |