

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 10479/1

File Number: DWERVT14337

Duration of Permit: From 4 September 2024 to 4 September 2026

PERMIT HOLDER

Regional Power Corporation, trading as Horizon Power

LAND ON WHICH CLEARING IS TO BE DONE

Lot 555 on Deposited Plan 74894, Onslow

AUTHORISED ACTIVITY

The permit holder must not clear more than 8.8 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

CONDITIONS

1. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- (a) avoid the clearing of *native vegetation*;
- (b) minimise the amount of *native vegetation* to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

2. Weed management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared:
- (b) ensure that no known *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Directional clearing

The permit holder must:

- (a) conduct clearing under this permit in one direction, from south to north, towards adjacent *native vegetation*; and
- (b) allow reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the clearing activity.

4. Flora management – Priority Flora

Prior to undertaking any clearing under this permit, the permit holder must ensure that the boundaries of the area to be cleared are identified and demarcated using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA20), expressing the geographical coordinates in Eastings and Northings or decimal degrees.

5. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Spec	cifications
1.	In relation to the authorised clearing	(a)	the species composition, structure, and density of the cleared area;
	activities generally		the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings;
		(c)	the date that the area was cleared;
		(d)	the size of the area cleared (in hectares); and
			actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 1; and
		(f)	actions taken to minimise the risk of the introduction and spread of <i>weeds</i> in accordance with condition 2.
		(g)	actions taken to conduct directional clearing in accordance with condition 3
		(h)	actions taken to demarcate the clearing boundary in accordance with condition 4.

6. Reporting

The permit holder must provide to the *CEO* the records required under condition 5 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

Table 2: Definitions

Term	Definition			
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .			
clearing	has the meaning given under section 3(1) of the EP Act.			
condition	a condition to which this clearing permit is subject under s.51H of the EP Act.			
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.			
EP Act	Environmental Protection Act 1986 (WA)			
fill	means material used to increase the ground level, or to fill a depression			
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.			
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.			
priority flora	means those plant taxa described as priority flora classes 1, 2, 3, or 4 in the Department of Biodiversity, Conservation and Attractions Threatened and Priority Flora List for Western Australia (as amended)			
weeds	means any plant — (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.			

END OF CONDITIONS

Ryan Mincham

MANAGER

NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

12 August 2024

SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

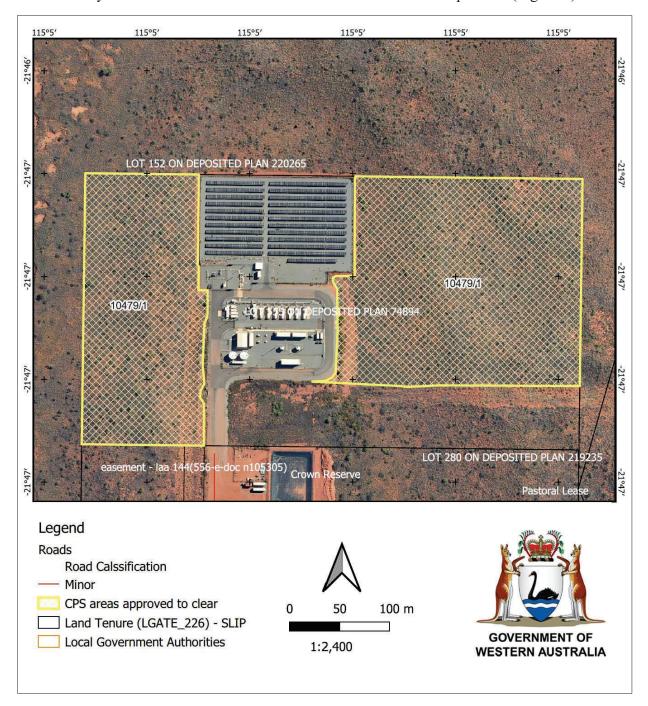


Figure 1: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number: CPS 10479/1

Permit type: Area permit

Applicant name: Regional Power Corporation, trading as Horizon Power

Application received: 11 January 2024

Application area: 8.8 hectares of native vegetation

Purpose of clearing: Expansion of existing hybrid power station

Method of clearing: Mechanical

Property: Lot 555 on Deposited Plan 74894

Location (LGA area/s): Shire of Ashburton

Localities (suburb/s): Onslow

1.2. Description of clearing activities

The vegetation proposed to be cleared is distributed across two separate areas (see Figure 1, Section 1.5). It is proposed that up to 8.8 hectares of native vegetation will be cleared for a solar farm and associated infrastructure, which will expand on the existing hybrid power station. The application area is located at the corner of Warrirda Road and Onslow Road in the Ashburton North Strategic Industrial Area (ANSIA).

The clearing of vegetation will be permanent and maintained to allow for safe and effective operation and maintenance of Horizon Powers assets.

1.3. Decision on application

Decision: Granted

Decision date: 12 August 2024

Decision area: 8.8 hectares of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 14 days and no submissions were received.

In making this decision, the Delegated Officer had regard for:

- the site characteristics (see Appendix A),
- relevant datasets (see Appendix F.1),
- the findings of biological surveys (see Appendix D and E),
- advice received from the Department of Biodiversity Conservation and Attractions (DBCA, 2022 and DBCA, 2022a).
- the clearing principles set out in Schedule 5 of the EP Act (see Appendix B),

relevant planning instruments and any other matters considered relevant to the assessment (see Section 3).

The assessment identified that the proposed clearing will result in:

- the loss of six individual Eremophila forrestii subsp. viridis (Priority 3) plants,
- the loss of 31 individual *Triumfetta echinata* (Priority 3) plants,
- potential indirect impacts to *Abutilon* sp. *Pritzelianum* (S. van Leeuwen 5095) (Priority 3), *Eremophila forrestii subsp. viridis* and *Triumfetta echinata* recorded outside of, but within 50 metres of the application area,
- the loss of native vegetation that is suitable habitat for migratory waterbirds (Oriental Pratincole and Oriental Plovers), the Lakeland Downs mouse (P4), Peregrine falcon (OS), Maryan's keeled slider (P1), Grey Falcon (VU), and potential direct impacts to fauna utilising the application area during the time of clearing,
- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values for conservation significant flora and fauna, and riparian communities.

After consideration of the available information, as well as the applicant's avoidance, minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that the proposed clearing is unlikely to have long-term adverse impacts on the persistence of priority flora at the regional, and species level. The proposed clearing is also unlikely to result in significant adverse impacts to significant habitat for fauna.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid and minimise measures to reduce the impacts of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds
- undertake slow, progressive one directional clearing from south to north to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity
- clearly demarcate the defined clearing area to avoid impacts to *Abutilon* sp. *Pritzelianum* (S. van Leeuwen 5095) and to ensure the clearing of *Eremophila forrestii* subsp. *viridis* and *Triumfetta echinata* is limited to the individual plants recorded within the application area during the local flora survey.

1.5. Site map

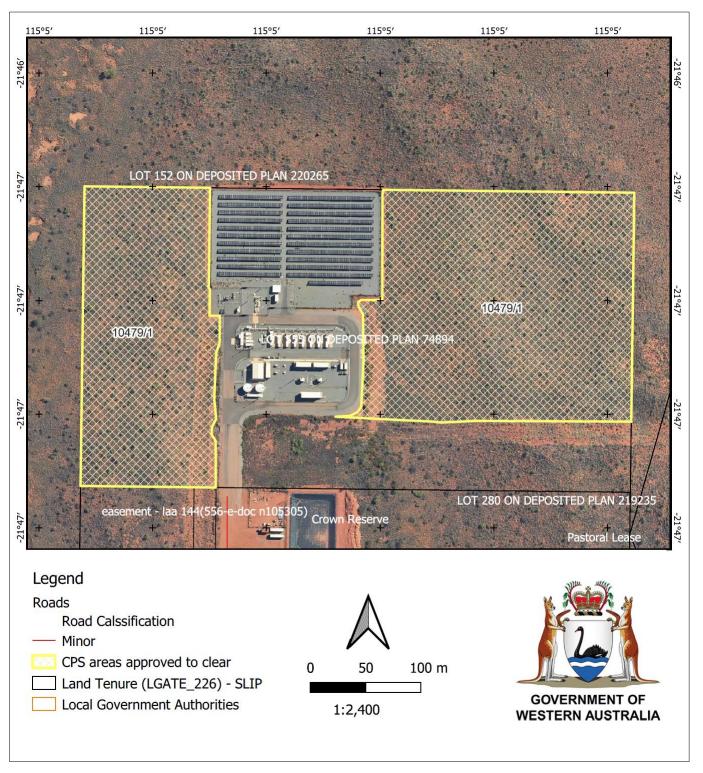


Figure 1 Map of the application area

The areas cross-hatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection* (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- Biodiversity Conservation Act 2016 (WA) (BC Act)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)
- Rights in Water and Irrigation Act 1914 (RIWI Act)

The key guidance documents which inform this assessment are:

- A guide to the assessment of applications to clear native vegetation (DER, December 2013)
- Procedure: Native vegetation clearing permits (DWER, October 2019)
- Technical guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance Terrestrial Fauna Surveys for Environmental Impact Assessment (EPA, 2016)

3 Detailed assessment of application

3.1. Avoidance, minimise and mitigation measures

Supporting documentation was submitted by the applicant which outlines the 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.

The following measures to manage the impacts of the proposed clearing will be undertaken (Horizon Power, 2024a):

Aspect
Extent of Clearing

Management Measures

- No clearing is permitted outside the application area (Figure 1).
- Clearing will be minimised where possible through placement of site investigations, access tracks, battery, laydown and construction areas and infrastructure in existing cleared locations where possible.
- The clearing locations are to be demarcated prior to clearing activities.
- Clearing areas are to be checked by an Environmental Specialist or Site Supervisor prior to clearing to ensure no more than 8.8 hectares of clearing is undertaken for the Project
- A pre-clearing toolbox will be held so all staff are aware of their responsibilities under the clearing permit.
- Driving on vegetation will be kept to the minimum required to perform the works.

Flora and vegetation

- Areas that are degraded, sparsely vegetated and/or previously cleared will be used preferentially for site investigations, access tracks, laydown areas and infrastructure.
- Where possible, pre-existing access tracks will be used and vehicles and machinery will exit the application area along the same route used for access
- 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.
- Construction personnel will not touch, feed or otherwise directly interact with fauna.
- Vehicle and machinery speeds within the application area will be restricted to reduce the likelihood of fauna strike.
- The Contractor will ensure that no weed-affected soil, mulch, fill or other material is brought into the application area.

Fauna

Weeds

Erosion and soils

- All vehicles and machinery will arrive clean on site.
- Movement of vehicles and machinery will be restricted to the application area or established tracks and roads.
- Standard construction measures regarding erosion and sediment control will be implemented during construction works.
- Potential flood risk mitigation measures may include conducting a hydrology study, equipment, design above the 1 in 100-year flood levels and including flood collars on poles if required. These mitigation measures are subject to further investigations.
- Designated access tracks will be applied to prevent additional disturbance.
- Works will be undertaken systematically to minimise re-run and compaction of access tracks.
- Standard construction dust control and mitigation measures will be implemented during clearing. This may include the use of a water trucks, or similar.
- Ground disturbance and clearing of vegetation will be restricted during high winds if dust cannot be adequately controlled.
- Reduced vehicle speed limits will be applied in areas of unconsolidated soil.
- Use of defined routes for machinery/ vehicles travelling on unsealed roads.
- The contractor will comply with the Environmental Protection (Noise) Regulations 1997
- Complaints regarding noise will be recorded and investigated by Horizon Power.
- Rubbish will be disposed of in appropriate containers and all waste will be removed from the site.

In considering the above, the Delegated Officer was satisfied that the applicant has undertaken reasonable measures to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix B) identified that the impacts of the proposed clearing present a risk to biological values (fauna and flora). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1.Biological values (flora) - Clearing Principles (a) and (c)

<u>Assessment</u>

A review of the site characteristics (see Appendix A) and the Targeted flora survey (VLA, 2023) identified three Priority flora species within the survey area, two of which are located within the eastern portion of the application area. Their locations are shown on Figure 4 of Appendix E:

- Triumfetta echinata (Priority 3), 31 individuals in the application area (45 individuals in the broader survey footprint), recorded in the GsSsTs/Te vegetation type (see Appendix A for vegetation type descriptions)
- Eremophila forrestii subsp viridis (Priority 3), 6 individuals in the application area (comprising 3 x 2 locations), recorded in the GsSsTs/Te vegetation type
- Abutilon subsp Pritzelianum (S. van Leeuwen 5095) (Priority 3), 4 individuals recorded approximately 50 metres south of the application area in the AsTe*Cc vegetation type

Eremophila forrestii subsp viridis

Eremophila forrestii subsp. *viridis* is a multi-branched shrub with pink-cream flowers occurring in August and occurs in red to brown sandy soils, usually in Acacia shrubland over hummock grassland of Triodia spp. (Western Australian Herbarium, 1998-). *Eremophila forrestii* subsp. *viridis* is known from six locations in Western Australia over a range

Noise

Dust

Waste

of 1,000 kilometres east-west by 700 kilometres north-south from Talandji to Gibson Desert North and is also known from one record in the Northern Territory and one record in South Australia (DBCA, 2022).

Eremophila forrestii subsp viridis shrubs in the survey area were all sterile and as such a positive determination could not be provided by the WA Herbarium. However, WA Herbarium agreed the sterile parts of the collected specimen did match that of *E. forrestii* subsp viridis and the non-sterile parts of the plant match the feature which distinguishes it from *E. forrestii* subsp hastieana, therefore VLA reported these plants as the P3 subspecies (VLA, 2023).

DWER's preliminary assessment (including a review of historical surveys within the surrounding area) and previous advice received from DBCA (DBCA, 2022; DBCA, 2022a) indicate that *Eremophila forrestii* subsp. *viridis* is not restricted to the application area and is likely locally common within extensive unsurveyed areas of nearby suitable habitat (based on broad scale vegetation mapping). Historical surveys associated with other infrastructure projects in the vicinity of the application area have identified an estimated 8,552 individuals of this species. Therefore, the proposed loss of six individuals of this species is not likely to impact significantly on this species at a local or regional scale, or on the conservation status of the species.

DWER has considered the cumulative impact risk to this species at a regional scale resulting from nearby infrastructure developments both proposed and approved under Part IV and Part V of the EP Act. These include the Ashburton Infrastructure Project, Onslow Seawater Desalination Plant, Wheatstone Development – Gas Processing, Export Facilities and Infrastructure and Clearing Permits CPS 9495/1, CPS 9534/1, CPS 9545/1, CPS 9550/1 and CPS 9818/1. While the cumulative impacts to *Eremophila forrestii* subsp. *viridis* are not at a level that would warrant a decision to allow no further clearing of this species for this application, the department considers that impacts to this species must be appropriately managed through conditions on the clearing permit, and the commitments set out in the applicants CEMP. These measures include the demarcation of the defined clearing area to ensure that the clearing of this species is limited to the six individual plants recorded within the defined clearing boundary during the flora surveys, dust management and weed management measures.

Abutilon sp Pritzelianum (S. van Leeuwen 5095)

Abutilon subsp. *Pritzelianum* (S. van Leeuwen 5095) is a perennial shrub growing to 1.5 metres tall with yellow-orange flowers in August. This species occurs on sand plains with orange-brown sandy loam substrate and is distributed over the southern Carnarvon bioregion through to Port Hedland in the Pilbara (Western Australian Herbarium, 1998).

The flora survey (VLA, 2023) reported four *Abutilon* sp *Pritzelianum* (S. van Leeuwen 5095) individuals in the low semi-disturbed swale area with *Acacia stellaticeps* midway along the southern boundary of the survey area. The identified individuals of this species were located 50 metres south of the application area (VLA, 20223). The applicant's CEMP includes measures, which together with the weed management conditions of the clearing permit, are expected to adequately manage indirect impacts to the recorded individuals of this species.

Triumfetta echinata

Triumfetta echinata is a prostrate shrub that flowers in August and occurs in red to brown sandy soils, typically in dune systems of Triodia hummock grassland (Western Australian Herbarium, 1998-). *Triumfetta echinata* is known from three locations (includes 7 records) in Western Australia over a range of around 40 kilometres east-west by 40 kilometres north-south from Peedamulla to Talandji (DBCA, 2022).

The flora survey report (VLA, 2023) indicates *Triumfetta echinata* is known to be relatively widespread and abundant in the Onslow dune area. This notion is supported by the findings of a flora survey undertaken by Spectrum Ecology (2021) within adjacent areas, in support of clearing permit CPS 9534/1, which identified 101 individuals of this species (of which 100 were retained). The proposed clearing represents the loss of 31 of 139 individuals (22%) that have recently been recorded in the vicinity of the application area, and is unlikely to significantly impact *Triumfetta echinata* at the regional or species level.

From a cumulative impact perspective, it appears that this species has not been as heavily impacted at a regional level from surrounding infrastructure projects. This is noting that two of the eight projects referenced above under the described impacts to *Eremophila forrestii* subsp. *viridis* have recorded low level impacts to *Triumfetta echinata* species (including CPS 9534/1). The department will continue to consider cumulative impacts to this species in future assessments given the number of infrastructure projects in the local area.

Several individuals of this species occur within 30 metres of the application area, and there is a risk of indirect impacts to the continued existence of these individuals. The applicant's CEMP includes the following measures, which together with the conditions of the clearing permit, are expected to adequately manage indirect impacts to the remaining individuals of this species:

- demarcation of the defined clearing area to ensure that the clearing of this species is limited to the individual plants recorded within the defined clearing boundary.
- restricting clearing of vegetation and ground disturbance during high wind and reducing vehicle speed limits in areas of unconsolidated soils. Defined routes will be utilised for machinery and vehicles travelling on unsealed roads.
- ensuring that no weed-affected soil, mulch, fill or other material is brought into the application area and the movement of vehicles will be restricted to the application area or using the established tracks and roads.

Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on Priority 3 flora are unlikely to be significant at a regional or species level, and do not constitute a significant residual impact.

It is considered that the impacts of the proposed clearing on Priority 3 flora can be managed through permit conditions and through implementing appropriate construction and design measures such as dust and weed control measures.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- flora management Priority flora, which requires demarcation of the clearing area prior to clearing to ensure the avoidance of *Abutilon* sp. Pritzelianum, and that the clearing of *Eremophila forrestii* subsp. *viridis* and *Triumfetta echinata* is limited to the individual plants recorded within the defined clearing boundary during the local flora surveys, and
- weed control, which ensures protocols are put in place to limit the introduction and transportation of weed affected material.

3.2.2. Biological values (fauna) - Clearing Principles (a) and (b)

Assessment

A GHD (2023) fauna survey reported one broad fauna habitat type within the application area, consisting of 'undulating orange sand dune system, dominated by *Acacia* shrubs over *Triodia* hummock grass, sparsely occupied by the occasional *Eucalyptus camaldulensis* on lower elevations' (see Figure 2). There are few moderate to large fallen logs suitable as shelter due to the low tree density, however, dense shrub foliage and localised ground leaf litter provide refugia habitat. Sandy open ground and dunes provide habitat for a high diversity of arid adapted terrestrial fauna including a range of small vertebrates, especially fossorial reptiles, and burrowing mammals. The tall shrubs provide suitable foraging and nesting habitat for a range of shrubland birds, particularly insectivorous and nectar-feeding birds, terrestrial reptiles, and mammals species.

No BC Act or EPBC Act listed Threatened fauna or DBCA Priority listed fauna were recorded during the fauna survey (GHD, 2023). The survey included targeted searches for northern quoll activity (*Dasyurus hallucatus*) (EN) (no suitable habitat identified), Lakeland Downs mouse (*Leggadina lakedownensis*) (P4) and lined soil-crevice skink (*Notoscincus butleri*).

Noting the findings of the fauna survey (GHD, 2023) and the habitat preferences of the conservation significant fauna species recorded in the local area (see Appendix A), the application area was considered to contain suitable habitat for migratory waterbirds (34 species), the Lakeland Downs mouse, the Grey Falcon, Maryan's keeled slider and the Peregrine Falcon.

Migratory waterbirds

It is considered that 34 species of migratory waterbird protected under International Agreements may inhabit the 'Triodia and Acacia over Orange Sand Dune System' habitat within the application area for foraging or roosting, or as transient visitors during migration (Commonwealth of Australia, 2015). Two migratory waterbird species, Oriental pratincole (Glareola maldivarum) and Oriental plover (Charadrius veredus), are considered likely to occur within the

application area due to potentially suitable foraging and/or breeding habitat in the survey area and close proximity of previous records.

The Oriental Pratincole usually inhabits open plains, floodplains or short grassland, often with extensive bare areas. They often occur near terrestrial wetlands, such as billabongs, lakes or creeks, and artificial wetlands such as reservoirs, saltworks and sewage farms, especially around the margins. The species also occurs along the coast, inhabiting beaches, mudflats and islands, or around coastal lagoons. The species does not breed in Australia. It breeds in colonies on open grassland plains (often recently burnt) or stubble fields, or at the edge of wetlands such as lakes, rivers or rice fields, including on grassy islands or reclaimed land (DoE, 2024a). The fauna survey (GDA, 2023) identified that the habitat within the survey area is likely to support this species at least on an intermittent basis.

Oriental Plovers usually inhabit flat, open, semi-arid or arid grasslands, where the grass is short and sparse, and interspersed with hard, bare ground, such as claypans, dry paddocks, playing fields, lawns and cattle camps (DoE, 2024). They usually breed in arid elevated areas on extensive open upland flats, mountain ridges or plateaux where sparse vegetation such as moss, lichen or short grass is interspersed with patches of bare rock (Wiersma 1996).

While these migratory waterbird species may occur within the application area, DWER's preliminary assessment has identified that none of the waterbird species are expected to breed within the application area, therefore the proposed clearing is unlikely to impact nest sites or significant breeding habitat for these species.

Lakeland Downs mouse

The Lakeland Downs Mouse occupies a diverse range of habitats from the monsoon tropical coast to semiarid climates, including spinifex and tussock grasslands, samphire and sedgelands, Acacia shrublands, tropical Eucalyptus and Melaleuca woodlands and stony ranges. Most habitats, however, are seasonally inundated on red or white sandy-clay soils. They are nocturnal, largely solitary, and individuals spend the day in simple, single chambered burrows (Van Dyck and Strahan 2008). The fauna survey identified that the Sand Plains habitat within the application area may provide suitable substrate and vegetation for the Lakeland Downs mouse, however, no individuals, burrows or other evidence of this species were recorded within the survey area (GHD, 2023).

The Sand Plains habitat within the application area is well-represented in the immediate vicinity of the survey area and similar habitat is also likely to be well-represented in the extensively vegetated local area. Given the extent of suitable habitat in the local area, that no evidence of individuals was observed during the fauna survey (GHD, 2023), and that the species has a scattered distribution on the mainland across northern Australia and on offshore islands, the application area is not likely to comprise significant habitat for this species. Noting that abundant suitable habitat for this species is located adjacent to the application area, it is expected that any individuals present at the time of clearing will be able to disperse into adjacent suitable habitat ahead of the clearing, given the application of slow, progressive, one directional clearing.

Peregrine falcon

The peregrine falcon typically nests on rocky ledges in tall, vertical cliff faces and gorges, or in tall trees associated with drainage lines, and can hunt in a range of habitat types including timbered watercourses, riverine environments, wetlands, plains, open woodlands, and pylons and spires of buildings (Australian Museum, 2021). This species is known to occur locally and has the potential to utilise the application area given it contains suitable foraging habitat for this species. However, the application area does not contain suitable nesting habitat for the peregrine falcon. Given the extent of suitable foraging habitat for this species in the local area, which is extensive, and that the peregrine falcon is a highly mobile species with a large range that does not rely on specialist niche habitats, the application area is unlikely to contain significant habitat for this species and the proposed clearing will not significantly reduce foraging habitat for this species in the local area.

Conclusion

Based on the above assessment, the application area is not likely to represent significant habitat for any conservation significant fauna species or be critical for the continuation of these species. However, it is acknowledged that the proposed clearing has the potential to result in direct impacts to migratory waterbirds and the Lakeland Downs mouse, if individuals are present at the time of clearing. For the reasons set out above, it is considered that direct impacts to fauna species can be managed to be environmentally acceptable through the application of slow, directional clearing and that the proposed clearing does not constitute a significant residual impact.

Conditions

To address the above impacts, the following management measure will be required as a condition on the clearing permit:

 directional clearing, which ensures slow, progressive, directional clearing is undertaken from south to north to allow fauna to move into adjacent vegetation ahead of the clearing activity to minimise impact to individuals.

3.3. Relevant planning instruments and other matters

The Shire of Ashburton advised DWER that it did not have any objections to the proposed clearing (Shire of Ashburton, 2024).

The application area falls within the Pilbara Groundwater and Pilbara Surface Water areas, as proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act). The Department's Northwest Region (NWR) has advised that there are no significant water resource features in the vicinity of this proposal and the area to be cleared is relatively small. As a result, the risk of subsequent water quality impacts downstream is minimal. Additionally noting the applicant does not require groundwater or surface water for clearing or for subsequent use of the land or any other purposes, no water licences are required (DWER, 2024).

No Aboriginal Sites of Significance have been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process. The applicant has commenced engagement with the Buurabalayji Thlanyji Aboriginal Corporation regarding this project and will be undertaking and Aboriginal Cultural Heritage Survey prior to works (Horizon Power, 2024a). The applicants CEMP notes that should Aboriginal Cultural Heritage materials be uncovered during construction works, works will stop immediately within 20 metres of the find, until the incident is investigated and resolved.

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details							
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is located at the corner of Warrirda Road and Onslow Road in the Ashburton North Strategic Industrial Area (ANSIA).							
	Spatial data indicates the local area (50-kilometre radius from the centre of the area proposed to be cleared) retains approximately 97.69 per cent of the original native vegetation cover.							
Ecological linkage	The application area does not intersect any formally mapped ecological linkages. While the vegetation may provide some connectivity, noting the extensively vegetated region and adjacent expansive tracts of connected vegetation, it is not considered likely to contribute significantly to vegetation connectivity or linkage values in the local area.							
	coastal and sub pungens humme This habitat type barriers, display	ey described the vegetation as 'part of a la coastal plains, consisting of grass savann ock grass, and <i>Acacia translucens</i> forming e occurs throughout the surrounding area, is a high degree of habitat connectivity with ar or better condition vegetation'.	a dominated by <i>Triodia</i> the dwarf shrub steppe. and, due to limited natural					
Conservation areas	The application	area does not intersect any conservation a	areas.					
Vegetation description	Vegetation description The Vegetation survey undertaken by Vicki Long & Associates (VLA) in 2023 in the vegetation within the proposed clearing area consists of four vegetation type outlined in Table 1. Representative photos and the full survey descriptions and maps are available in Appendix E.							
	VLA Code	tion units within the clearing footprint for C Vegetation Description and Condition	Micro Habitat					
	GsTzgTe	Grevillea stenobotrya tall open shrubland over Trichodesma zeylanicum var. grandiflorum, Crotalaria cunninghamii shrubland over Triodia epactia hummock grassland with patchy *Cenchrus ciliaris grassland. (Plate 1)						
	GsSsTs/Te	Grevillea stenobotrya tall open shrubland with Trichodesma zeylanicum var. grandiflorum, Crotalaria cunninghamii, over Scaevola sericophylla low shrubland with Grevillea eriostachya over Triodia schinzii hummock grassland with Triodia epactia. Scattered to open *Cenchrus ciliaris associated with disturbed areas. (Plate 2)	Irregular red sandy swale with broken hummocky red sand dunes, eastern side of survey area.					

Characteristic	Details	
	AsTe*Cc	Acacia stellaticeps shrubland over Triodia epactia/*Cenchrus ciliaris mixed grassland, very patchy Triodia schinzii. Scattered Grevillea stenobotyra tall shrubs. (Plate 3)
	*Cc	*Cenchrus ciliaris tussock grassland. Disturbed sand swale. (Plate 4)
	Beard 6	t with the Beard mapped vegetation type: 70, which is described as Hummock grassland with scattered shrubs or <i>Triodia</i> spp. <i>Acacia</i> spp., <i>Grevillea</i> spp. <i>Eucalyptus</i> spp (Shepherd et
Vegetation condition	Very gord since Expression since Ex	ch vegetation condition within the application area is (VLA ,2023): hectares ectares
Landform and Climate	The landform is	mapped as depositional surfaces comprising mainly of dune fields; -
	north-south and claypans, swam Climate data from 36.5 °C in Janua 13.1 °C in July to	swales with no organised drainage, dunes trending approximately frequently becoming reticulate, narrow swales with minor area of os and depressions, relief up to 15 metres. In this station indicates the mean maximum temperature ranges from ry to 25.6 °C in July. The mean minimum temperature ranges from 25.1 °C in February. The mean annual rainfall is 306.4 mm, with 6.9 rain days a year (GHD, 2023).
Soil description	The soil is mapp 201Du Dune Syste 201On Onslo Syste	Dune fields supporting soft spinifex and minor hard spinifex grasslands. Undulating sandplains, dunes and level clay plains
Land degradation risk		units of the Onslow System and Dune System are susceptible to wind ring is not expected to cause appreciable land degradation.

Characteristic	Details
Waterbodies	The desktop assessment and aerial imagery indicate that no watercourses or wetlands transect the area proposed to be cleared.
Hydrogeography	The application area falls within the Pilbara Groundwater and Pilbara Surface Water areas, as proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act).
Flora	DWER's desktop assessment identified a total of six priority flora species in the local area. Two of these species, <i>Triumfetta echinata</i> and <i>Eremophila forrestii subsp. Viridis</i> , both Priority 3 (P3), were recorded in the application area during the VLA (2023) survey.
Ecological communities	The vegetation survey did not identify any threatened or priority ecological communities within the application area (Horizon Power, 2024a). The closest conservation significant ecological community is approximately 50 kilometres east of the application area.
Fauna	The desktop assessment identified that a total of 50 conservation significant fauna species have been recorded in the local area, including 13 threatened fauna species, four priority fauna species, and 34 specially protected fauna species (DBCA, 2007).

A.2. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
IBRA bioregion*					
Carnarvon	8,382,890.35	8,360,801.46	99.74	1,020,434.08	12.17
Vegetation complex					
Beard vegetation association 670	147,808.61	147,792.06	99.99	17,242.88	11.67
Local area					
50 km radius	514,455.06	502,576.98	97.69	-	-

^{*}Government of Western Australia (2019a)

A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix F.1), and biological survey information (see Appendix E), impacts to the following conservation significant flora required further consideration.

Species name	Conserva tion status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	known records	Identified during survey (VLA, 2023)? [Y, N, N/A]
Abutilon sp. Onslow (F. Smith s.n. 10/9/61)	P3	Υ	Υ	N	8.6	16	N
Abutilon sp. Pritzelianum (S. van Leeuwen 5095)	P3	Υ	Υ	Υ	0.57	4	Y (outside application area)
Eremophila forrestii subsp. viridis	P3	Υ	Y	Υ	2.71	3	Υ
Triumfetta echinata	P3	Υ	Υ	Υ	0	6	Υ

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

A.4. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix F.1), the distribution and extent of existing records, and biological survey information (GHD, 2023), the following conservation significant fauna required further consideration. Further consideration has also been given to 34 species of migratory waterbird not listed below, these have been discussed under section 3.2.2.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	closest	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]	Identified during survey (GHD, 2023)
Lakeland Downs mouse	P4	Υ	Υ	4.4	57	Υ	N
Peregrine falcon	OS	Υ	Υ	2.58	5	Υ	N

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?				
Environmental value: biological values						
Principle (a): "Native vegetation should not be cleared if it comprises a high level of biodiversity."	May be at variance	Yes Refer to Section				
Assessment:		3.2.1 and 3.2.2,				
The area proposed to be cleared comprises of one broad fauna habitat type 'Triodia and Acacia over Orange Sand Dune System habitat which is part of a larger continuous area of coastal and sub-coastal plains, consisting of grass savanna dominated by <i>Triodia pungens</i> hummock grass, and <i>Acacia translucens</i> forming the dwarf shrub steppe'. This habitat type is well represented in the local area and region but provides suitable habitat for conservation significant fauna. The application area also includes two priority 3 flora species.		above.				
Principle (b): "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."	May be at variance	Yes Refer to Section				
Assessment:		3.2.2				
A total of 18 fauna species were recorded during the GHD (2023) survey, including eight birds, four reptiles and six mammals. Three of these species are introduced (house mouse, cat and rabbit).						
No BC Act or EPBC Act listed Threatened fauna or Priority listed fauna by DBCA were recorded during the GHD (2023) survey. However, the area proposed to be cleared contains suitable habitat for conservation significant fauna.						
Principle (c): "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."	Not likely to be at	Yes				
Assessment:	variance	Refer to Section 3.2.1				
The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act.						
Principle (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."	Not likely to be at variance	No				
Assessment:						
The area proposed to be cleared does not contain vegetation that is representative of a threatened ecological community.						
Environmental value: significant remnant vegetation and conservation areas						
<u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	Not likely to be at	No				
Assessment:	variance					
The extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia. The						

Assessment against the clearing principles	Variance level	Is further consideration required?
vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.		
Principle (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."	Not likely to be at variance	No
Assessment:		
Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.		
Environmental value: land and water resources		•
Principle (f): "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."	Not likely to be at	No
Assessment:	variance	
Given no watercourses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.		
Principle (g): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."	Not likely to be at	No
Assessment:	variance	
Topographic maps indicate the degree of slope is small and not likely to have a large amount of soil or water movement that would cause or exacerbate erosion. There may be risk of flooding at the application area. Standard construction management measures incorporated to reduce the risk of soil erosion and sedimentation as a result of ground disturbance and clearing.		
The western portion of the application area overlaps the Onslow land system, which is characterised by undulating sandplains, dunes and level clay plains supporting soft spinifex grasslands and minor tussock grasslands. The sandplains and dunes and are considered likely to produce dust during construction, which will be managed through the implementation of a CEMP.		
Noting the management actions such as dust control measures and flood risk mitigation measures to be implemented through the Construction Environmental Management Plan (CEMP), the proposed clearing is not likely to have an appreciable impact on land degradation.		
<u>Principle (i):</u> "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."	Not likely to be at variance	No
Assessment:		
Given no watercourses, wetlands or Public Drinking Water Sources Areas are recorded within the application area, the proposed clearing is unlikely to impact surface or groundwater quality.		
Principle (j): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."	Not likely to be at variance	No
Assessment:		
Noting the extent of the proposed clearing in the context of the extensively vegetated area, and the management measures in the CEMP, the proposed		

Assessment against the clearing principles	Variance level	Is further consideration required?
clearing is not considered likely to cause, or exacerbate, the incidence of flooding.		

Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Basic And Targeted Fauna survey information excerpts

The applicant commissioned GHD to undertake a basic and targeted fauna survey of the proposed site (the survey area). The post-wet single season basic and targeted fauna survey was undertaken from 31 May – 2 June 2023.



Figure 2: Fauna habitat types within the survey area

Appendix E. Vegetation and Flora Survey information excerpts

The applicant commissioned Vicki Long & Associates (VLA) to conduct a reconnaissance survey in July 2023, targeting priority flora over the extended area around the existing facility on Lot 555 (the survey area). This survey was to verify vegetation types previously mapped there, locate any species of conservation significance and to update any taxa nomenclature which may have changed since GHD's targeted flora survey 2017. GHD conducted its flora survey in January 2017 for the adjacent clearing permit CPS 7253/1. The area had previously been surveyed as part of the larger Wheatstone Project by Biota in 2013 (Biota 2013) and it was on this that GHD based their vegetation types.



Figure 3: Vegetation types identified during the survey.

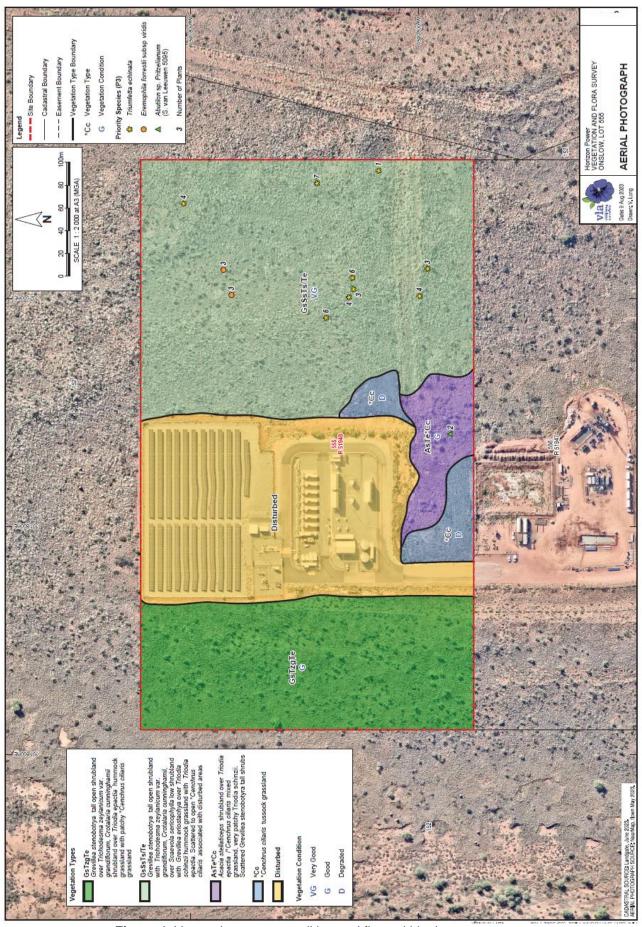


Figure 4: Vegetation types, condition and flora within the survey area.

Appendix F. Sources of information

F.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography Inland Waters Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality Flood Risk (DPIRD-007)
- Soil Landscape Land Quality Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping Best Available
- Soil Landscape Mapping Systems

Restricted GIS Databases used:

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

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