



Environmental Management Plan

Winu Project (DRAFT)

June 2026

[C-WN-0720-H-PLN-00001](#)

Winu Services Pty Ltd

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Disclaimer and Limitation

This Environmental Management Plan has been prepared by Eco Logical Australia (ELA) on behalf of Winu Services Pty Ltd (WSPL) (the Proponent) for the Rio Tinto Winu Project.

Neither the document nor its content may be referred to without the express approval of Rio Tinto unless the document has been submitted by Rio Tinto to the relevant government regulator for assessment in connection with the Winu Project.

Document Status					
Rev	Author	Reviewer/s	Date	Approved for Issue	
				To Whom	Date
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Draft v7 (Rev 1)	ELA	G. Doherty	Nov 2025	EPA	18 Nov 2025
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Recognition

Rio Tinto recognises the Nyangumarta and Martu Peoples' intrinsic and continuous connection to Country, culture and community of the land and waters on which the Winu Project is located.

Rio Tinto respects and honours the rights and obligations Nyangumarta and Martu People have to Ngurra by caring for Country and is committed to developing the Winu Project in a genuine partnership that is open, honest, culturally appropriate and benefits all.

Through meaningful consultation, co-development and co-management, combining both traditional knowledge and Western science, throughout the development, operation and closure of the Winu Project, Rio Tinto will aim to minimise impact to Country, intangible and tangible culture and support the economic, social aspirations and opportunities for current and future generations of Nyangumarta People and Martu People.

EXECUTIVE SUMMARY

This Environmental Management Plan (EMP) has been prepared by Winu Services Pty Ltd (WSPL) (the Proponent) for the Rio Tinto Winu Project (the Project). This EMP is prepared consistent with the Environmental Protection Authority's (EPAs) '*Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans*' (EPA 2024a) and the Commonwealth '*Environmental Management Plan Guidelines*' (DCCEEW 2024). This EMP is expected to meet future conditions and will be subject to approval before implementation by the WA Environmental Protection Authority (EPA) and the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW).

It is acknowledged that the Nyangumarta People and Martu People have indicated concerns regarding impacts to the Greater Bilby and associated habitat and the introduction of weeds to the Development Envelope. This EMP has been structured to address these concerns individually (where necessary).

This EMP specifically addresses the following key environmental factors associated with the Project:

- Terrestrial fauna –Matters of National Environmental Significance (MNES) and State-listed fauna species and their critical and supporting habitat (habitat defined as per Biota 2025b), including:
 - Greater Bilby/Mankarr (*Macrotis lagotis*) (VU – BC Act and EPBC Act)
 - Northern Quoll (*Dasyurus hallucatus*) (EN – BC Act and EPBC Act)
 - Black-footed Rock-wallaby/Black-flanked Rock-wallaby/Moororong (*Petrogale lateralis*) (EN – BC Act and EPBC Act)
 - Grey Falcon (*Falco hypoleucos*) (VU – BC Act and EPBC Act)
 - Night Parrot (*Pezoporus occidentalis*) (CR – BC Act and EN – EPBC Act)
 - Princess Parrot (*Polytelis alexandrae*) (VU – EPBC Act, P4 DBCA-listed)
 - Peregrine Falcon (*Falco peregrinus*) (Other specially protected species – BC Act)
 - Six DBCA-listed Priority species (one P2, five P4 DBCA-listed)
 - Migratory birds (various).
- Flora and Vegetation, including:
 - Native vegetation in Excellent condition and habitat for Priority flora
 - Eleven (11) DBCA-listed Priority flora species (one P1, one P2 and nine P3) plus two species of taxonomic interest *Amphipogon caricinus* (hairy lamina) (J. Paterson WB41138) and *Portulaca* sp. Nyangumarta (B. Eckermann BE Opp 01)
 - Groundwater dependent vegetation
 - Weeds (invasive plant species).
- Subterranean Fauna (Stygofauna)

Management of the Terrestrial Environmental Quality environmental factor is addressed in the Acid Mine Drainage (AMD) Management Plan. It includes management for (but is not limited to) the Waste Rock Landform (WRL) and Tailing Storage Facility (TSF). Management of the Inland Waters environmental factor is addressed in the AMD Management Plan and Surface Water Management Plan.

Summary Table 1 presents the environmental objectives for each environmental factor to be met through the implementation of this EMP, as well as the environmental criteria and management targets to measure the achievement of the associated environmental outcomes and objectives.

Summary Table 1: Environmental Criteria and Targets to Measure Achievement of Environmental Outcomes and Objectives

Proposal title		Winu Project – Environmental Management Plan
Proponent		Winu Services Pty Ltd
Purpose of this EMP		This EMP provides management for environmental values with the potential to be impacted by the Winu Project. This EMP fulfils the anticipated requirements of: <u>Commonwealth:</u> • <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). <u>Western Australia State:</u> • <i>Biodiversity Conservation Act 2016</i> (BC Act) • <i>Environmental Protection Act 1986</i> (EP Act) • <i>Mining Act 1978</i> • <i>Mining Rehabilitation Fund Act 2012</i> • <i>Planning and Development Act 1950</i>.
Terrestrial Fauna		
EPA Objective: <i>To protect terrestrial fauna so that biological diversity and ecological integrity are maintained</i>		
Greater Bilby (<i>Macrotis lagotis</i>)		
Outcome-based provisions	Environmental outcome	• The Proponent shall ensure no more than 4,498 ha of direct disturbance (clearing) to Greater Bilby habitat as a result of the Project.
	Trigger criteria	• Reduction in vegetation extent greater than 4,048 ha (within 10% of the threshold criterion) as a result of direct disturbance (clearing).
	Threshold criteria	• Reduction in Greater Bilby habitat equal to or greater than 4,498 ha as a result of direct disturbance (clearing) • Ground disturbance or clearing occurs outside the approved clearing boundary.
Objective-based provisions	Environmental objective	• Minimise impacts to the Greater Bilby as a result of the Project.
	Management targets	• Minimise loss or degradation of Greater Bilby habitat within the Development Envelope.
Grey Falcon (<i>Falco hypoleucos</i>) and Migratory Birds		
Objective-based provisions	Environmental objective	• Minimise direct and indirect impacts to Grey Falcon and Migratory birds resulting from wind turbines associated with the project.
	Management target	• Minimise Grey Falcon and Migratory bird interactions with wind turbines.
Conservation Significant Fauna (including MNES species)		

Objective-based provisions	Environmental objective	Minimise impacts to conservation significant fauna species within the Development Envelope as a result of the Project.
	Management target	- Minimise loss or degradation of fauna habitat - Reduce indirect impacts on retained vegetation and fauna habitat resulting from dust - Minimise impacts to fauna habitat as a result of increased light and noise - Minimise the spread of weeds in Management Area 1 - Minimise the entry and spread of weeds in Management Area 2 - Prevent the introduction and spread of weed species within Management Area 3 - Ensure a prompt response to all weeds identified within Management Area 2 & 3 - Control any introduction of feral fauna to minimise impacts on fauna populations and habitat within Management Area 3. - Minimise any change in bushfire frequency or intensity as a result of the Project - Minimise fauna interaction with vehicles or machinery - Minimise loss of or serious injury to conservation significant fauna as a result of entrapment.
Flora and Vegetation EPA Objective: <i>To protect flora and vegetation so that biological diversity and ecological integrity are maintained</i>		
Priority Flora		
Objective-based provisions	Environmental objective	Minimise direct and indirect impacts to Priority flora species as a result of the Project.
	Management target	- Minimise loss (clearing) of Priority flora individuals and habitats - Minimise the spread of weeds in Management Area 1 - Minimise the entry and spread of weeds in Management Area 2 - Prevent the introduction and spread of weed species within Management Area 3 - Ensure a prompt response to all weeds identified within Management Area 2 & 3 - Control any introduction of feral fauna to minimise impacts on fauna populations and habitat within Management Area 3 - No visible vegetation health impact on retained vegetation and Priority flora habitats resulting from dust generated by the Proposal - Minimise any change in bushfire frequency or intensity as a result of the Project.
Proposed construction date		MM/YYYY
EMP required pre-construction?		Y/N

Declaration of accuracy

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Name:**Signed:****Designation:****Date:****Corporate endorsement**

I hereby certify that to the best of my knowledge, the provisions within this Winu Project Environmental Management Plan are true and correct.

Name:**Signed:****Designation:****Date:**

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Abbreviations/Specialised Terms

Abbreviation	Description
ACAR	Annual Compliance Assessment Report
AMD	Acid and Metalliferous Mine Drainage / Acid Mine Drainage
BC Act	<i>Biodiversity Conservation Act 2016 (WA)</i>
BWT	Below watertable
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DWER	Department of Water and Environmental Regulation
EMP	Environmental Management Plan
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EPA	Western Australian Environmental Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
ERD	Environmental Review Document
GDV	Groundwater dependent vegetation
Management level	Level of management appropriate for an environmental value, as determined by assessment described in the Rio Tinto Framework for EMPs
MIA	Mine and Infrastructure Area
MNES	Matters of National Environmental Significance
Proponent	Winu Services Pty Ltd (WSPL)
Project	Rio Tinto Winu Project
Framework for EMPs	Rio Tinto Framework for development of EMPs
RAC	Road Access Corridor
Rimfire	Rimfire Regional Borefield
SPR	A ' <i>casual pathway conceptual model</i> ' (Source, Pathway, Receptor) approach for potential impacts due to Project
TSF	Tailing Storage Facility
WRL	Waste Rock Landform

1. CONTEXT, SCOPE, AND RATIONALE

This Environmental Management Plan (EMP) has been prepared by Winu Services Pty Ltd (WSPL) (the Proponent) for the Rio Tinto Winu Project (the Project). This EMP was produced to support an assessment of the Project under the WA *Environmental Protection Act 1986* (EP Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

This EMP was developed according to the Conceptual Framework for developing Rio Tinto EMPs. This framework was originally developed for Rio Tinto's Pilbara Iron Ore Operations, but has been adopted for the Project (a copper-gold operation), given broadly similar environmental and geographic settings and as the framework provides a standardised approach to environmental management in accordance with relevant Western Australian policy and guidance, including:

- Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2024 (EPA 2024b)
- Environment Protection Authority's (EPA) Instructions on how to prepare *Environmental Protection Act 1986* Part IV Environmental Management Plans (EPA 2024a)
- EPAs Interim Guidance for Environmental outcomes and outcomes-based conditions (EPA 2021)
- Environmental Impact Assessment (Divisions 1 and 2) Procedures Manual (EPA 2024c).

This EMP addresses Commonwealth requirements described in the Environmental Management Plan Guidelines (DCCEEW 2024), as presented in Table 1 1.

This EMP is expected to meet future conditions and will be subject to approval before implementation by the WA Environmental Protection Authority (EPA) and the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW).

It is acknowledged that the Nyangumarta People and Martu People have indicated concerns regarding impacts to the Greater Bilby and habitat and the introduction of weeds to the Development Envelope. This EMP has been structured to address these concerns individually (where necessary).

The purpose of this EMP is to:

- Ensure impacts to MNES fauna species (including Greater Bilby [Mankarr] and Migratory birds) recorded or likely to occur within the Development Envelope during the construction and operation of the Project are avoided and reduced as far as possible by implementing good practice management measures
- Ensure the impacts from weeds (invasive flora species) within the Development Envelope during construction and operation of the Project are avoided and reduced as far as possible by implementing good practice management measures
- Ensure impacts to DBCA-listed Priority flora and fauna recorded within the Development Envelope during the construction and operation of the Project are avoided and reduced as far as possible by implementing good practice management measures.

1.1 Terminology

The following terminology is used throughout this document:

- **Conceptual Footprint:** Refers to the indicative direct disturbance of the Project. To provide project flexibility, this footprint is indicative only and includes key elements such as mine pit, waste rock landforms and infrastructure. The final location of key elements and infrastructure may occur outside the Conceptual Footprint but will be contained within the Development Envelope and any approval limits
- **Development Envelope:** Refers to the combined areas of the mine and infrastructure area, access road and the Rimfire Borefield (Rimfire) (refer Figure 1-2). All activities will occur within this area
- **The Project:** Includes developing a new below-water table (BWT) copper-gold deposit and associated infrastructure and activities required to access process and transport ore

- **Mine and Infrastructure Area (MIA):** Refers to the area containing the mineralised deposit and related infrastructure. This is the Winu mine site (refer Figure 1-2)
- **Road Access Corridor (RAC):** Refers to the Access Road, which encompasses the entire length of the existing Access Road from Great Northern Highway to the MIA
- **Rimfire Borefield (Rimfire):** Refers to the regional borefield located at Rimfire, which is approximately 31 km from the MIA. This includes the pipelines, infrastructure and access tracks back to the MIA
- **Management Area 1:** Refers to the section of the RAC within the Wallal Downs pastoral lease (refer to Figure 1-5)
- **Management Area 2:** Refers to the section of the RAC east of Wallal Downs pastoral lease up to the MIA (refer to Figure 1-5)
- **Management Area 3:** Refers to the MIA and Rimfire (refer Figure 1-5).

The EMP includes actions already undertaken by the Proponent, which will be continued, and further measures to be implemented. The management measures proposed will provide environmental benefits to other fauna and flora species within the Development Envelope and wider region.

Measures undertaken by the Proponent concerning proposed offsets for any significant residual impacts on MNES species will be described in separate offset strategies and plans prepared as part of the Project's environmental impact assessment and approval processes.

Table 1-1: Commonwealth Requirements within this EMP

Commonwealth Requirement	Section of this EMP
Conditions of Approval reference table	N/A (to be included in later versions as appropriate)
Project Description	Section 1.2
Objectives	Table 2-1 to Table 2-5
Roles and Responsibilities	Section 2.5
Reporting	Section 2.3
Environmental Training	Section 2.4
Potential Environmental Impacts and Risks	Section 1.3
Environmental Management Measures: A) Environmental management activities B) Performance targets C) Environmental Monitoring D) Corrective actions.	EMP Provisions (Table 2-1 to Table 2-5)
Maps and Diagrams	Figure 1-1 to 1-5
Audit and Review	Section 3

1.2 Project Description

The Proponent plans to develop a new copper-gold mine, referred to as the Project, approximately 300 km south of Broome and 320 km east of Port Hedland in the northern Pilbara region of Western Australia within both the Nyangumarta People's and Martu People's Native Title Determination Areas (Figure 1-1). The Project is located within a Development Envelope of approximately 23,649 ha. The Mine is estimated to have a life of 32 years.

The Project proposal involves developing a single open pit that extends below watertable (BWT) and associated infrastructure, including material waste and waste management infrastructure, ore processing facilities, mine dewatering infrastructure, water supply infrastructure, linear infrastructure and support facilities. Access to the mine site will be via the RAC, which extends approximately 183 km from the Great Northern Highway to the western edge of the Mine and Infrastructure Area (MIA). The development of the Project will involve vegetation clearing and works associated with establishing the

above-proposed infrastructure (Figure 1-2). This has the potential to impact ecologically sensitive features of the environment, in particular, known critical habitat for the Greater Bilby (*Macrotis lagotis*) and supporting habitat for other MNES and State and DBCA-listed fauna species, as well as several DBCA-listed Priority flora species, potential groundwater dependent vegetation and stygofauna and stygofauna habitat.

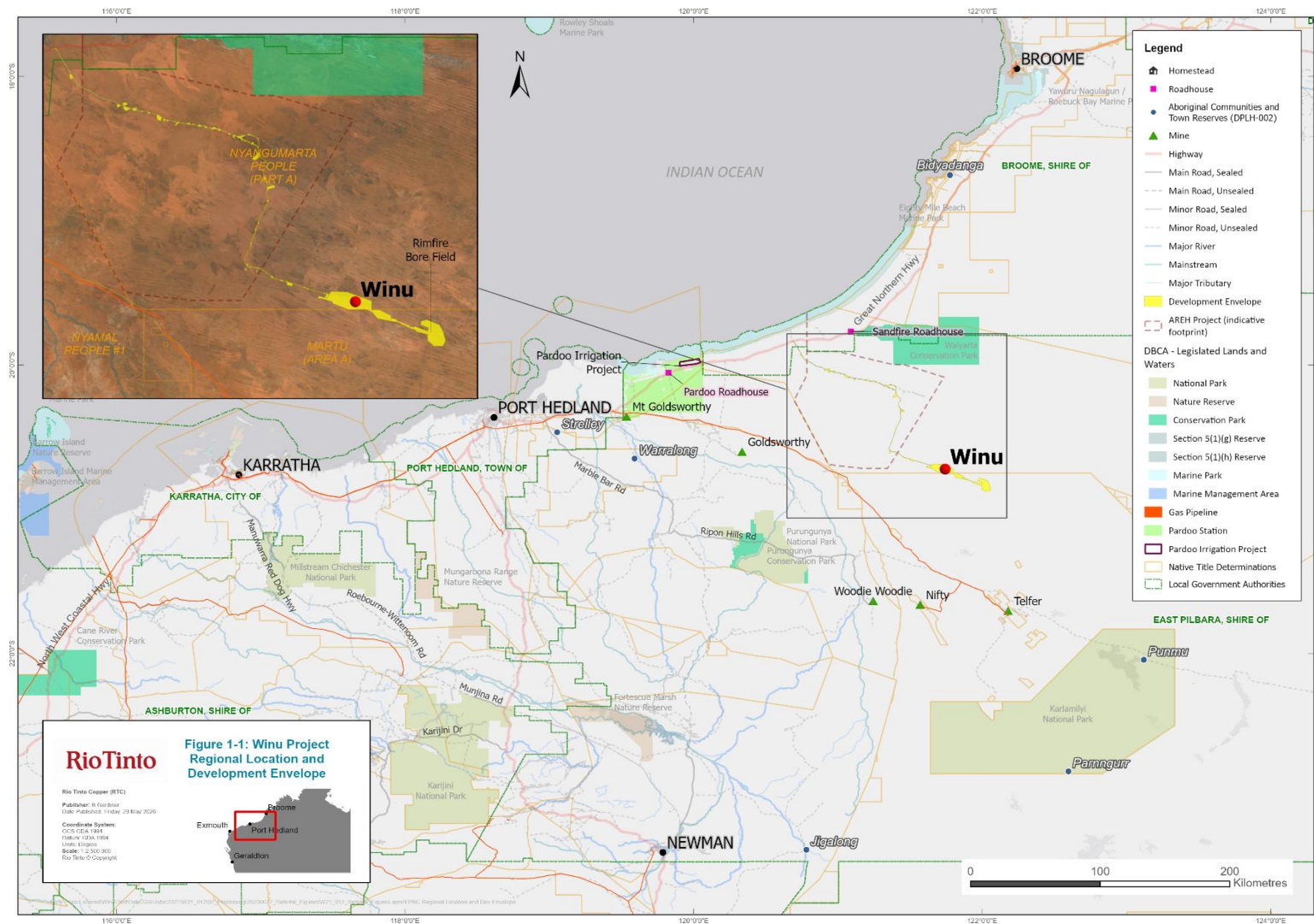


Figure 1-1: Regional Location and Development Envelope

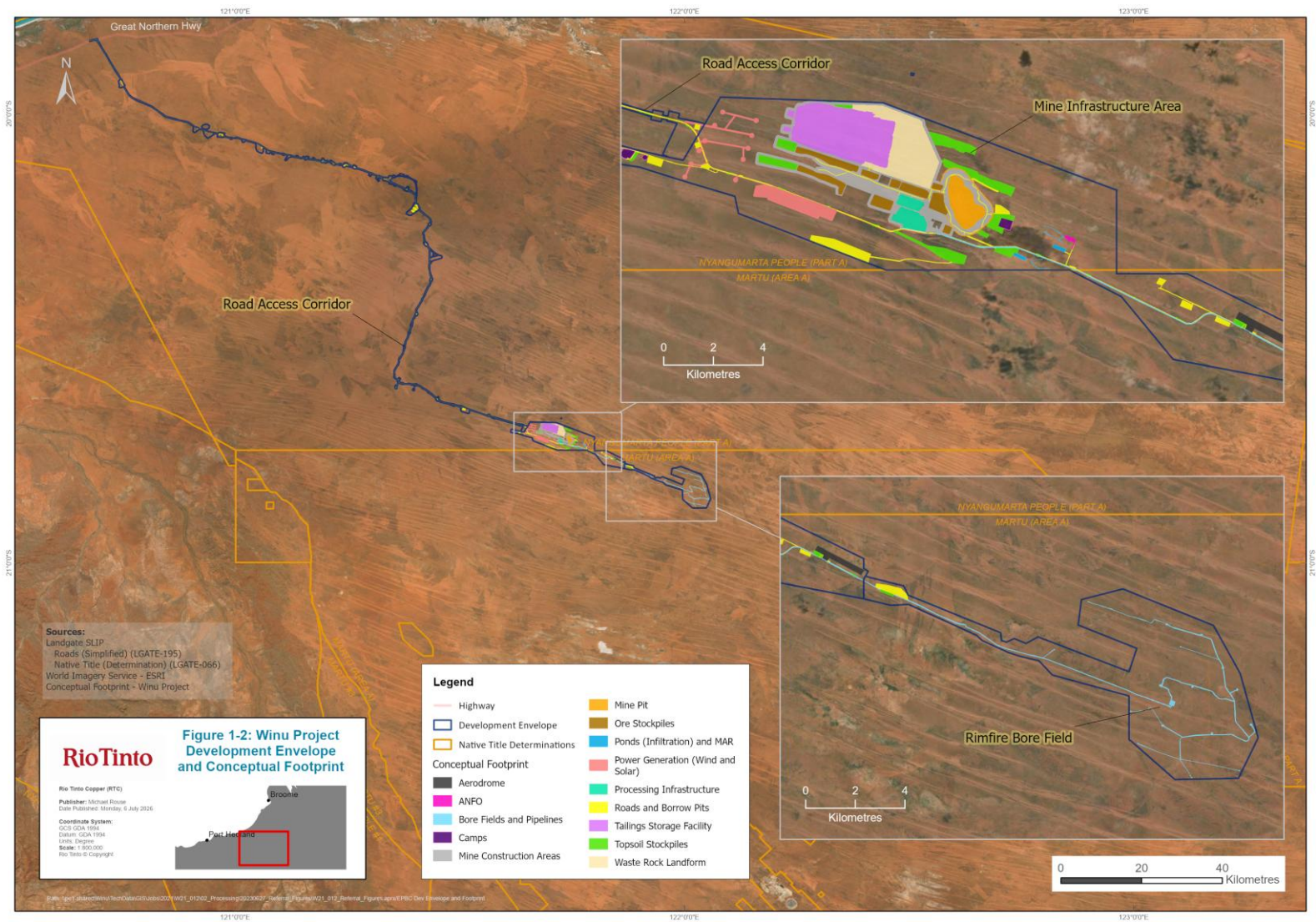


Figure 1-2: Development Envelope and Conceptual Footprint

1.3 Key Environmental Factors and Summary of Potential Impacts

The key environmental factors relevant to the Project, as identified in the Environmental Review Document (ERD) and addressed in this EMP, are described in Table 1-2. A 'causal pathway conceptual model' (Stressor, Pressure, Receptor [SPR]) approach has been used to characterise Project potential impacts.

Table 1-2: Key Environmental Factors - Associated Environmental Values and Potential Impacts

Environmental Value (Environmental Receptor)	Proposed and Potential Impacts (Stressor, Pressure, Receptor)	
	Direct (Stressor, Pressure)	Indirect (Stressor, Pressure)
Terrestrial Fauna		
Fauna habitats present with the Development Envelope (Figure 1-3): • Clayey Sand Plain with Termitaria • Ephemeral Claypan • Gravelly Lateritic Rises • Inland Sand Dunes • Shrub and Spinifex on Sandplain • Disturbed/cleared	Clearing • Land and vegetation clearing (up to 4,878 ha) will reduce fauna habitat (including critical Greater Bilby habitat)	Introduction of, or increase in abundance of, weeds (invasive flora species) and feral fauna (predation/competition) as a result of Project activities • Apart from Management Area 1, the site and surrounding area currently have a very low level of weeds. The introduction of weed species may cause changes in vegetation composition, which may affect the ability of some fauna species to use the habitat to forage or breed • An increase in the local population of predators may lead to changes in behaviour or increased mortality of fauna species. Introducing herbivorous pest species may increase competition for food or change the vegetation composition, affecting fauna species' ability to forage or breed • Mining activities may introduce or encourage and increase invasive fauna or feral predators, such as cats and foxes. This may impact Migratory birds by modifying their movement, increasing competition with introduced species, and increasing mortality rates from predation Dust as a result of Project activities • Increased dust generated by clearing, construction, traffic and mining operations may impact the quality of the fauna habitat Wildfires (unplanned events as a result of Project activity)

Environmental Value (Environmental Receptor)	Proposed and Potential Impacts (Stressor, Pressure, Receptor)	
	Direct (Stressor, Pressure)	Indirect (Stressor, Pressure)
		Project-related ignition sources could result in accidental fires. This may impact fauna habitat by burning vegetation in the area. Changes in the frequency or intensity of the fire may impact fauna habitat. Fauna species may relocate due to the loss of habitat, food or the increase of predation due to lack of shelter. Smaller fauna species may get caught in the large fires
The variety of habitat makes the area suitable for a range of MNES/State significant fauna, including (Figure 1-4): - Greater Bilby (<i>Macrotis lagotis</i>) (VU – BC Act and EPBC Act) - Northern Quoll (<i>Dasyurus hallucatus</i>) (EN – BC Act and EPBC Act) - Black-footed Rock-wallaby (<i>Petrogale lateralis lateralis</i>) (EN – BC Act and EPBC Act) - Grey Falcon (<i>Falco hypoleucos</i>) (VU – BC Act and EPBC Act) - Night Parrot (<i>Pezoporus occidentalis</i>) (CR – BC Act and EN – EPBC Act) - Princess Parrot (<i>Polytelis alexandrae</i>) (VU – EPBC Act and P4 – DBCA-listed) - Oriental Plover (<i>Charadrius veredus</i>) (MI/Marine – EPBC Act, MI - BC Act) - Oriental Pratincole (<i>Glareola maldivarum</i>) (MI/Marine – EPBC Act, MI - BC Act) - Australian (Gull-billed) Tern (<i>Gelochelidon nilotica</i>) (MI/Marine – EPBC Act, MI - BC Act) - Pacific Swift (<i>Apus pacificus</i>) (MI – EPBC Act, BC Act) - Little Curlew (<i>Numenius minutus</i>) (MI/Marine – EPBC Act, MI - BC Act) - Barn Swallow (<i>Hirundo rustica</i>) (MI/Marine – EPBC Act, MI – BC Act)	Vehicle and machinery movement - The volume of haul road and light vehicle traffic will increase during the construction and operation of the mine site. This may cause an increase in vehicle strikes at night or dusk and dawn when nocturnal fauna (i.e. Greater Bilby, Northern Quolls, Black-footed Rock-wallaby) are more active Fencing and wind turbines - Birds may become entangled in barbed-wire fences or struck by the blades of wind turbines, causing injury or death	Artificial light - An increase in light due to the construction and operation of the Project may impact nocturnal fauna species (i.e. Greater Bilby, Northern Quoll and Black-footed Rock-wallaby). - Light emissions may disorient flying birds, particularly during migration, and cause them to divert from efficient migratory routes or collide with infrastructure (DCCEEW 2023) Noise and vibration as a result of Project activities - Noise and vibrations occurring during construction and operation (increased traffic, blasting, etc) of the Project may disturb fauna species - Increased noise and vibration arising from the construction and operation of the Project may disturb Migratory bird species. This includes disrupting feeding and resting behaviour, reduced population densities, abandonment of habitat area and reduced hunting efficiency - The vibration and presence of wind turbines may affect the presence and distribution of prey species Water sources - Water from artificial sources may attract birds, resulting in the intake and bioaccumulation of heavy metals and other contaminants, particularly from the

Environmental Value (Environmental Receptor)	Proposed and Potential Impacts (Stressor, Pressure, Receptor)	
	Direct (Stressor, Pressure)	Indirect (Stressor, Pressure)
- Dampierland Plain Slider (<i>Lerista separanda</i>) (P2) - Brush-tailed Mulgara (<i>Dasycercus blythi</i>) (P4) - Northern Marsupial Mole (<i>Notoryctes caurinus</i>) (P4) - Spectacled Hare-wallaby (<i>Lagorchestes conspicillatus leichardti</i>) (P4) - Short-tailed Mouse (<i>Leggadina lakedownensis</i>) (P4) - Western Pebble-mound Mouse (<i>Pseudomys chapmani</i>) (P4) - Peregrine Falcon (<i>Falco peregrinus</i>) (Other specially protected species – BC Act)		Tailings Storage Facility (TSF) supernatant and artificial ponds. Increased attraction to the Development Envelope may increase the likelihood of other operations-related impacts
Flora and Vegetation		
Native vegetation in Excellent condition present within the Development Envelope Native vegetation that is habitat for Priority flora (no MNES, but State significant flora recorded): <i>Cynodon anisocarpus</i> (P1) <i>Goodenia hartiana</i> (P2) <i>Bonamia oblongifolia</i> (P3) <i>Comesperma sabulosum</i> (P3) <i>Corynotheca asperata</i> (P3) <i>Dasymalla chorisekala</i> (P3) <i>Indigofera ammobia</i> (P3) <i>Synostemon arenosus</i> (P3) <i>Terminalia kumpaja</i> (P3) <i>Tribulopsis marliesiae</i> (P3) Two species of taxonomic interest: <i>Amphipogon caricinus</i> (hairy lamina) (J. Paterson WB41138)	Clearing Proposed clearing (up to 4,878 ha) will remove native vegetation and Priority flora species within the Conceptual Footprint	Introduction of weeds (invasive flora species) and feral fauna (herbivores) as a result of Project activities - Changes to the environment from Project activities may affect the supporting vegetation composition and mortality of Priority flora species - The site and surrounding area currently have very low levels of weeds. Any introduction of weed species has the potential to cause changes in vegetation composition, decreasing the abundance or distribution of Priority flora species due to competition - The introduction or encouragement and increase of herbivorous pest species (e.g. camels) due to Project activities may change vegetation composition or result in increased grazing pressure on Priority flora species Creation of artificial groundwater dependent vegetation (GDV) as a result of increased water infiltration - The increase in water infiltration may result in the creation of artificial GDV in proximity to infiltration ponds, resulting in a change in species composition and abundance over the life of the Project

Environmental Value (Environmental Receptor)	Proposed and Potential Impacts (Stressor, Pressure, Receptor)	
	Direct (Stressor, Pressure)	Indirect (Stressor, Pressure)
<i>Portulaca Sp. Nyangumarta</i> (B. Eckermann BE Opp 01) Potential groundwater dependent vegetation (GDV) to the south of the Rimfire Borefield.		Dust as a result of Project activities - Dust produced by construction and the operation of the mine and unsealed roads may affect photosynthesis, affecting the growth and health of Priority flora. Wildfires (unplanned events as a result of Project activity) - Project-related ignition sources could result in accidental fires. This may impact Priority flora with an increase in mortality. Changes in fire frequency or intensity may impact Priority flora's regeneration Vegetation health impact to potential GDV species as a result of groundwater extraction from the Rimfire borefield - Proposed groundwater extraction potentially impacting GDV south of the Rimfire borefield due to drawdown
Subterranean Fauna (Stygofauna)		
Saturated subterranean habitat suitable for stygofauna in the vicinity of the palaeodrainage within and south of the Rimfire borefield including new species, some of which may be range restricted.	Groundwater Extraction Proposed groundwater extraction (groundwater drawdown) will reduce the availability of stygofauna habitat in the palaeovalley tributary	Contamination of habitat from Project activities Spills, leaching and environmental incidents could infiltrate into groundwater

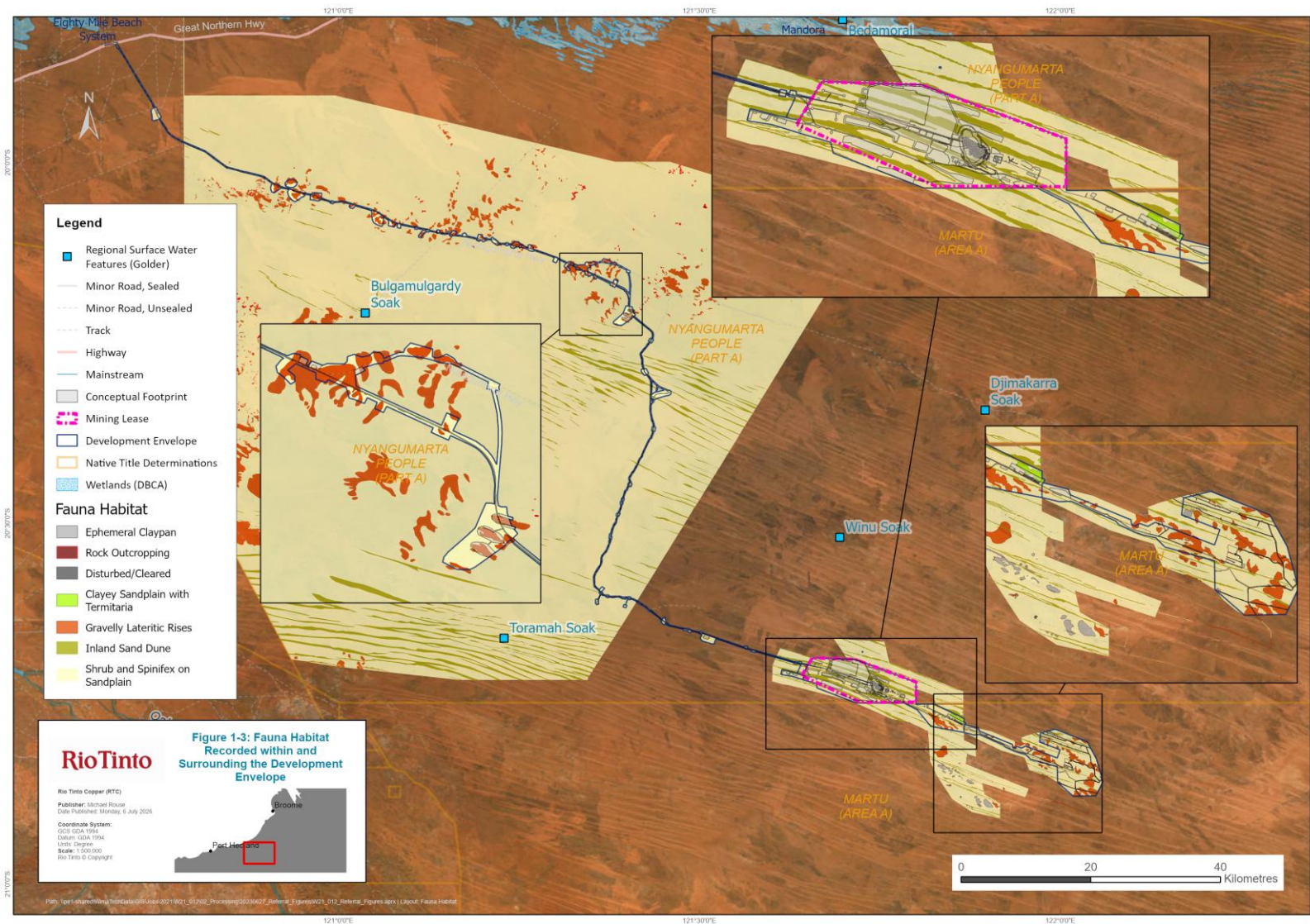


Figure 1-3: Fauna Habitat Recorded within and Surrounding the Development Envelope

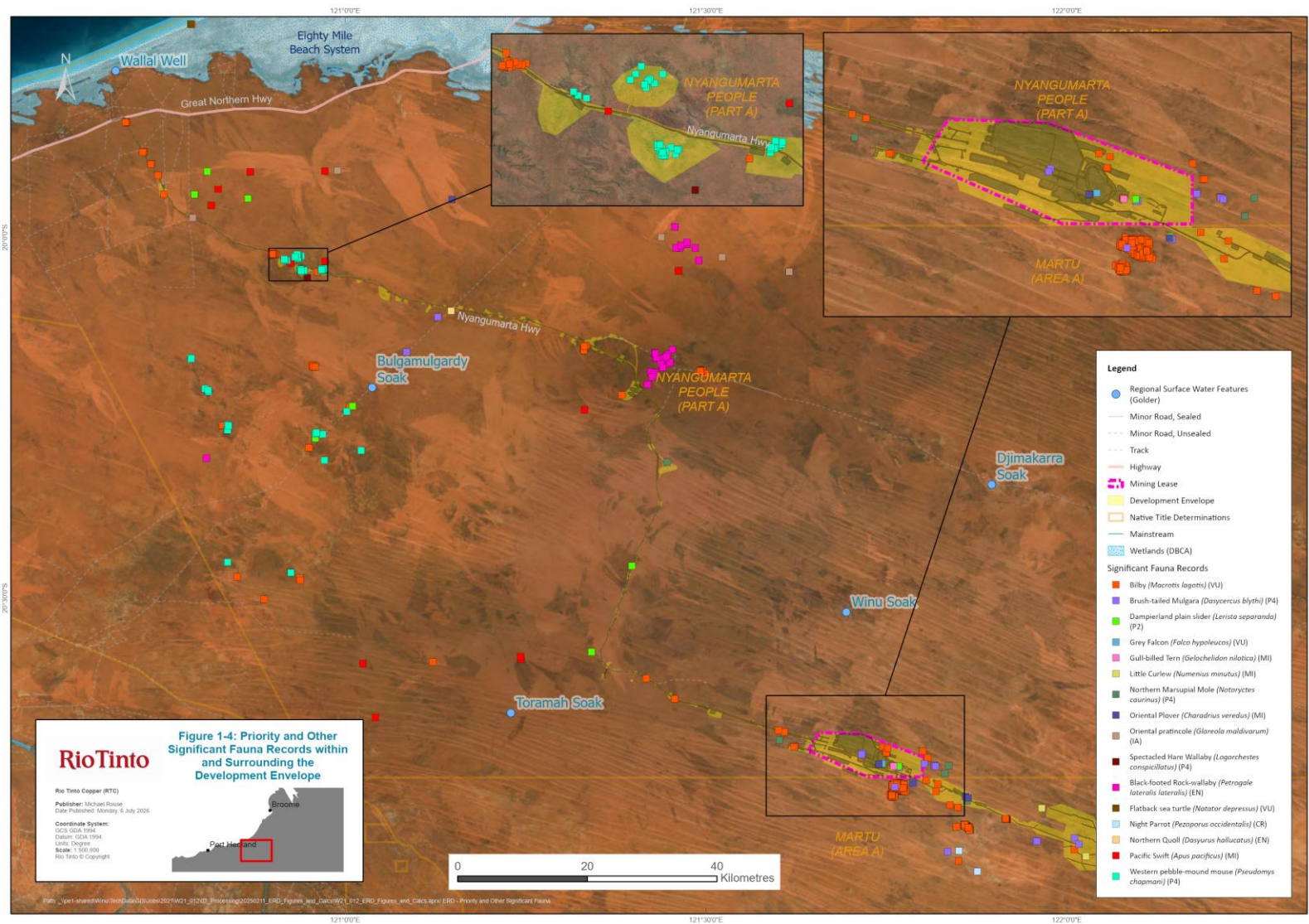


Figure 1-4: Priority and Other Significant Fauna Records within and Surrounding the Development Envelope

1.4 Condition Requirements

The Project is currently being assessed under Part IV of the EP Act and Part 8 of the EPBC Act. Using the information provided in the ERD (WSPL 2026 in prep), this EMP proposes environmental management and monitoring to ensure environmental outcomes and objectives are achieved.

1.5 Approach

This EMP was drafted in accordance with the conceptual framework for the development of Rio Tinto Environmental Management Plans. This conceptual approach to management considers the conservation significance of the environmental value (receptor) based on conservation status at local, state, and regional levels. Management level (low, moderate, or high) is assigned to achieve the environmental objective and/or outcome according to the conservation significance of the environmental value and the significance of impact predicted over spatial and temporal scales (Appendix 1). Assessment of the pathways over which impacts may occur provides the rationale for choosing provisions and appropriate indicators to measure against the environmental objective.

This EMP provides provisions for potential impacts to environmental values specific to the Project. The significance of all respective potential threats to the environmental values present within the Development Envelope are considered during the conceptual framework assessment to ensure appropriate provisions.

1.5.1 Management Areas

Three Management Areas have been delineated to manage any increase in abundance or introduction of pest species (feral/invasive fauna and weeds) across the Development Envelope attributable to the Project. The different Management Areas have been chosen based on the management targets and operational controls that can be reasonably expected to be implemented given the size, access, and abundance of existing pest species for each of the Management Areas.

Management Area 1 comprises the section of the RAC within the Wallal Downs pastoral lease which is known to have a presence of weed species which is likely ongoing (Figure 1-5). The Proponent will implement weed monitoring within Management Area 1 (Table 2-4; Table 2-5).

The Proponent considers that any introduction or increase in abundance of pest species in Management Area 2 (RAC east of Wallal Downs pastoral lease to MIA; Figure 1-5) cannot be wholly attributable to the Project, given the extent (approximately 183 km) of non-exclusive access, and potential for translocation of existing weeds species from Management Area 1. Therefore, the Proponent will implement management provisions to minimise the introduction and spread of weeds and the introduction of feral/invasive fauna within Management Area 2 (Table 2-4; Table 2-5).

Any introduction or increase in abundance of pest species in Management Area 3 (MIA and Rimfire; Figure 1-5) are likely to be attributable to the Project, given the Proponent's control of access, intensity of activities and the lack of existing weed species present in the Management Area. Therefore, the Proponent will implement extensive management provisions (Table 2-4; Table 2-5) within Management Area 3 to control any introduction of feral/invasive fauna, prevent the introduction or spread of weed species and ensure a prompt response to all weeds identified within the area.

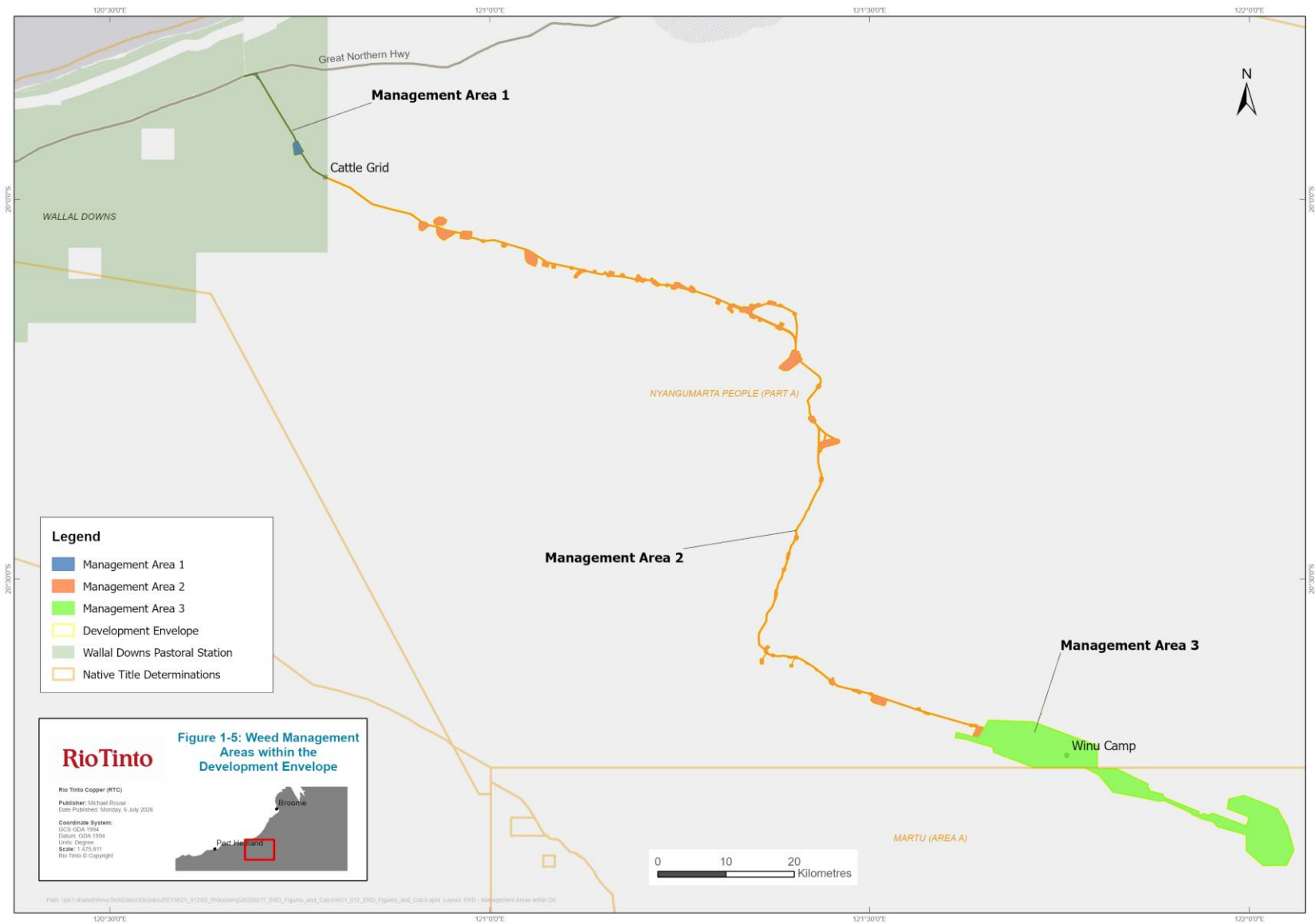


Figure 1-5: Weed Management Areas within the Development Envelope

1.6 Management Rationale

This EMP combines outcome-based and objective-based provisions (previously known as management-based provisions) to achieve environmental objectives.

Outcome-based provisions are applied where sufficient information exists to establish objective and measurable criteria (EPA 2024b). Environmental criteria are defined to assess performance against the environmental outcome. These are:

- **Trigger criteria** are set at a conservative level to forewarn the approach of threshold criteria and ensure trigger level actions are implemented well before the environmental outcome is compromised. Trigger criteria are related to the indicators identified in Table 1-3
- **Threshold criteria** represent the limit of acceptable impact beyond which there is likely a significant effect on the environment. This indicates there is risk that the environmental outcome will not be met.

Objective-based provisions are applied where a level of uncertainty exists that prevents setting measurable criteria. In this case, management targets are established to measure success of management actions in achieving the environmental objective, as there is insufficient site-specific information for setting outcome-based criteria and associated trigger and threshold values.

The rationale for the choice of provisions is provided in Table 1-3.

Table 1-3: Rationale for Choice of Provisions

Current Knowledge and Description of Impacts	Key Assumptions and Uncertainties	Rationale for Choice of Provision
Environmental Value: Terrestrial Fauna - habitat for significant fauna species		
Level of Management¹: Moderate		
Key surveys and studies: Biota Environmental Sciences (2026b)		
The Development Envelope includes the presence of six fauna habitat types: • Clayey Sand Plain with Termitaria • Ephemeral Claypan • Gravelly Lateritic Rises • Inland Sand Dunes • Shrub and Spinifex on Sandplain • Disturbed/Cleared. Foraging, dispersal, roosting and/or breeding habitat for significant fauna species will be impacted by land clearing. Clearance may bring weeds and feral animals into the fauna habitat (listed and non-listed species). Dust and light from construction, operations and rehabilitation might also affect fauna, forcing them to leave the area and affect their patterns. MNES, State and DBCA-listed (not including Migratory/Marine) species that may occur within the Development Envelope are: • Greater Bilby (<i>Macrotis lagotis</i>; VU – BC Act and EPBC Act) • Northern Quoll (<i>Dasyurus hallucatus</i>; EN – BC Act and EPBC Act) • Black-footed Rock-wallaby (<i>Petrogale lateralis lateralis</i>; EN – BC Act and EPBC Act) • Grey Falcon (<i>Falco hypoleucos</i>; VU – BC Act and EPBC Act) • Night Parrot (<i>Pezoporus occidentalis</i>; CR – BC Act and EN – EPBC Act) • Princess Parrot (<i>Polytelis alexandrae</i>; VU – EPBC Act and P4 – DBCA-listed) • Dampierland Plain Slider (<i>Lerista separanda</i>; P2 – DBCA-listed) • Northern Marsupial Mole (<i>Notoryctes caurinus</i>; P4 – DBCA-listed) • Brush-tailed Mulgara (<i>Dasyercus blythi</i>; P4 – DBCA-listed) • Western Pebble-mound Mouse (<i>Pseudomys chapmani</i>; P4 – DBCA-listed) • Spectacled Hare-wallaby (<i>Lagorchestes conspicillatus leichardti</i>; P4 – DBCA-listed) • Short-tailed Mouse (<i>Leggadina lakedownensis</i>; P4 – DBCA-listed) • Peregrine Falcon (<i>Falco peregrinus</i>; Other specially protected species – BC Act).	Assumptions • Protection of fauna habitat will enable the persistence of significant fauna species in the Development Envelope and surroundings Uncertainties • The likely impact of climate change and drought on the sensitivity of fauna species to noise, vibration and light • The soil seed bank response to disturbance and stockpiling, as well as to plant growth response to reconstructed soil profiles as part of habitat rehabilitation • The change in vegetation communities due to changed final landform • The ability to regenerate key species. Species might move from the disturbance areas during fluctuations in the environment conditions	Outcome-based provisions have been proposed to manage impacts on the Shrub and Spinifex on Sandplain and Inland Sand Dune fauna habitat types. As discussed below, these habitat types constitute critical habitat for the Greater Bilby. The outcome-based provision for the Greater Bilby concerning habitat loss applies to all fauna species that may occur within the Development Envelope, with the exception of Western Pebble-mound Mouse and Night Parrot. Objective-based provisions have been proposed to manage indirect impacts to fauna habitat. Objective-based provisions are appropriate as although the impacts can be minimised, they cannot be avoided. Monitoring will be undertaken to assess the efficacy of these actions.
Environmental Value: Terrestrial Fauna – MNES Species (Greater Bilby [<i>Macrotis lagotis</i>])		
Level of Management¹: Moderate		
Key surveys and studies: Biota Environmental Sciences (Biota 2026a), Biota Environmental Sciences (2026b)		
The Greater Bilby (<i>Macrotis lagotis</i>) is listed as Vulnerable under the EPBC Act and BC Act. The Greater Bilby has been recorded throughout the Development Envelope and wider region. Surveys undertaken within the Development Envelope recorded Greater Bilby evidence such as recent diggings, scats, tracks and active burrows (Biota 2026b) Figure 1-4). Secondary evidence was also found at multiple locations surrounding the Development Envelope. The Shrub and Spinifex on Sandplain and Inland Sand Dune habitat types within the Development Envelope are considered to be critical habitat for the Greater Bilby. Gravelly Lateritic Rises habitat type is considered supporting habitat. The Project will remove up to 4,498 ha of critical habitat and 238 ha of supporting habitat for the Greater Bilby. Clearing, infrastructure and mining operations may also directly impact the species through loss of or injury to individuals.	Assumptions: • The terrestrial fauna surveys undertaken for the Project have accurately recorded the presence and extent of Greater Bilby habitat within the Development Envelope • Protection of Greater Bilby habitat will enable the persistence of significant fauna species in the Development Envelope and surroundings • Feral predators cannot be completely eradicated from the Development Envelope as Cats and Foxes can colonise from adjacent areas Uncertainties:	Outcome-based and objective-based provisions have been applied for the loss of Greater Bilby habitat. Upper clearing limits have been assigned to critical habitat, constituting all native vegetation (in Excellent condition) within the Development Envelope. An outcome-based condition is appropriate for direct disturbance to these habitats. Trigger and threshold criteria with respective response actions allow for detecting and avoiding impacts above the clearing limits. The outcome-based provision for this species with respect to a threshold on critical habitat loss also applies to all fauna species that may utilise these habitat types as critical or supporting habitat.

¹ Summary of assessment for determination of required management zone provided in Appendix 1, as per the conceptual framework for development of Rio Tinto's EMPS .

Current Knowledge and Description of Impacts	Key Assumptions and Uncertainties	Rationale for Choice of Provision
The Project may indirectly impact Greater Bilby, including degradation of fauna habitat associated with construction and operational activities, including an increase in weeds, dust and abundance of introduced fauna species, and altered fire regimes. The Project may also result in the disturbance and/or displacement of the Greater Bilby individuals as a result of increased light and noise.	- There is limited data available on the likely impact of climate change and drought on Greater Bilby - There is limited data available on the sensitivity of Greater Bilby to noise	Objective-based provisions have been applied for direct fauna mortality from clearing, infrastructure and mine operations. Objective-based provisions are appropriate as although the impacts can be minimised, they cannot be avoided. Objective-based provisions applicable to all fauna within the Development Envelope have been applied for managing degradation of fauna habitat, injury or mortality of fauna individuals and disturbance and/or displacement of fauna as a result of the Project. Objective-based provisions are appropriate as although the impacts can be minimised, they cannot be avoided.
Environmental Value: Terrestrial Fauna – MNES Species (Black-footed Rock-wallaby [<i>Petrogale lateralis lateralis</i>] and Northern Quoll [<i>Dasyurus hallucatus</i>])		
Level of Management² Low		
Key surveys and studies: Biota Environmental Sciences (2026b)		
The Black-footed Rock-wallaby (<i>Petrogale lateralis lateralis</i>) is Endangered under the BC Act and EPBC Act. The Black-footed Rock-wallaby targeted survey revealed a previously unknown colony near the RAC diversion. The rock piles where this species was recorded represent critical (core and restricted) habitat for the species in the region. To mitigate any direct or indirect impacts, a section of the RAC has been diverted to approximately 1 km south of the closest rocky outcropping habitat. There are no Rocky Outcrops within the Development Envelope. The Project may result in the clearing of 4 ha of supporting habitat, comprising the Shrub and Spinifex on Sandplain and Gravelly Lateritic Rises habitat types which occur within 500 m of Rocky Outcropping habitat. The vehicle movements on the RAC will increase during the construction and operation of the mine site. This may impact the Black-footed Rock-wallaby indirectly due to noise, light and introduced pest fauna and flora species. Whilst the road has been moved to limit interactions, there may also be an increase in direct impact (e.g. vehicle strike).	Assumptions - Black-footed Rock-wallaby are known to stay close to their key habitat of rocky outcrops. The Black-footed Rock-wallaby is considered likely to occur as a transient visitor within the Development Envelope in areas of supporting habitat. As the species is known to forage approximately 300 m from critical habitat, supporting habitat for the Black-footed Rock-wallaby has been conservatively defined as the Shrub and Spinifex on Sandplain and Gravelly Lateritic Rises habitat types which occur within 500 m of Rocky Outcropping habitat Uncertainties - Limited data is available on the sensitivity of Black-footed Rock-wallaby to light and noise - Limited data on the likely impact of climate change and drought on the species	Objective-based provisions have been proposed to manage impacts on Black-footed Rock-wallaby, which occurs in specialised habitat adjacent to the RAC diversion, due to a lack of quantitative data regarding population size and distribution. As the Development Envelope has been designed to avoid critical habitat for the species, outcome-based criteria to manage direct impacts are not considered required outside the proposed outcome-based habitat loss criteria applicable to the suite of fauna recorded or with potential to occur within the Development Envelope. Due to the distance between the species' key habitat and the realigned RAC, a low management level is considered appropriate to manage impacts (direct and indirect) on the Black-footed Rock-wallaby and its habitat. Objective-based provisions applicable to all fauna within the Development Envelope have been applied for managing the degradation of fauna habitat, injury or mortality of fauna individuals and disturbance and/or displacement of fauna due to the Project. Objective-based provisions are appropriate as although the impacts can be minimised, they cannot be avoided.
The Northern Quoll (<i>Dasyurus hallucatus</i>) is listed as Endangered under the BC Act and EPBC Act. There is no evidence of Northern Quolls within the Development Envelope. One scat was recorded near the RAC. No individuals have been recorded within the Development Envelope despite targeted surveys. Northern Quoll population numbers can fluctuate substantially on both annual and inter-annual cycle. This variability is driven by both the reproductive biology of individuals and longer-term cycles in response to regional process such as rainfall, fire and related changes to prey populations. Hence, despite the absence of records, it is assumed that the Northern Quoll will transiently use the rocky habitat near the Development Envelope. There are no Rocky Outcrops in the Development Envelope. The Project may result in the clearing of 16 ha of supporting habitat, comprising the Shrub and Spinifex on Sandplain and Gravelly Lateritic Rises habitat types which occur within 1 km of Rocky Outcropping habitat. Due to the nature of the transient usage of the Development Envelope for the species, the Northern Quoll may be indirectly impacted by noise, light, and vibration from traffic along the RAC. The introduction of predators and increased fires may impact the species directly as the mortality rate may increase. There is no suitable habitat in the MIA.	Assumptions - There is only limited evidence of the presence of Northern Quoll from a scat outside the Development Envelope. However, knowing that the Northern Quoll population can fluctuate substantially, there is the assumption that the species is present within the Development Envelope and may utilise the area as a transient visitor - While it is possible that all habitat types mapped within the Development Envelope may be used by Northern Quoll to disperse or forage, the 1 km area around surrounding Rocky Outcropping is more likely to be used as potential supporting habitat, as the species has a strong home range preference within rocky outcrops, transient visitation within the broader area and having low local population density Uncertainties - There are uncertainties regarding the habitat use within the Development Envelope by the Northern Quoll. The targeted survey cannot ensure the presence or absence of the Northern Quoll population in the Development Envelope due to the species' natural boom/ bust cycles, which makes understanding the population locality difficult - There is limited data on sensitivity of Northern Quoll to light and noise - There is limited data on the likely impact of climate change and drought on Northern Quoll	Northern Quoll population numbers and use of habitat fluctuate on an annual cycle. This natural variability makes threshold criteria on population dynamics and habitat usage inappropriate for outcome-based criteria, outside the proposed habitat loss criteria applicable more broadly to the suite of fauna recorded or potentially occurring in the Development Envelope. As a result, objective-based provisions have also been applied. The environmental objectives aim to increase knowledge of Northern Quoll presence and maintain any population that currently forages within the Development Envelope. There is a need to increase knowledge of feral predator presence and abundance with the aim to manage and reduce impacts to Northern Quoll. Objective-based provisions applicable to all fauna within the Development Envelope have been applied for managing degradation of fauna habitat, injury or mortality of fauna individuals and disturbance and/or displacement of fauna as a result of the Project. Objective-based provisions are appropriate as although the impacts can be minimised, they cannot be avoided. Monitoring will be undertaken to assess the efficacy of these actions.

² Summary of assessment for determination of required management zone provided in Appendix 1, as per the conceptual framework for development of Rio Tinto's EMPS.

Current Knowledge and Description of Impacts	Key Assumptions and Uncertainties	Rationale for Choice of Provision
Environmental Value: Terrestrial Fauna – MNES Species (Grey Falcon [<i>Falco hypoleucos</i>], Night Parrot [<i>Pezoporus occidentalis</i>], Princess Parrot [<i>Polytelis alexandrae</i>])		
Level of Management³: Moderate		
Key surveys and studies: Biota Environmental Sciences (2026b), Biota Environmental Sciences (2025)		
The Grey Falcon (<i>Falco hypoleucos</i>) is listed as Vulnerable under the BC and EPBC Act. A single Grey Falcon has been observed in the airspace from the Development Envelope. Habitat within the Development Envelope potentially supports foraging and dispersal during appropriate foraging conditions, as it is assumed that the Grey Falcon was hunting within the Development Envelope. The Project will indirectly impact the species with the potential introduction of pests and diseases, and the direct impact of clearing of vegetation will impact the food source of the Grey Falcon.	Assumptions - The Grey Falcon and Princess Parrot are using the area for foraging/dispersal only - The Night Parrot may access the Development Envelope as a transient visitor only - Feral predators cannot be completely eradicated from the Development Envelope as Cats and Foxes can colonise from adjacent areas Uncertainties - Limited data is available on the potential threats of the Grey Falcon, Night Parrot and Princess Parrot including from operational activities such as noise, vibration and artificial light sources. Therefore, the threats and impacts outlined are based on general considerations but are considered speculative - Limited data is available on the likely impact of climate change and drought on the Grey Falcon, Night Parrot and Princess Parrot	Objective-based provisions have been proposed to manage impacts to fauna habitat within the Development Envelope due to lack of quantitative data to set outcomes, triggers and thresholds outside the proposed habitat loss threshold criteria applicable more broadly to the suite of fauna recorded or with potential to occur, in the Development Envelope. A moderate management classification is considered appropriate to manage impacts to Grey Falcon, Night Parrot and Princess Parrot and their habitats which occurs throughout and near the Development Envelope. Objective-based provisions applicable to all fauna within the Development Envelope have been applied for managing degradation of fauna habitat, injury or mortality of fauna individuals and disturbance and/or displacement of fauna as a result of the Project. Objective-based provisions are appropriate as although the impacts can be minimised, they cannot be avoided. Monitoring will be undertaken to assess the efficacy of these actions. Trigger and threshold criteria for groundwater level and vegetation health monitoring along with respective response actions allow for detecting and avoiding impacts to groundwater dependent vegetation units that may act as secondary foraging habitat for Princess Parrot
The Night Parrot (<i>Pezoporus occidentalis</i>) is listed as Critically Endangered under the BC Act and Endangered under the EPBC Act. No Night Parrots have been detected within the current Development Envelope. The Night Parrot has been recorded to the south-east of the project from eight different locations during 2024. One confirmed Night Parrot individual is believed to be visiting the local habitat area on a transitory basis. Night Parrot habitat mapping has occurred in and proximate to the project area with suitable roosting and foraging areas defined. This habitat mapping has been undertaken in accordance with the <i>Guidelines for Determining the Likely Presence and Habitat Usage of Night Parrot</i> (Pezoporus occidentalis) in Western Australia (DBCA 2024). Additional Night Parrot detections have occurred in the Lake Waukarlicarly locality 40 to 50 km south of the Development Envelope in the closest known other suitable Night Parrot habitat. The Lake Waukarlicarly habitat is of superior quality and more extensive than the habitat proximate to the Development Envelope. At least seven individual Night Parrots have been detected in the Lake Waukarlicarly area. The available evidence supports Lake Waukarlicarly being the source population for the bird recorded near the Development Envelope, which does not appear to have a permanent presence proximate to the Development Envelope. This would be consistent with the individual bird moving sporadically into the area south of Rimfire to take advantage of good foraging conditions following significant rainfall and then returning to the more extensive habitat around Lake Waukarlicarly after conditions in and around that area become drier. To mitigate direct and indirect impacts the Development Envelope has been reshaped to remove the Night Parrot habitat. However, some habitat is close to the Development Envelope along the corridor from the MIA to Rimfire. Whilst the Night Parrot habitat has been removed from the Development Envelope the species may pass through the Development Envelope and vehicle movements during construction and operation of the mine may have a direct impact on the Night Parrot (e.g. vehicle strike). Night Parrots may also collide with infrastructure during flight e.g. entanglement in fencing. Indirect impacts may also occur due to noise, vibration, light, dust and introduced pest fauna and flora proximate to the Development Envelope.		
The Princess Parrot (<i>Polytelis alexandrae</i>) is listed as Vulnerable under the EPBC Act and P4 DBCA-listed). The Princess Parrot has not been recorded within or surrounding the Development Envelope. It is considered that the species may occur within the Development Envelope, where it would likely forage on spinifex during seeding events. As the species may occur within the Development Envelope, clearing vegetation and potentially introducing feral animals and diseases due to the Project may impact the Princess Parrot.		

³ Summary of assessment for determination of required management zone provided in Appendix 1, as per the conceptual framework for development of Rio Tinto's EMPS.

Current Knowledge and Description of Impacts	Key Assumptions and Uncertainties	Rationale for Choice of Provision
The Princess Parrot may forage on <i>Eucalyptus victrix</i> that occurs within areas of shallow watertable that may support groundwater dependent vegetation like <i>E. victrix</i> in the Percival Palaeovalley south of Rimfire. The risk of significant impact to Princess Parrot is expected to be negligible as the habitat is only considered secondary foraging habitat, the parrot has not been recorded there and is expected to be only an occasional visitor and there are similar areas of foraging habitat in the area outside the influence of groundwater drawdown from Rimfire.		
Environmental Value: Terrestrial Fauna – Migratory Birds		
Level of Management³: Moderate		
Key surveys and studies: Biota Environmental Sciences (2026b)		
Construction and operation of the Project have the potential to impact the following Migratory bird species listed under the EPBC and BC Act: • Oriental Plover (<i>Charadrius veredus</i>) (Recorded) • Oriental Pratincole (<i>Glareola maldivarum</i>) (Recorded) • Pacific Swift (<i>Apus pacificus</i>) (Likely to occur) • Little Curlew (<i>Numenius minutus</i>) (Likely to occur) • Barn Swallow (<i>Hirundo rustica</i>) (May occur) • Australian (Gull-billed) Tern (<i>Gelochelidon [nilotica] macrotarsa</i>)* The Development Envelope contains supporting habitat for each of these Migratory species. Given the extent of habitat remaining within the Development Envelope and wider region, none of the species are considered likely to be dependent on the habitat present within the Development Envelope to the extent that the proposed Project would result in significant impacts at a local or regional scale. Loss or injury may impact Migratory bird species due to fencing or wind turbines constructed for the Project. *Note that the Australian (Gull-billed) Tern is now recognised as a separate, resident (non-migratory) species to the migratory Asian Gull-billed Tern (<i>Gelochelidon nilotica affinis</i>), however it is currently listed as Migratory under the EPBC Act and EP Act. Populations of both species occur in Australia, with only the Australian Tern recorded within the Development Envelope.	Assumptions • No species are considered to be reliant on the habitat within the Development Envelope, given their large range	Objective-based provisions have been proposed to manage impacts to the listed Migratory bird species which may occur within the Development Envelope. Outcome-based habitat loss threshold criteria applicable more broadly to the suite of fauna recorded or with potential to occur within the Development Envelope are also expected to minimise potential impacts to Migratory bird species. As none of the species are considered reliant on the habitat within the Development Envelope, a low management level is considered appropriate to manage impacts (direct and indirect) to the Migratory Bird species and their habitat. Objective-based provisions applicable to all fauna within the Development Envelope have been applied for managing degradation of fauna habitat, injury or mortality of fauna individuals and disturbance and/or displacement of fauna due to the Project. Objective-based provisions are appropriate as although the impacts can be minimised, they cannot be avoided.
Environmental Value: Subterranean Fauna (Stygofauna)		
Level of Management: Moderate		
Key surveys and studies: Biota Environmental Sciences (Biota 2026c)		
One area of stygofauna occurrence has been identified within and adjacent to the proposed Rimfire Borefield. No stygofauna have been collected in surveys undertaken at the MIA. Five orders of stygobitic crustaceans were recorded from the 2024 and 2025 stygofauna sampling in and around Rimfire. This total was represented by 22 molecular taxa, comprising: one amphipod taxa, two isopod taxa, 14 copepod taxa (12 harpacticoid and two cyclopoid) and five oligochaete taxa. 18 of the 22 taxa were only recorded from a single site. The records were all within or close to a palaeodrainage feature. The stygofauna records are all within or adjacent to an inferred palaeodrainage feature delineated from airborne transient electromagnetic (TEM) data that corresponds with several vegetation communities containing <i>Melaleuca lasiandra</i>, <i>M. glomerata</i>, and <i>Eucalyptus victrix</i> within and to the South of Rimfire. This palaeochannel is interpreted as a tributary of the WASANT Percival Palaeovalley. While regional groundwater levels are generally greater than 20 m below ground level, measurements indicate that groundwater can be as shallow as 3.8 m below surface at at least one location within the vicinity. Modelling of the project licensing case (2.8 GL/a) predicts a drawdown of 10 m to 2 m may extend approximately 17 km from the Rimfire borefield. Under this scenario 19 of the 22 species were recorded within of the drawdown zone, across varying spatial locations (i.e. one species recorded both outside drawdown zone and in the 2-5 m	Assumptions: • Limiting groundwater drawdown in the vicinity of the stygofauna records will preserve stygofauna habitat and thus prevent impacts associated with future extraction from the Rimfire Borefield • Additional studies will better define impacts and optimise mitigations • It is proposed that the need for groundwater extraction from the Rimfire Borefield is not till year 13 of the operation (P90 water balance) • Drawdown of groundwater levels is modelled to be gradual Uncertainties • The Great Sandy Desert region is under-surveyed compared to other regions known for high levels of stygofauna diversity (e.g. the Pilbara and Yilgarn regions). Contextual records are limited but indicate generally low subterranean diversity. This is likely a reflection of both the lower suitability of Great Sandy Desert geological units as stygofauna habitat, and the limited survey effort expended in the region.	Objective-based provisions have been proposed to limit impact on stygofauna Objective based provisions include limiting extraction of groundwater from the Rimfire Borefield. Trigger and threshold criteria for groundwater level and stygofauna monitoring along with respective response actions allow for detecting and avoiding impacts to these stygofauna.

Current Knowledge and Description of Impacts	Key Assumptions and Uncertainties	Rationale for Choice of Provision
drawdown area, four solely within 5-10 m, four solely within 10 m area, one species within 5-10 m drawdown at one site and 10 m area at another, two species within both 2-5 m and 5-10 m areas, seven solely within 2-5 m drawdown area). Loss of individual stygofauna is expected to be unavoidable; however, suitable connected habitat is expected to extend outside the groundwater drawdown cone of depression. The potential for indirect impacts from changes to surface water inputs and contamination due to Project activities is not expected to be significant given the limited extent of clearing and scale of infrastructure required to construct and operate the borefield.	- The palaeodrainage in this area is thought to be transitional with drilling results in and adjacent to the inferred and WASANT Paleochannel tributary providing very limited evidence of true palaeodrainage lithology. - Connectivity between the deep aquifer where extraction is proposed and the aquifer close to the surface is not fully established - however a full connection has been hydrogeologically modelled to enable a conservative assessment of potential impacts	
Environmental Value: Flora and Vegetation – Priority flora		
Level of Management⁴: Moderate		
Key surveys and studies: Western Botanical (2026)		
State-significant Priority flora species occur within the Development Envelope, including <i>Cynodon anisocarpus</i> (P1), <i>Goodenia hartiana</i> (P2), <i>Bonamia oblongifolia</i> (P3), <i>Comesperma sabulosum</i> (P3), <i>Corynotheca asperata</i> (P3), <i>Dasymalla chorisepala</i> (P3), <i>Indigofera ammobia</i> (P3), <i>Polymeria</i> sp. Broome (K.F. Kenneally 9759) (P3), <i>Synostemon arenosus</i> (P3), <i>Terminalia kumpaja</i> (P3), <i>Tribulopsis marliesiae</i> (P3). Two species of taxonomic interest <i>Amphipogon caricinus</i> (hairy lamina) (J. Paterson WB41138) and <i>Portulaca</i> sp. Nyangumarta. No flora listed under the EPBC Act have been recorded within the Development Envelope. The State-listed Priority flora could be impacted directly and indirectly by the construction, operation and/or rehabilitation of the Project. Clearing during construction and operation will directly impact the vegetation within the Development Envelope (clearing up to 4,878 ha). Further, the construction and operation of the Mine will create ground disturbance and increase dust which may impact Priority flora. There is the potential to introduce weeds within the disturbance area, which may compete with Priority flora. The construction and operation of the mine may result in Project-initiated fires fuelled by vegetation and/or flammable items within the mine site. An increased fire frequency and intensity can affect vegetation resilience and regeneration.	Assumptions: - Baseline surveys of the flora and vegetation provide representative species inventories and reflect sampling over variable seasonal conditions. However, these baselines may not capture the full range of climatic variable experiences in the environment (which may be on a decade-scale) - Protection of Priority flora and habitat outside the Conceptual Footprint will allow these species to persist within the Development Envelope and surroundings - Vegetation in the area is adapted to bushfires due to the fire history in the area. It is assumed that fires do not significantly negatively affect the vegetation in the area long-term Uncertainties: - There are some uncertainties on plant growth response and regeneration during rehabilitation (stockpiled soils are expected to be used; however, no details on suitability for rehabilitation are available to date)	Objective-based provisions have been proposed to manage impacts to Priority flora within the Development Envelope. Due to several flora species of State significance within the Development Envelope, a moderate management level is considered appropriate to manage impacts (direct and indirect).
Environmental Value: Flora and Vegetation – Groundwater Dependent Vegetation		
Level of Management: Moderate		
Key surveys and studies: Western Botanical (Western Botanical 2026), Richard Consulting (2026) and Worley (Worley 2025)		
Potential Groundwater Dependent Vegetation (GDV) has been identified within and adjacent to the proposed Rimfire Borefield. Several vegetation communities containing <i>Melaleuca lasiandra</i>, <i>M. glomerata</i>, and <i>Eucalyptus victrix</i> occur in this area (P23a-23d; C1+P23) and align with an inferred palaeochannel delineated from airborne transient electromagnetic (TEM) data. This palaeochannel is interpreted as a tributary of the WASANT Percival Palaeovalley. While regional groundwater levels are generally greater than 20 m below ground level (mbgl), groundwater is relatively shallow within the Percival Palaeochannel. Gauging data indicate depths of 3.5 mbgl (WINU1446) to 6.7 mbgl (WINU1445) in the north, and 9.5 mbgl (WINU1454) and 12 mbgl (WINU1453) in the south. Two (2) other groundwater bores (WINU1451 and WINU1452) mapped within the south-western extent of the P23c vegetation zone but outside the palaeochannel also reported shallow groundwater . The vegetation species present (<i>Melaleuca lasiandra</i>, <i>Melaleuca glomerata</i>, and <i>Eucalyptus victrix</i>) are capable of accessing groundwater where root systems extend to the water table; however, they may also rely on alternative water sources, including soil moisture stored within the unsaturated zone.	Assumptions: - Limiting groundwater drawdown in the vicinity of these vegetation units will prevent impacts associated with future extraction from the Rimfire Borefield - Additional studies will better define impacts and optimise mitigations - It is proposed that the need for groundwater extraction from the Rimfire Borefield is not till year 13 of the operation (P90 water balance) - Drawdown of groundwater levels is modelled to be gradual which will allow time for root systems to adapt. Uncertainties	Objective-based provisions have been proposed to limit impact on the potential GDV units Objective based provisions include limiting extraction of groundwater from the Rimfire Borefield. Trigger and threshold criteria for groundwater level and vegetation health monitoring along with respective response actions allow for detecting and avoiding impacts to these vegetation units.

⁴ Summary of assessment for determination of required management zone provided in Appendix 1, as per the conceptual framework for development of Rio Tinto's EMPs.

Current Knowledge and Description of Impacts	Key Assumptions and Uncertainties	Rationale for Choice of Provision
In the palaeochannel, groundwater is relatively shallow and likely contributes to plant water use, together with moisture retained in unsaturated sediments that accumulate in the lower-lying terrain. Preliminary remote sensing analysis of vegetation persistence indicates that this area may support GDV. Although confirmation is limited, the co-occurrence of potentially groundwater-dependent species and shallow groundwater suggests a reasonable likelihood of GDV presence. Accordingly, a precautionary approach will be adopted, with these areas managed as GDV and mitigation measures implemented to minimise potential impacts. Potential effects of drawdown (P90 Water Balance): Some P23a, P23c units (<i>M. glomerata</i> and <i>M. lasiandra</i> open shrubland) lie within modelled 1-2 m drawdown zone – however given gradual rate of drawdown over 15 to 20 years, there is an opportunity for vegetation to adapt and extend root systems Some C1+P23 (<i>Eucalyptus victrix</i> open woodland) lie within the 1 m drawdown contour, indicating no impact on this unit	• The palaeodrainage in this area is thought to be transitional with drilling results in and adjacent to the inferred and WASANT Paleochannel tributary providing very limited evidence of true palaeodrainage lithology. • Connectivity between the deep aquifer where extraction is proposed and the aquifer close to the surface is not fully established	

2. EMP PROVISIONS

This section of the EMP identifies the provisions that the Proponent will implement to ensure that the defined environmental outcomes and objectives are met during the implementation of the Project. Outcome-based and objective-based provisions are detailed in Table 2-1 to Table 2-5 including monitoring and reporting provisions.

The EMP will be updated to align with the adaptive management approach (refer to Section 3).

2.1 Outcome-based Provisions

2.1.1 Greater Bilby/Mankarr

Table 2-1: Outcome-based Provisions – Terrestrial Fauna: Greater Bilby/Mankarr

Terrestrial Fauna – Greater Bilby/Mankarr
EPA Objective: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained Key Environmental Values: Greater Bilby population; Greater Bilby habitat within the Development Envelope Key Impacts and Risks: Clearing up to 4,498 ha of Greater Bilby habitat within the Development Envelope
Outcome-based Provisions
Outcome: The Proponent shall ensure no more than 4,498 ha of direct disturbance (clearing) to Greater Bilby habitat as a result of the Project

Environmental Criteria	Response Action	Monitoring	Timing/Frequency	Reporting
Trigger Criteria: Reduction in critical bilby habitat extent greater than 4,048 ha (within 10% of the threshold criterion) as a result of direct disturbance (clearing).	Trigger level actions: - Review clearing requirements and undertake a review of land clearing reconciliation against the mine plan - Review of demarcation mechanisms (e.g. signage, flagging tape, spatial data/maps) for the clearing boundaries to ensure they are up to date and remain in place, and if any additional mechanisms are required - Review other monitoring and supporting data, such as seasonal and climatic data	- Land clearing reconciliation (against GIS exclusion and disturbance layers) - Aerial image capture (e.g. satellite or Remotely Piloted Aircraft) - Annual review of internal incident reporting and internal approval request process	- Regular inspections during vegetation clearing activities - Annual or as triggered by clearing reconciliation - Bi-annual imagery captures and analysis	- The environmental outcome will be reported against the trigger criteria for each reporting year - If the trigger criteria were exceeded during the reporting period, the ACAR will discuss potential reasons for the exceedance of the trigger criterion and include a description of the effectiveness of the trigger level actions
Threshold Criteria: - Reduction in critical bilby habitat extent equal to or greater than 4,498 ha as a result of direct disturbance (clearing) - Ground disturbance or clearing activities occur outside the approved clearing boundary.	Threshold contingency actions: - Immediately cease clearing activities - Identify the cause of exceedance and undertake a review of planning, assessment and implementation of clearing boundary procedures (internal permitting and reporting) - Undertake rehabilitation of cleared areas outside of the approved extent in consultation with the relevant government agencies			

2.2 Objective-based Provisions

2.2.1 Greater Bilby/Mankarr

Table 2-2: Objective-based Provisions – Terrestrial Fauna: Greater Bilby/Mankarr

Terrestrial Fauna – Greater Bilby/Mankarr
EPA Objective: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained
Key Environmental Values: Greater Bilby population; Greater Bilby habitat within the Development Envelope
Key Impacts and Risks: Clearing up to 4,498 ha (critical) and 238 ha (supporting) of Greater Bilby habitat within the Development Envelope
Objective-based Provisions
Objective: Minimise impacts to the Greater Bilby as a result of the Project

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Loss or degradation of Greater Bilby habitat as a result of the Project					
Minimise loss or degradation of Greater Bilby habitat within the Development Envelope.	Clearing to only occur within approved areas	- Land clearing reconciliation (against GIS exclusion and disturbance layers) - Aerial image capture (e.g. satellite or Remotely Piloted Aircraft) - Annual review of internal incident reporting and internal approval request process	- Regular inspections during vegetation clearing activities - Annual clearing reconciliation - Bi-annual imagery captures and analysis	The Proponent and clearing contractor(s)	- Reported yearly in the ACAR or as required by the Ministerial Statement condition - If the management targets were not met or management actions not implemented during the reporting year, the ACAR will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required
Indicator: Collisions of Greater Bilby with vehicles or machinery					
Minimise Greater Bilby interaction with vehicles or machinery.	- A survey to detect the presence of the Greater Bilby shall be conducted by a qualified fauna specialist within a 14-day period, prior to the commencement of clearing or bulk earthworks⁵ - Any Greater Bilby identified during pre-clearance/earthwork surveys will be recorded in a centralised database and can be made available to DCCEW, DBCA and Traditional Owners, or other agencies as requested - If Greater Bilby individuals or active burrows are located, no-go zones will be established around any active Greater Bilby burrows (should they be identified during pre-clearance surveys). No-go zones will remain in place until either: - A fauna specialist has relocated the individual; or - The individual has been observed to have moved on from the area to adjoining suitable habitat, or the burrow is observed to no longer be active - Areas of any no-go zones will be demarcated with flagging before the commencement of clearing, and the no-go zones are to remain adequately marked for the duration of clearing activities - Traffic management procedures, including but not limited to: - Speed limits - Warning signs	- Inspection of incident records for wildlife interaction - Population abundance survey conducted on current known Greater Bilby population south of the MIA (tracked up to 10 km from the Development Envelope)	- As required during construction and operation over the life of mine 2-yearly population study	- The Proponent is responsible for conducting pre-clearance Bilby surveys - The Proponent is responsible for implementing traffic management procedures and provision of inductions to relay required information to project personnel - Project personnel are then responsible for adhering to traffic management procedures - All site personnel are responsible for reporting wildlife interactions and sightings	- As above - Population study results to be reported in the AER

⁵Fauna specialist' means a person who holds a tertiary qualification specialising in environmental science or equivalent, and has a minimum of two years' work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the DWER CEO as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Biodiversity Conservation Act 2016*.

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
				The proponent is responsible for population studies	

2.2.2 Night Parrot

Table 2-3: Objective-based Provisions – Terrestrial Fauna: Night Parrot

Terrestrial Fauna – Night Parrot					
EPA Objective: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained					
Key Environmental Values: Night Parrot within and nearby the Development Envelope					
Key Impacts and Risks: Construction and Mining activities including include bird strike with vehicles or entanglement in fencing; Noise, Vibration and Artificial light					
Objective-based Provisions:					
Objective: Minimise direct and indirect impacts to Night Parrots associated with the Project					
Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Striking of Night Parrot with vehicles or entanglement of Night Parrots in fencing					
Minimise Night Parrot interactions with vehicles and fences	- Traffic management procedures, including but not limited to: - Speed limits, including a 40 km/h limit along the Rimfire pipeline corridor adjacent to Night Parrot habitat - Warning signs - No nighttime driving proximate to Night Parrot habitat unless it is in an emergency - No fencing in areas adjoining known or potential Night Parrot habitat - Reflectors will be attached to fencing to ensure it is visible and reduce the risk of fauna injury or mortality due to entanglement - Construction of the Rimfire pipeline will only occur during daytime hours to not disturb Night Parrot behavioural patterns - Operational access to the Rimfire borefield (via the Rimfire pipeline) for routine maintenance activities will be planned for during daytime hours (unless due to emergency circumstances or un-planned maintenance requirements) so as to not disturb Night Parrot behavioural patterns - Should Night Parrot individuals be identified during construction, work will cease immediately and all personnel will leave the vicinity	Monitoring of incident reporting for records involving Night Parrot	As required during construction and operation over the life of mine	- The Proponent is responsible for implementing traffic management procedures and provision of inductions to relay required information to project personnel - The proponent is responsible for identifying and implementing no go zones for fencing - All site personnel are responsible for reporting wildlife interactions and sightings	- Assessment of achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR or as required by the Ministerial Statement conditions - If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required
Indicator: Disturbance of Night Parrot (behavioural changes) as a result of light and noise					
Minimise impacts to Night Parrot as a result of increased light and noise within the Development Envelope.	- No lighting will be installed along pipeline corridors or at the production or monitoring bores. Limited temporary lighting may be used occasionally if required to support safe operations - Lighting at Rimfire borefield collection tanks will be limited to that required for safe operations noting that the borefield will be remotely operated so light usage will be minimal - Specific Actions for Rimfire Corridor Only:	- Monitoring of fauna incident reporting - Monitoring noise levels at night parrot habitat areas - Monitoring for night parrot occupancy within suitable habitat within 10 km of the Development Envelope.	- As required during construction and operation over the life of mine - Post construction noise monitoring in night parrot habitat areas within 1st year of operations (first ore), for a continuous period of 1 month. - Ongoing night parrot occupancy monitoring during construction	- The proponent is responsible for identifying and implementing no go zones for lighting installation - The proponent is responsible for undertaken the monitoring activities	As above

	○ Should Night Parrot individuals be identified during construction, work will cease immediately and all personnel will leave the vicinity. ○ Scheduling of construction activities to daytime hours • Monitoring of noise impacts from mining activities to night parrots • Monitor night parrot occupancy of suitable habitat nearby the mining activities		and up until 2 years post construction (from first ore)		
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2.2.4 Grey Falcon and Migratory Birds

Table 2-3: Objective-based Provisions – Terrestrial Fauna: Grey Falcon and Migratory Birds

Terrestrial Fauna - Grey Falcon and Migratory Birds
EPA Objective: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained
Key Environmental Values: Grey Falcon and Migratory Birds and habitat within the Development Envelope
Key Impacts and Risks: Bird strike from wind turbines
Objective-based Provisions
Objective: Minimise direct and indirect impacts to Grey Falcon and Migratory birds resulting from wind turbines associated with the Project

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Striking of conservation significant bird species with wind turbine blades					
Minimise Grey Falcon and Migratory bird interactions with wind turbines.	- Minimise lighting (subject to regulatory requirements) on turbines as much as practicable to avoid attracting birds, bats or insects - Investigate the effectiveness of noise deterrents and enhanced blade visibility - Implement a Bird and Bat Adaptive Management Plan (BBAMP). Key actions may include, but not be limited to: - Survey and study findings - Bird and bat risk assessment - Monitoring program - Adaptive management triggers	- Monitoring of incident reporting for records involving Grey Falcon and Migratory birds - Wind turbine impact monitoring program aligned to the BBAMP. Including, but not limited to: - Carcass monitoring program - Bias correction for carcass detectability and persistence - Carcass data collection protocol - Carcass search methodology - Monitoring schedule	- As required during construction and operation over the life of mine - Mortality monitoring program in alignment with BBAMP	- The Proponent is responsible for ensuring lighting is installed and operated to the requirements - All site personnel are responsible for reporting wildlife interactions and sightings - Independent Power Producer to develop and implement BBAMP .	- Assessment of achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR or as required by the Ministerial Statement conditions - If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required - Reporting and investigation of breaches to impact trigger criteria

2.2.5 Conservation Significant Fauna

Table 2-4: Objective-based Provisions – Terrestrial Fauna: Conservation Significant Fauna

Terrestrial Fauna
EPA Objective: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained
Key Environmental Values: Conservation significant fauna species and habitat (including Greater Bilby, Black-footed Rock-wallaby, Night Parrot Grey Falcon, and Migratory Birds)
Key Impacts and Risks: Direct impacts from: • Clearing and fragmentation of fauna habitat • Loss of fauna individuals as a result of clearing, infrastructure and mining operations Indirect impacts from: • Degradation of fauna habitat associated with construction and operational activities, including an increase in weeds, dust and abundance of introduced species, and altered fire regimes • Disturbance and displacement of fauna as a result of light, noise and/or vibration
Objective-based Provisions
Objective: Minimise impacts to conservation significant fauna species within the Development Envelope as a result of the Project

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Loss or degradation of fauna habitat as a result of the Project					
Minimise loss or degradation of fauna habitat.	• Known locations of fauna habitat and suitable SRE habitat will be included in the Proponent's GIS system to ensure impacts to known locations of significant habitat types are minimised and adhere to authorised extents • Clearing will only occur within approved areas • Vehicles and machinery to remain on approved and/or existing tracks • A Winu Topsoil Management Procedure will be developed and implemented during construction and operations • Undertake remediation and rehabilitation of areas that are temporarily disturbed during construction and operations • Minimise risk of pollution by significant spills or leaks of hazardous material by ensuring: ○ All non-explosive hazardous materials will be managed in accordance with regulations and standard operating procedures for transport, handling and storage as per the requirements of AS-1940 and the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 ○ All explosives will be managed in accordance with regulations and standard operating procedures for transport, handling and storage as per the requirements of AS-2187 and the Dangerous Goods Safety (Explosives) Regulations 2007 ○ Hazardous materials are to be provided and stored in sealed, labelled containers without leaks ○ All vehicles and equipment to be cleaned in designated wash bays fitted with suitable pollution control equipment ○ A Winu Spill Response Management Plan will be developed and implemented during construction and operations	• Land clearing reconciliation (against GIS exclusion and disturbance layers) • Aerial image capture (e.g. satellite or Remotely Piloted Aircraft) • Annual review of internal incident reporting and internal approval request process	• Regular inspections during vegetation clearing activities • Annual clearing reconciliation • Bi-annual imagery captures and analysis	• The Proponent and clearing contractor(s)	• Assessment of achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR or as required by the Ministerial Statement condition • If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Striking of Fauna with vehicles/machinery/aircraft or entanglement of Fauna in fencing					
Minimise fauna interaction with vehicles / machinery or entanglement in fencing	- Traffic management procedures, including but not limited to: - Speed limits - Warning signs - Vehicle traffic confined to defined roads and tracks - Reflectors will be attached to fencing in accordance with the EMP to ensure it is visible and reduce the risk of fauna injury or mortality due to entanglement - The airstrip will be fenced, and fauna clearance runs will be undertaken prior to aircraft movements. - All construction and operation personnel to undergo induction training on significant fauna presence and behaviour and the required vehicle speed limits - Implement speed limits within the Development Envelope, which all vehicle and machinery must adhere to. - Clearing will be undertaken progressively and commence, where possible, from a disturbed vegetation edge to an undisturbed area to allow fauna to disperse to suitable habitat in the surrounds - If MNES fauna individuals are injured during clearing or construction, the animal shall be taken to an authorised trained wildlife carer or if not possible, humanely euthanised in accordance with <i>PestSmart Guidelines</i>⁶ (or equivalent) by a suitably qualified person	Inspection of incident records for wildlife interaction	As required during construction and operation over the life of mine	- The Proponent is responsible for implementing traffic management procedures and provision of inductions to relay required information to project personnel - Project personnel are then responsible for adhering to traffic management procedures - All site personnel are responsible for reporting wildlife interactions and sightings	As above
Indicator: Degradation of fauna habitat as a result of dust affecting fauna habitat					
Reduce indirect impacts on retained vegetation and fauna habitat resulting from dust.	- RAC will be sealed to minimise dust emissions - Fixed plant dust suppression to be included in the design - Appropriate dust controls (including but not limited to water carts, non-toxic stabilisers, speed limits, progressive rehabilitation or other) to be implemented throughout construction and operations as required to prevent and minimise dust impacts to the surrounding environment - Vehicles will be required to travel at designated operating speeds on unsealed roads	Dust monitoring and flora monitoring to ensure the health of flora	As required during construction and operation over the life of mine	- The Proponent is responsible for fixed plant dust suppression - All site personnel responsible for adhering to road rules when on the site	As above
Indicator: Disturbance of fauna species (behavioural changes) as a result of light and noise					
Minimise impacts to fauna as a result of increased light and noise within the Development Envelope.	- Employee and site personnel inductions on appropriate fauna management - Ensure all vehicles and machinery are serviced and maintained to minimise machinery noise - No permanent lighting will be installed along the RAC. Limited temporary lighting may be used during construction of the road to support safe operations - Equipment design will be specified to be within Australian standard noise limits and/or fitted with noise mufflers in accordance with manufacturing specifications.	Monitoring of fauna incident reporting	- As required during construction and operation over the life of mine - Opportunistically during construction and operations	- The Proponent is responsible for the implementation of lighting, installed in accordance with best practice - The Proponent is responsible for the implementation	As above

⁶ PestSmart *General methods of Euthanasia in field conditions*

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
	Lighting to be designed in accordance with National Light Pollution Guidelines for Wildlife (DCCEEW 2023)			of noise management measures	
Indicator: Increased weed diversity and/or abundance					
Minimise the spread of weeds in Management Area 1 (RAC within Wallal Downs pastoral lease)	Undertake weed monitoring within Management Area 1	- Undertake targeted weed monitoring - Opportunistic monitoring	- Annual targeted weed monitoring - Opportunistic weed monitoring	Personnel moving through and entering site Management Area 1	As above
Indicator: Increased weed diversity and/or abundance					
Minimise the entry and spread of weeds in Management Area 2 (RAC east of Wallal Downs pastoral lease to MIA)	- Active guidance from and participation of the Nyangumarta Traditional Owner group representatives, including the installation of a washdown facility at the intersection of Management Area 2 and the Wallal Downs Pastoral Lease, which will include: - Vehicle inspection and washdown before entry to Management Area 2 - Equipment inspection and washdown before entry to Management Area 2 - Undertake targeted weed monitoring within Management Area 2	- Review of vehicle and equipment weed inspections - Undertake targeted weed monitoring - Opportunistic monitoring	- Vehicle and equipment wash and inspections before entry to Management Area 2 - Opportunistic weed monitoring - Annual targeted weed monitoring	Personnel moving through and entering site Management Area 2	- As above - Nyangumarta Traditional Owner group representatives will report to WSPL
Indicator: Increased weed diversity and/or abundance					
Prevent the introduction and spread of weed species within Management Area 3 (MIA and Rimfire).	- Undertake weed inspections on all vehicles and equipment coming into Management Area 3 - Vehicle washdown before entry to Management Area 3 (will occur at the entry to Management Area 2) - Include weed checks in routine work area inspections - Undertake targeted weed monitoring within Management Area 3, including around the infiltration ponds - Personnel to report any weed sightings - Weed hygiene measures for incoming personnel - Weed management measures in personnel inductions	- Review of vehicle and equipment weed inspections - Record any weeds identified - Weed checks in work area inspections - Undertake targeted weed monitoring - Review of personnel weed hygiene measures	- Vehicle and equipment wash and inspections before entry to Management Area 3 (will occur at the entry to Management Area 2) - Weed hygiene practices and inductions carried out upon mobilisation of personnel to site - Work area inspections as per schedule - Bi-annual targeted weed monitoring with Management Area 3	- Construction workers (especially machinery operators and clearing contractors) - Personnel moving through and entering Management Area 3	As above
Indicator: Increased weed diversity and/or abundance					
Ensure a prompt response to all weed identification within Management Area 2 and 3.	Treatment of identified weeds either by application of appropriate herbicide and/or manual extraction from the ground	- Record any weeds identified - Record any weed treatment - Include previously identified weed locations in	- Treatment of weeds to occur as soon as practicable - Follow up targeted weed monitoring of treatment areas	The Proponent is responsible for weed management	As above

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
		targeted weed survey	within 3 months post treatment Annual targeted weed monitoring		
Indicator: Introduction of feral fauna species within the Development Envelope					
Control any introduction of feral fauna to minimise impacts on fauna populations and habitat in Management Area 3	- No domestic animals are permitted within Management Area 3 - Undertake feral fauna control with active guidance from and participation of the relevant Traditional Owner group representatives - Install and maintain fencing around landfills and, where appropriate, water storage areas and infiltration ponds - Artificial water sources will be kept to the minimum required for operations. Leaking water sources will be repaired and minimised. - Establish designated points to assess feral fauna presence	- Feral fauna species survey to monitor presence within Management Area 3 - Inspect feral fauna species records, including sightings, encounters and fauna removal	Annual or as required during construction and operation over the life of mine	- The Proponent is responsible for developing feral fauna management strategy - Inductions to communicate important information to site personnel, if deemed necessary	As above
Indicator: Project initiated wildfires within the Development Envelope					
Minimise any change in bushfire frequency or intensity as a result of the Project.	- Develop and implement the Fire Management Plan. Key actions may include, but not be limited to: - Development in conjunction with Traditional Owners for fire land management activities (firebreaks, cold burns etc.) - Equip fire control equipment in vehicles and in fire-risk areas - Restrict open fires within the Development Envelope at all times - All relevant construction and operational personnel to undertake training in fire prevention and management - All site vehicles to be supplied with appropriate fire control equipment, which will be regularly maintained - Smoking and the use of cigarette lighters only permitted in designated smoking areas. - Develop and implement hazardous materials storage, handling and disposal procedures. - Hot works permits will be followed at all times - Implementation of an emergency response plan	- Inspection of firefighting equipment to ensure availability and compliance with fire safety standards - Inspection of hazard/incident records - Inspection of permit to work system records	Annual or as required during the construction and operation over the life of mine	The Proponent is responsible for creating a Fire Management Plan for the project site and engaging with rangers on fuel reduction program	As above
Indicator: Entrapment of significant fauna individuals					
Minimise loss of or serious injury to conservation significant fauna individuals as a result of entrapment.	- The length of any open trenches will be minimised and backfilled progressively where possible - Duration of open excavations will be minimised and backfilled immediately following completion of construction - Fauna egress and fauna refuge will be installed in all excavations left open overnight - Artificial water sources will have egress points - Trench inspections for fauna and clearance are to be carried out within two hours of sunrise and before sunset unless backfilled, in which case inspection shall precede backfilling, as identified below - Construction crews shall inspect trenches half an hour before backfilling; if trapped fauna are present, a fauna handler will be notified and engaged to assist before backfilling	Trench inspections	Twice daily (morning and afternoon)	The Proponent is responsible for implementing trench inspections	As above
Indicator: Impact on significant fauna individuals (SGARs)					

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Prevent impact on significant fauna individuals from second generation anticoagulant rodenticides (SGARs)	- Use alternative control methods including: - Non-lethal control - Alternative products without second-generation poison - Restrict use of SGARs to only: - Licensed and qualified personnel - Approved methods for use that reduce exposure to significant fauna	- Pest control contract review - Chemical approval record review	Annual review	The Proponent is responsible for implementing the reviews	As above

2.2.6 Priority Flora

Table 2-5: Objective-based Provisions – Flora and Vegetation: Priority Flora

Flora and Vegetation – Priority Flora					
EPA objective: To protect flora and vegetation so that biological diversity and ecological integrity are maintained Key environmental values: Priority flora species and habitat Key impacts and risks: Potential adverse impacts on Priority flora and habitat due to clearing, introduction of weeds and indirect impacts such as dust.					
Objective-based Provisions					
Objective: Minimise direct and indirect impacts to Priority flora species as a result of the Project					
Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Loss of Priority flora individuals and habitat as a result of the Project					
Minimise loss (clearing) of Priority flora individuals and habitats.	- Known locations of native vegetation will be included in the Proponent's GIS system to ensure impacts are minimised and adhere to authorised extents - Where practicable, clearing will be minimised during construction and will be undertaken in areas required for future use - Clearing will only occur within approved areas - A Winu Topsoil Management Procedure will be developed and implemented during construction and operations - Vehicles and machinery to remain on approved and/or existing tracks - Undertake remediation and rehabilitation of areas that are temporarily disturbed during construction and operations - Minimise risk of pollution by significant spills or leaks of hazardous material by ensuring: - All non-explosive hazardous materials will be managed in accordance with regulations and standard operating procedures for transport, handling and storage as per the requirements of AS-1940 and the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 - All explosives will be managed in accordance with regulations and standard operating procedures for transport, handling and storage as per the requirements of AS-2187 and the Dangerous Goods Safety (Explosives) Regulations 2007 - Hazardous materials are to be provided and stored in sealed, labelled containers without leaks - All vehicles and equipment to be cleaned in designated wash bays fitted with suitable pollution control equipment - A Winu Spill Response Management Plan will be developed and implemented during construction and operations	- Land clearing reconciliation (against GIS exclusion and disturbance layers) - Aerial image capture (e.g. satellite or Remotely Piloted Aircraft) - Annual review of internal incident reporting and internal approval request process	- Regular inspections during vegetation clearing activities - Annual clearing reconciliation - Bi-annual imagery captures and analysis	The Proponent and clearing contractor(s)	- Assessment and achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR or as required by the Ministerial Statement condition - If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required
Indicator: Increased weed diversity and/or abundance					
Ensure a prompt response to all weed identification within Management Area 2 and 3.	Treatment of identified weeds either by application of appropriate herbicide and/or manual extraction from the ground	- Record any weeds identified - Record any weed treatment - Include previously identified weed locations in targeted weed surveys	- Treatment of weeds to occur as soon as practicable - Bi-annual targeted weed monitoring	The Proponent is responsible for weed management	As above

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Increased weed diversity and/or abundance					
Minimise the spread of weeds in Management Area 1 (RAC within Wallal Downs pastoral lease)	Undertake weed monitoring within Management Area 1	- Undertake targeted weed monitoring - Opportunistic monitoring	- Annual targeted weed monitoring - Opportunistic weed monitoring	Personnel moving through and entering site Management Area 1	As above
Indicator: Increased weed diversity and/or abundance					
Minimise the entry and spread of weeds in Management Area 2 (RAC east of Wallal Downs pastoral lease to MIA)	- Active guidance from and participation of the Nyangumarta Traditional Owner group representatives, including the installation of a washdown facility at the intersection of Management Area 2 and the Wallal Downs Pastoral Lease, which will include: - Vehicle inspection and washdown before entry to Management Area 2 - Equipment inspection and washdown before entry to Management Area 2	- Review of vehicle and equipment weed inspections - Undertake targeted weed monitoring - Opportunistic weed monitoring	- Vehicle and equipment wash and inspections before entry to Management Area 2 - Opportunistic weed monitoring - Annual targeted weed monitoring	Personnel moving through and entering Management Area 2	Nyangumarta Traditional Owner group representatives will report to WSPL
Indicator: Increased weed diversity and/or abundance					
Prevent the introduction and spread of weed species Management Area 3 (MIA and Rimfire). No decline in mapped vegetation condition due to the presence of weeds in Management Area 3	- Undertake weed inspections on all vehicles and equipment coming into Management Area 3 - Vehicle washdown before entry to the Management Area 3 (will occur at the entry to Management Area 2) - Include weed checks in routine work area inspections - Undertake targeted weed monitoring within the Management Area 3, including around the infiltration ponds - Personnel to report any weed sightings - Weed hygiene measures for incoming personnel - Weed management measures in personnel inductions	- Review of vehicle and equipment weed inspections - Record any weeds identified - Undertake targeted weed monitoring - Review of personnel weed hygiene measures	- Vehicle and equipment wash and inspections before entry to Management Area 3 (will occur at the entry to Management Area 2) - Weed hygiene practices and inductions carried out upon mobilisation of personnel to site - Work area inspections as per schedule - Bi-annual targeted weed monitoring	- Construction workers (especially machinery operators and clearing contractors) - Personnel moving through and entering Management Area	As above
Indicator: Degradation of vegetation and flora as a result of increased dust emissions					
No vegetation health impacts on retained vegetation and Priority flora habitats resulting from dust.	- RAC will be sealed to minimise dust emissions - Fixed plant dust suppression to be included in the design - Appropriate dust controls (including but not limited to water carts, non-toxic stabilisers, speed limits, progressive rehabilitation or other) to be implemented throughout construction and operations as required to prevent and minimise dust impacts to the surrounding environment - Vehicles will be required to travel at designated operating speeds on all roads and will be restricted from accessing rehabilitated surfaces except for management purposes	Dust monitoring and flora monitoring to ensure the health of flora	As required during construction and operation over the life of mine	- The Proponent is responsible for fixed plant dust suppression - All site personnel responsible for adhering to road rules when on the site	- Assessment and achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR or as required by the Ministerial Statement condition - If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required
Indicator: Degradation of vegetation and flora as a result of increased groundwater levels associated with infiltration ponds and Managed Aquifer Recharge (MAR)					

Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
No vegetation health impacts on vegetation and Priority flora within the mounding contour	- Surplus clean water from operations will be directed into a clean water dam (CWD). Where surplus water cannot be managed in the CWD, MAR (preferentially) and infiltration ponds will be used. - Develop targeted vegetation health monitoring around the infiltration ponds and MAR borefield to assess vegetation stress within the modelled 10 mbgl mounding contour	Vegetation health monitoring	As required during the use of the infiltration ponds and MAR	The Proponent is responsible for undertaking vegetation health monitoring	- Assessment and achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR or as required by the Ministerial Statement condition - If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required
Indicator: Introduction of invasive fauna species within the Development Envelope					
Control any introduction of invasive fauna so that it does not impact on Priority flora habitat within Management Area 3	- No domestic animals are permitted within the Management Area 3 - Undertake feral fauna control within Management Area 3, with active guidance from and participation of the relevant Traditional Owner group representatives - Install and maintain fencing around landfills and, where appropriate, water storage areas and infiltration ponds - Establish designated points to assess feral fauna presence	- Feral fauna species survey to monitor presence within Management Area 3 - Inspect feral fauna species records, including sightings, encounters and fauna removal	Annual or as required during construction and operation over the life of mine	- The Proponent is responsible for developing a feral fauna management - Inductions to communicate important information to site personnel, if deemed necessary	As above
Indicator: Project initiated wildfires within the Development Envelope					
Minimise any change in bushfire frequency or intensity as a result of the Project.	- Develop and implement the Fire Management Plan. Key actions may include, but not be limited to: - Implementation of an emergency response plan - In conjunction with Traditional Owners, undertake fire land management activities (firebreaks, cold burns etc.) - Equip fire control equipment in vehicles and in fire-risk areas - Restrict open fires within the Development Envelope at all times - All relevant construction and operational personnel to undertake training in fire prevention and management - All site vehicles to be supplied with appropriate fire control equipment, which will be regularly maintained - Smoking and the use of cigarette lighters only permitted in designated smoking areas - Develop and implement hazardous materials storage, handling and disposal procedures - Hot works permits will be followed at all times	- Inspection of firefighting equipment to ensure availability and compliance with fire safety standards - Inspection of hazard/incident records - Inspection of permit to work system records	Annual or as required during the construction and operation over the life of mine	The Proponent is responsible for creating a Fire Management Plan for the project site and engaging with rangers on fuel reduction program	As above

2.2.7 Groundwater dependent vegetation (GDV)

Table 2-6: Objective-based Provisions – Groundwater dependent vegetation

Flora and Vegetation – Groundwater dependent vegetation					
Objective-based Provisions					
Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting
Indicator: Loss of groundwater dependent vegetation due to groundwater extraction					
Minimise loss or degradation of groundwater dependent vegetation	- Develop and implement a Groundwater Operating Strategy that includes: - Monitoring and reporting protocols - Establishment of Trigger/Threshold levels to safeguard potential groundwater dependent vegetation. - Management actions for trigger and threshold criteria including limiting groundwater extraction - Adaptive management - Develop and implement a vegetation health monitoring plan including: - Baseline vegetation health of potential GDV - Monitoring and reporting protocols - Establishment of Trigger/Threshold levels to safeguard potential groundwater dependant vegetation. - Management actions for trigger and threshold criteria to detect and avoid impacts to GDV - Monitoring parameters and methods - Adaptive management	- Groundwater monitoring - Vegetation health monitoring - Trigger and threshold	- Groundwater operating strategy developed prior to operation of the Rimfire borefield - Baseline data to support groundwater operating strategy and vegetation health monitoring to commence 2 years prior to commencement of groundwater extraction from the Rimfire Borefield	The Proponent is responsible for developing and implementing an Operating Strategy	- Assessment and achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR and annual performance reports for the Operating Strategy, or as required by the Ministerial Statement condition - If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR and annual performance reporting will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required

2.2.8 Subterranean Fauna

Table 2-6: Objective-based Provisions – Stygofauna

Subterranean fauna – Stygofauna					
Objective-based Provisions					
Management Target	Management Actions	Monitoring	Timing/Frequency	Responsible	Reporting

Indicator: Loss of stygofauna due to groundwater extraction					
Minimise loss or degradation of stygofauna	- Develop and implement a Groundwater Operating Strategy that includes: - Monitoring and reporting protocols - Establishment of Trigger/Threshold levels to safeguard stygofauna. - Management actions for trigger and threshold criteria including limiting groundwater extraction - Adaptive management - Develop and implement stygofauna monitoring plan including: - Monitoring and reporting protocols - Monitoring parameters and methods	- Groundwater monitoring - Stygofauna monitoring - Trigger and threshold	- Groundwater operating strategy developed prior to operation of the Rimfire borefield - Baseline data to support groundwater operating strategy to commence 2 years prior to commencement of groundwater extraction from the Rimfire Borefield - Stygofauna monitoring plan developed prior to operation of the Rimfire borefield	The Proponent is responsible for developing and implementing an Operating Strategy	- Assessment and achievement of the management targets and implementation of management actions will be reported annually in the ACR/ACAR and annual performance reports for the Operating Strategy, or as required by the Ministerial Statement condition - If the management targets were not met or management actions were not implemented during the reporting year, the ACR/ACAR and annual performance reporting will include a discussion of remedies undertaken, including on the effectiveness of management actions and whether revision is required

2.3 Reporting

For each calendar year, during the operational phase, the environmental outcomes and objectives will be reported against their associated management actions and targets in the Annual Compliance Assessment Report (ACAR) for the Project (Table 4-2).

In the event that management targets are not met during the reporting period, the ACAR will include a description of the effectiveness of any management contingency actions that have been implemented to manage the impact.

A stand-alone report will also be produced for DWER within 21 days of any reported non-achievement of a management target. A follow up report detailing the adequacy of the response actions will also be submitted to DWER within 12 months of the initial notification.

2.4 Environmental Training

The Proponent is responsible for ensuring that all personnel (including contractors, subcontractors and visitors) involved with the Project are aware of the environmental risks and potential impacts of their activities on site. All personnel should receive environmental training relevant to their role within the Project to ensure they understand their responsibilities when on site to ensure compliance with this EMP. The training should be tailored to the role of the individual in the Project.

2.4.1 Personnel Selection, Competency and Training

All personnel to be engaged will be competent to perform tasks that could impact environment-related matters within the workplace. Environmental training and awareness ensure the capability of personnel, especially those carrying out specialised environmental management functions, to understand all environmental plans, procedures and reporting.

The Proponent is responsible for employing personnel with the relevant competencies for the individual tasks and for retaining copies of all documentation regarding environmental reporting. A competent person is defined as one whom, because of training, education and/or experience:

- Is capable of identifying existing or potential environmental impacts in the job being performed
- Is capable of identifying working conditions that have the potential to be harmful to the environment.

The relevant supervisor designates the competent persons, evaluates their performance and ensures that a competent person is available for the required activity.

2.4.2 Inductions

The Proponent is responsible for ensuring that all personnel (including any visitors) are inducted such that they are aware of the environmental hazards present. Ongoing instruction shall be provided as required via training packages, toolbox meetings and the like. All inductions shall be recorded.

Site inductions will contain an extensive section on the Project's environmental obligations and commitments. This includes but is not limited to:

- Key environmental management aspects of this EMP
- Rio Tinto HSE Policies
- Information on management responsibilities for environmental receptors that may occur within or in proximity to the work areas
- Incident response
- Reporting requirements.

2.4.3 Personnel Training

All personnel associated with the Project shall undergo basic environmental management training as part of the initial safety and environmental induction to inform them of their responsibilities. Personnel will be provided with more intensive training according to their role and accountability. The training will

be modular and will include information on management systems, waste management, ground disturbance procedures and construction.

All employees (including contractors) shall receive awareness instruction in the following areas:

- Environmental policies
- This EMP and any related documents
- Site environmental objectives and targets
- Understanding the regulatory requirements applying to the Project and their consequent responsibilities as a member of the Project team
- Significant Project aspects, impacts and controls as detailed in this EMP
- Potential consequences of departure from procedures
- Emergency procedures and responses
- Identification of their legal obligations.

Personnel performing tasks that have the risk of causing significant environmental impacts shall receive additional induction and training in a modular format to further inform them of particular requirements, risks and controls or must be certified as having completed induction and training processes, and/or having gained appropriate experience, before undertaking such tasks.

2.4.4 Training Records

All training will be recorded, including the following details:

- The purpose of the training
- The person receiving the training
- The date the training was received
- The name of the person (or organisation) conducting the training.

2.5 Roles and Responsibilities

This section defines the roles and responsibilities of personnel in charge of the project's environmental management. Everyone – including contractors, sub-contractors, persons on secondment and visitors – is responsible for complying with environmental management requirements and ensuring that any action or inaction of their part does not result in harm to the environment.

The Proponent is responsible for the environmental aspects of works at the Project. Organisational responsibility for achieving the EMP outcomes and objectives rests ultimately with the Proponent's Project Management Teams. However, that responsibility passes successively through functional managers to supervision and to all employees, contractors and service providers. Contractors shall ensure environmental management responsibilities and designated authority levels are well understood before commencing work on site.

All personnel are required to work in consultation with each other and to the full extent of their respective authorities to pro-actively identify, assess and control possible environmental aspects and impacts associated with the Project.

The responsibilities and authorities of the major project roles are summarised in Table 2-6 below. At a minimum, each of these roles is expected to be filled for the Project. Some personnel may be responsible for more than one role on occasion.

Table 2-6: Environmental Management Roles and Responsibilities

Role	Responsibilities
General Manager	The General Manager, as head of the WSPL Team for the Project, is responsible for promoting environmental awareness across the team by providing sufficient and adequate resources (qualified personnel, technical, financial, etc.) for proper implementation and to ensure that all Project activities comply and are in line with the conditions as described in this EMP and with the contractual and statutory requirements.
Project Manager	The Project Manager is responsible to promote environmental awareness within their work by providing sufficient and adequate resources (qualified personnel, technical, financial etc.) for proper implementation and to ensure that all Project activities comply and are in line with the conditions as described in this EMP and with the contractual and statutory requirements. They will continuously monitor the effectiveness of the implemented EMP and confirm that all project employees fully and correctly understand the Project environmental requirements. The Project Manager will ensure the availability of resources essential to establish, implement, maintain and improve the EMP. Resources include human resources and specialised skills, organisational infrastructure, technology, specialised subcontractors and financial resources.
Site Supervisors	Supervisory personnel are responsible for the operational and environmental aspects of the work performed under their supervision. They shall provide guidance and direction and lead by example in their day-to-day supervisory roles. They are responsible for carrying out the following tasks: • Responsible for the monitoring and implementation of work instructions/procedures that concerns environmental issues • Carry out appropriate quality, safety and environmental monitoring under their responsibility • Ensure that all person under their control, including subcontractors, service providers and visitors, have received adequate information, training and briefing in their task or function and are aware of all applicable environmental aspects and their subsequent conditions and necessary precautions and restrictions that have to be observed • Organise, attend and regularly hold toolbox meetings that include environmental topics • Investigate environmental incidents within the workplace and propose measures to prevent similar incidents from occurring in the future • Seek the advice of the environmental advisors as required • Check if the distribution of the tasks and responsibilities occur in a way that the tasks are carried out by employees who have the required competencies, skills and have received the required instructions and training
Environment Advisors	The Environment Advisors and relevant environmental resources are responsible for preparing, implementing and updating the EMP. During the execution of the works, the site team manages day to day issues associated with all aspects of environmental management within the scope of works. The Environment advisors are tasked with advising Project Management on all environmental requirements as needed, and contractual issues related to the environment and reporting of any activities that require additional mitigation measures. The Environment advisors will perform site inspections along with others in the team and conduct investigation in case of incidents and non-conformances. Tasks for the Environment advisor include but are not limited to the following: • Advice and assurance on the prevention of environmental impacts, including the application of environmental procedures as outlined in this EMP • Handle any changes in legislation relative to environmental issues and ensure procedures and controls adequately address any changes • Assist project personnel to monitor environmental performance and key indicators and compile reports for Project Management review • Support the team to complete appropriate environmental monitoring through audits, inspections and testing and report to the Project Manager on progress and completion of actions identified

Role	Responsibilities
	• Advise on, arrange and as needed present appropriate environmental training • Determine causes(s) of any environmental accident(s)/incident(s) and recommend means of preventing recurrence • Conduct environmental impact assessments with relevant parties to identify potential negative impacts on the environment • Consult with relevant parties on environmental issues • Review this EMP and associated management plans and procedures
Project Personnel	All Project Personnel are required to adhere to all environmental procedures and plans as specified in this EMP. All personnel have the following responsibilities and obligations: • To comply with the instruction and recommendations given for environmental issues at the workplace by the employer at the workplace • 'Stop Work Authority' – whereby everyone has the right and responsibility to challenge or refuse work in workplace conditions that are harmful to themselves, others or the environment • To perform all tasks in a way that does not impact the surrounding work environment beyond the approved activities and impacts • To immediately inform the employer of all work situations which they reasonably presume entails an immediate danger and/or could have a negative and harmful impact on the environment • Attend and participate in all environmental trainings (i.e. inductions, toolbox meetings, external training, safety drills, etc.)
Service Providers and Contractors	While working on the Project all service providers and contractors are required to adhere to this EMP, including all environmental work procedures and plans. As part of the Project team, subcontractors and service providers have the following responsibilities and obligations: • Perform all tasks in a way that will not negatively impact the surrounding work environment beyond the approved activities and impacts • To comply with the instruction given for environmental issues at the workplace by the employer and/or contract's manager at the workplace • To practice 'Stop Work Authority' whereby they can challenge or refuse to work in workplace conditions that are harmful to themselves, others or the environment • To immediately inform the Site Supervisor of all work situations which they responsibly presume entails an immediate danger and/or could have a negative and harmful impact on the environment All service providers will be placed under the supervision of a Site Supervisor. This is to ensure that all workers comply with all onsite environmental requirements and proper communications lines are set up.
Visitors	All visitors to the Project must be introduced to the environmental aspects and regulations via an induction process. It is the responsibility of each visitor to adhere to the following requirements when on site: • Participate in visitor inductions prior to being allowed on site • Comply with all site environmental management requirements • Follow all instructions provided to them by their escort or sponsor • Report all environmental hazards and incidents to their escort or sponsor

3. ADAPTIVE MANAGEMENT AND REVIEW OF THIS EMP

The conceptual framework for the development of Rio Tinto EMPs provides details of the review and adaptive management process. The approach will include the evaluation of the following:

- Monitoring data and comparison to baseline and reference site data on a regular basis to verify responses to potential impacts
- The effectiveness and relevance of management actions and targets against environmental objectives, on an annual basis, to determine if any changes to actions, targets or monitoring are required
- Based on the review process results, the Proponent will update and adjust the management measures and strategies in consultation with relevant Commonwealth and State Government agencies (Table 4-3).

4. STAKEHOLDER CONSULTATION

Consistent with the DCCEE and DWER expectations for this EMP to align with the principles of EIA, the Proponent will consult with stakeholders, including but not limited to the Department of Biodiversity, Conservation and Attractions - Park and Wildlife Service and the DWER EPA Services and Compliance and Reporting during the environmental impact assessment of the Project. The Environmental Review Document outlines the substantive consultation across a range of Stakeholders. Future consultation outcomes will be contained in Table 4-1 below.

Stakeholder consultation undertaken is detailed in Table 4-1.

Table 4-1 Stakeholder Consultation

Stakeholder	Date	Issue/Topic Raised	Proponent Response/ Outcomes
TBA			

Table 4-2: Winu Project Environmental Management Plan Reporting Table

Key Environmental Factors: Terrestrial Fauna - Greater Bilby	
Environmental outcomes and objectives with associated management targets	Reporting periods: Annual (dates TBC)
<u>Trigger Criteria</u>	Status report: Trigger criteria not exceeded Trigger criteria exceeded
Reduction in critical Bilby habitat extent greater than 4,048 ha (within 10% of the threshold criterion) as a result of direct disturbance (clearing)	
<u>Threshold Criteria</u>	Status report: Trigger criteria not exceeded Trigger criteria exceeded
- Reduction in critical Bilby habitat extent equal to or greater than 4,498 ha as a result of direct disturbance (clearing) - Ground disturbance or clearing activities occur outside the approved clearing boundary	
<u>Management Targets</u>	Status report: Management target achieved Management actions implemented Management target not achieved Management actions not implemented
Minimise loss or degradation of Greater Bilby habitat within the Development Envelope	

Key Environmental Factor: Terrestrial Fauna – Grey Falcon and Migratory Birds	
Environmental outcomes and objectives with associated management targets	Reporting periods: Annual (dates TBC)
<u>Management Targets</u>	Status report: Management target achieved Management actions implemented Management target not achieved Management actions not implemented
Minimise Grey Falcon and Migratory bird interactions with wind turbines	

Key Environmental Factor: Terrestrial Fauna – Conservation Significant Fauna	
Environmental outcomes and objectives with associated management targets	Reporting periods: Annual (dates TBC)
<u>Management Targets</u>	Status report: Management target achieved Management actions implemented Management target not achieved Management actions not implemented
Minimise loss or degradation of fauna habitat	
Minimise fauna interaction with vehicles and machinery	
Reduce indirect impacts on retained vegetation and fauna habitat resulting from dust	
Minimise impacts to fauna as a result of increased light and noise	
Ensure a prompt response to all weed identification within the Management Area 2 and 3	
Minimise the spread of weeds in Management Area 1	
Minimise the entry and spread of weeds in Management Area 2	

Key Environmental Factor: Terrestrial Fauna – Conservation Significant Fauna	
Prevent the introduction and spread of weed species within Management Area 3	
Control any introduction of feral fauna to minimise impacts on fauna populations and habitat in Management Area 3	
Minimise any change in bushfire frequency or intensity as a result of the Project	
Minimise loss of or serious injury to conservation significant fauna individuals as a result of entrapment	

Key Environmental Factor: Flora and Vegetation – Priority Flora	
Environmental outcomes and objectives with associated management targets	Reporting periods: Annual (dates TBC)
<u>Management Targets</u>	Status report: Management target achieved Management actions implemented Management target not achieved Management actions not implemented
Minimise loss (clearing) of Priority flora individuals and habitats	
Ensure a prompt response to all weed identification within the Management Area 2 and 3	
Minimise the spread of weeds in Management Area 1	
Minimise the entry and spread of weeds in Management Area 2	
Prevent the introduction and spread of weed species within Management Area 3	
No visible vegetation health impacts on retained vegetation and Priority flora habitats resulting from dust	
Control any introduction of invasive fauna so that it does not impact on Priority flora habitat within Management Area 3	
Minimise any change in bushfire frequency or intensity as a result of the Project	

Key Environmental Factor: Flora and Vegetation – Groundwater dependent vegetation	
Environmental outcomes and objectives with associated management targets	Reporting periods: Annual (dates TBC)
<u>Management Targets</u>	Status report: Management target achieved Management actions implemented Management target not achieved Management actions not implemented
Minimise loss or degradation of groundwater dependent vegetation	

Key Environmental Factor: Subterranean fauna – Stygofauna	
Environmental outcomes and objectives with associated management targets	Reporting periods: Annual (dates TBC)
<u>Management Targets</u>	Status report: Management target achieved Management actions implemented Management target not achieved Management actions not implemented
Minimise loss or degradation of stygofauna	

Table 4-3: Change Register for the Winu Project EMP

Complexity of Changes	Minor Revisions ☐	Moderate Revisions ☐	Major Revisions ☐
Number of Key Environmental Factors	One ☐	Two – Three ☐	> Three ☐
Date Revision submitted to EPA: DD/MM/YYYY			

Proponent's Operational Requirement Timeframe for approval of revision for Timeframe:				
< One Month ☐ < Six Months ☐ > Six Months ☐ None ☐ Reason				
Item No.	EMP Section No.	EMP Page No.	Summary of Change	Reason for Change

5. REFERENCES

Biota 2025, *Winu Project Night Parrot Impact Assessment*, Report prepared for Prepared for Rio Tinto Winu Pty Ltd.

Biota 2026a, *Winu Project Bilby Abundance Study 2025*, Prepared for Rio Tinto Winu Pty Ltd.

Biota 2026b, *Winu Project Vertebrate Fauna Consolidation Report*, Report prepared for Prepared for Rio Tinto Winu Pty Ltd.

Biota 2026c, *Winu Project Rimfire Borefield Stygofauna Assessment 2026*, Report prepared for Prepared for Rio Tinto Winu Pty Ltd.

Department of Biodiversity, Conservation and Attractions (DBCA) 2024, 'Guidelines for Determining the Likely Presence and Habitat Usage of Night Parrot (*Pezoporus occidentalis*) in Western Australia'.

Department of Climate Change, Energy, Environment and Water (DCCEEW) 2023, *National Light Pollution Guidelines for Wildlife*, Australian Government, Canberra, Available from: <https://www.dcceew.gov.au/sites/default/files/documents/national-light-pollution-guidelines-wildlife.pdf>.

Department of Climate Change, Energy, Environment and Water (DCCEEW) 2024, *Environmental Management Plan Guidelines*, Australian Government, Canberra.

Environmental Protection Authority (EPA) 2021, *Environmental Outcomes and Outcomes-based Conditions Interim Guidance*, Western Australia.

Environmental Protection Authority (EPA) 2024a, *Instructions: How to Prepare Environmental Protection Act 1986 Part IV Environmental Management Plans*, Western Australia.

Environmental Protection Authority (EPA) 2024b, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures*, Western Australia.

Environmental Protection Authority (EPA) 2024c, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual*, Western Australia.

Richardson Consulting 2026, *Winu Ecohydrology Assessment - initial findings*, Report prepared for Memo Report Prepared for: Winu Services Pty Ltd.

Western Botanical 2026, *Consolidated Detailed Flora and Vegetation Assessment of the Winu Project, June 2026*, Report prepared for Prepared for Rio Tinto Winu Pty Limited.

Winu Services Pty Ltd (WSPL) 2026, *Winu Project Environmental Review Document*.

6. APPENDICES

Appendix 1: Summary of Assessment for Required Management Zone

Each environmental value, described in Section 1.3, was assigned a management zone based on matrix level assessment. A summary of the assessment for the Project, which takes into account information provided in Table 1-2 and Table 1-3 is provided in the table below, along with the resulting management zone for each environmental value relevant to this EMP.

The assessment considers all impacts collectively (direct and indirect) and assigns against the highest level of management zone.

Table A-1: Summary of assessment for assignment of management zone.

Environmental Value	Predicted and Potential Impact/s	Assessment				Management Level/Zone
		Likelihood	Consequence	Extent	Duration	
Terrestrial Fauna – Conservation Significant Fauna Habitat						
MNES -Tier 1	Vegetation Clearing (direct impact)	ALMOST CERTAIN (occurs >2 times/year) 5	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
MNES -Tier 1	Bushfire (direct impact)	UNLIKELY (Typically occurs in 10-100 years) 2	MAJOR Potential impact on Tier 1 values 4	LOCAL Impact restricted to the local area (>2km but <10km from Development Envelope) 3	MONTHS 2	MODERATE
MNES -Tier 1	Artificial light (indirect impact)	ALMOST CERTAIN (occurs >2 times/year) 5	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
MNES -Tier 1	Noise (indirect impact)	ALMOST CERTAIN (occurs >2 times/year) 5	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
MNES -Tier 1	Dust (indirect impact)	POSSIBLE (Typically occurs in 1-10 years) 3	MAJOR Potential impact on Tier 1 values 4	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	DECADES 4	MODERATE
MNES -Tier 1	Weeds (indirect impact)	LIKELY (occurs 1-2 times/year) 4	MAJOR Potential impact on Tier 1 values 4	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	DECADES 4	MODERATE
MNES -Tier 1	Invasive predators (indirect impact)	POSSIBLE (Typically occurs in 1-10 years) 3	MAJOR Potential impact on Tier 1 values 4	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	DECADES 4	MODERATE
Terrestrial Fauna – Greater Bilby						
MNES -Tier 1	Habitat loss (direct impact)	ALMOST CERTAIN (occurs >2 times/year) 5	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
MNES -Tier 1	Injury or mortality from vehicles or machinery (direct impact)	POSSIBLE (Typically occurs in 1-10 years) 3	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE

Environmental Value	Predicted and Potential Impact/s	Assessment				Management Level/Zone
		Likelihood	Consequence	Extent	Duration	
Terrestrial Fauna – Black-footed Rock-wallaby and Northern Quoll						
MNES -Tier 1	Habitat loss (direct impact)	UNLIKELY (Typically occurs in 10-100 years) 2	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	LOW
MNES -Tier 1	Injury or mortality from vehicles or machinery (direct impact)	UNLIKELY (Typically occurs in 10-100 years) 2	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	LOW
Terrestrial Fauna – Grey Falcon and Migratory Birds						
MNES -Tier 1	Habitat loss (direct impact)	UNLIKELY (Typically occurs in 10-100 years) 2	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	LOW
MNES -Tier 1	Mortality from interactions with wind turbines (direct impact)	POSSIBLE (Typically occurs in 1-10 years) 3	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
Terrestrial Fauna – Night Parrot						
MNES -Tier 1	Habitat loss (direct impact)	UNLIKELY (Typically occurs in 10-100 years) 2	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	LOW
MNES -Tier 1	Injury or mortality from vehicles or machinery (direct impact)	UNLIKELY (Typically occurs in 10-100 years) 2	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	LOW
MNES -Tier 1	Artificial light (indirect impact)	ALMOST CERTAIN (occurs >2 times/year) 5	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
MNES -Tier 1	Noise (indirect impact)	ALMOST CERTAIN (occurs >2 times/year) 5	MAJOR Potential impact on Tier 1 values 4	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
Flora and Vegetation – Priority Flora Habitat						
Tier 2	Vegetation Clearing (direct impact)	ALMOST CERTAIN (occurs >2 times/year) 5	SERIOUS Potential impact on Tier 2 values 3	IMMEDIATE Localised impact confined to the Development Envelope 1	DECADES 4	MODERATE
Tier 2	Bushfire (direct impact)	UNLIKELY (Typically occurs in 10-100 years) 2	SERIOUS Potential impact on Tier 2 values 3	REGIONAL Impacts occurring at a significant distance from the Project (>50km of Development Envelope) or multiple impacts within the Catchment	MONTHS 2	MODERATE

Environmental Value	Predicted and Potential Impact/s	Assessment				Management Level/Zone
		Likelihood	Consequence	Extent	Duration	
				5		
Tier 2	Toxins / Poison: Direct and indirect contact via bio-accumulation	UNLIKELY (Typically occurs in 10-100 years) 2	SERIOUS Potential impact on Tier 2 values 3	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	DECADES 4	MODERATE
Tier 2	Introduction of weeds (indirect impacts)	POSSIBLE (Typically occurs in 1-10 years) 3	SERIOUS Potential impact on Tier 2 values 3	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	YEARS 3	MODERATE
Tier 2	Dust (indirect impact)	LIKELY (occurs 1-2 times/year) 4	MEDIUM Potential impact on Tier 3 values 2	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	MONTHS 2	LOW
Flora and Vegetation – Groundwater dependent vegetation						
Tier 2	Groundwater extraction - loss of GDV (indirect impact)	POSSIBLE (Typically occurs in 1-10 years) 3	SERIOUS Potential impact on Tier 2 values 3	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	YEARS 3	MODERATE
Subterranean fauna – Stygofauna						
Tier 2	Groundwater extraction - loss of stygofauna (indirect impact)	POSSIBLE (Typically occurs in 1-10 years) 3	SERIOUS Potential impact on Tier 2 values 3	SURROUNDS Impact restricted to immediately adjacent to the Development Envelope (within ~2km) 2	YEARS 3	MODERATE

