



Environmental Management Plan

Environmental Management Plan

Bonney Downs Wind Farm

17 February 2026

549PG-5692--EN-0001

Rev 0



EPBC Number	TBC
Project Name	Bonney Downs Wind Farm
Proponent / Approval Holder	Pilbara Energy (Generation) Pty Ltd
ABN of Approval Holder	31 631 303 305
Proposed Action	The Proposed Action is for the construction and operation of a renewable energy wind farm, to power the Fortescue mining operations in the Pilbara region of Western Australia.
Location of the Action	The Proposal is located approximately 9 km southwest of Nullagine (at the northern extent of the Proposal) in the Shire of East Pilbara and Palyku Native Title determination area.
Date of Preparation	17 February 2026

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.

Signed:

Date:

Full name: Matt Dowling

Organisation: Pilbara Energy (Generation) Pty Ltd



EXECUTIVE SUMMARY

Table E-1 Executive Summary Table

Proposal name	Bonney Downs Wind Farm.
Proponent name	Pilbara Energy (Generation) Pty Ltd (PEG).
Ministerial statement number/s	Not applicable (yet to be granted).
Purpose of the EMP	To outline how the environmental impacts of the Proposal will be monitored, reported and managed for the following environmental factors: Flora and Vegetation ¹ and Terrestrial Fauna ² .
Key environmental factor/s	<ul style="list-style-type: none"> • Flora and Vegetation: To protect flora and vegetation so that biological diversity and ecological integrity are maintained. • Terrestrial Fauna: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained. • Social Surroundings: To protect social surroundings from significant harm.
Outcomes	<p>Flora and Vegetation</p> <p>FV-1 Environmental Outcome: Clearing no more than 910.26 ha of native vegetation (including 881.32 ha of 'Good to Excellent') within DE, of which no less than 480.81 ha will be rehabilitated.</p> <p>FV-2 Environmental Outcome: The implementation of the Proposal will not result in the change of conservation status of identified conservation significant vegetation, i. Including:</p> <ul style="list-style-type: none"> • Direct disturbance of no more than 76.65 ha of 'Four plant assemblages of the Wona Land System' PEC (P1), • Direct disturbance of no more than 9.61 ha of potential 'Four plant assemblages of the Wona Land System' PEC (P1), • Direct disturbance of no more than 3.13 ha of groundwater dependent vegetation, • Direct disturbance of no more than 4.20 ha of potential groundwater dependent vegetation, • Direct disturbance of no more than 82.47 ha of habitat for significant Priority flora species, including: <ul style="list-style-type: none"> o 22.62 ha of Area 1 (VfAI), o No disturbance of Area 2 (VfAI) o 8.19 ha of Area 3 (VfAI), o 47.02 ha of Area 4 (EIAbTI), o 4.64 ha of Area 5 (EIGwTe), and o No disturbance of Area 6 (VfAI) <p>FV-3 Environmental Outcome: No direct or indirect disturbance to the Threatened flora species <i>Quoya zonalis</i>.</p> <p>FV-4 Environmental Outcome: The implementation of the Proposal will not result in the change of conservation status of identified conservation significant flora species, including:</p> <ul style="list-style-type: none"> • No more than 0.4% of <i>Paspalidium retiglume</i> (P2) will be cleared, • No more than 5.3% of <i>Neptunia longipila</i> (P3) will be cleared, • No more than 3.1% of <i>Dolichocarpa</i> sp. Hamersley Station (A.A. Mitchell PRP 1479) (P3) will be cleared, • No more than 4.0% of <i>Euphorbia inappendiculata</i> var. <i>queenslandica</i> (P3) will be cleared, • No more than 20% of <i>Iotasperma sessilifolium</i> (P3) will be cleared,



	<ul style="list-style-type: none"> • No more than 2.0% of <i>Swainsona thompsoniana</i> (P3) will be cleared, • No more than 0.5% of <i>Ptilotus mollis</i> (P4) will be cleared, <p>FV-5 Environmental Objective: Implementation of the Environmental Management Plan monitor and minimise impacts on flora or vegetation from dust, weed spread, or changes to natural fire patterns when compared with existing environmental conditions.</p> <p>Terrestrial Fauna</p> <p>TF-1 Environmental Outcome: Disturbance of critical fauna habitat not to exceed:</p> <ul style="list-style-type: none"> • Clearing of no more than 1.42 ha of habitat identified as being critical to the survival of the Grey Falcon, • Clearing of no more than 14.95 ha of habitat identified as being critical to the survival of the Northern Quoll, • Clearing of no more than 238.24 ha of habitat identified as being critical supporting to the survival of the Northern Quoll, • Clearing of no more than 27.82 ha of habitat identified as being critical to the survival of the Ghost Bat and PLNB, • Clearing of no more than 27.82 ha of critical habitat for the Pilbara Olive Python within the DE will occur, • Clearing of no more than 281.81 ha of habitat identified as being critical to the survival of the Night Parrot, • Clearing of no more than 1.42 ha of potential Australian Painted Snipe and Common Greenshank dispersal and foraging habitat, and • Clearing of no more than 27.82 ha of habitat identified as being critical to the survival of the Peregrine Falcon. <p>TF-2 Environmental Outcome: Avoidance of habitat suitable for conservation significant fauna. Fauna Habitat Exclusion Zones (FHEZ) have been proposed to minimise impacts on critical fauna habitats and to ensure no disturbance occurs within these areas, these areas include:</p> <ul style="list-style-type: none"> • FHEZ of 5,894.74 ha of Rocky Escarpment habitat (including 1 km buffer), • FHEZ of 5,441.33 ha of Major Drainage Line/River/Creek habitat (including 500 m buffer, which allows for clearing but no turbines to be installed), and • FHEZ of 1,815.59 ha of Hills/Ranges/Plateaux (including 1 km buffer). <p>TF-3 Environmental Objective: Implementation of the Bird and Bat Adaptive Management Plan (BBAMP) to monitor and minimise collision risk impacts to species.</p>
Proposed construction date	Q4 2026
EMP required pre-construction?	Yes <input checked="" type="checkbox"/>

1 Includes culturally significant flora and vegetation.

2 Includes culturally significant fauna.



TABLE OF CONTENTS

1	INTRODUCTION	7
1.1	Proposal Background	7
1.2	Legislative context and definitions	10
1.3	Key Environmental Factors	10
1.4	Potential Impacts.....	18
1.4.1	Flora and Vegetation	18
1.4.2	Terrestrial Fauna	19
1.5	Condition requirements.....	25
1.6	Rationale and approach.....	25
1.6.1	Survey and Study Findings	28
1.6.2	Key assumptions and uncertainties	29
2	MANAGEMENT PLAN COMPONENTS	30
2.1	Management Provisions	30
3	MONITORING	37
3.1	Data handling and statistical analysis	37
4	ADAPTIVE MANAGEMENT AND REVIEW	38
5	STAKEHOLDER CONSULTATION.....	39
6	ENVIRONMENTAL MANAGEMENT ROLES AND RESPONSIBILITIES	40
6.1	Proposal Specific Roles and Responsibilities	41
7	ENVIRONMENTAL TRAINING	42
8	COMMUNICATION	43
8.1	Complaints Procedure	43
8.2	Emergency Response.....	43
9	REFERENCES	44
APPENDIX A	RELEVANT LEGISLATION.....	47
APPENDIX B	ACRONYMS AND DEFINITIONS.....	48



LIST OF TABLES

Table 1-1: Overview of Key Environmental Factors, Existing Environment and Related Proposal Activities.....	11
Table 1-2: Clearing of Fauna Habitat within the Indicative Disturbance Footprint.....	20
Table 1-3: Threatened Species Habitat Clearing within the Development Envelope	21
Table 1-4: Environmental Outcomes and Rationale	25
Table 1-5: Overview of Surveys and Studies Related to the Proposal.....	28
Table 2-1: Measures to Address the Flora and Vegetation Environmental Outcomes	31
Table 2-2: Measures to Address the Flora and Vegetation Environmental Objectives.....	33
Table 2-3: Measures to Address Terrestrial Fauna Environmental Outcomes	35
Table 2-4: Measures to address the Terrestrial Fauna Environmental Objectives	36
Table 5-1: Stakeholder Consultation	39
Table 6-1: EMP Related Roles and Responsibilities	41



1 INTRODUCTION

This Environmental Management Plan (EMP) has been prepared to outline how the environmental impacts on terrestrial fauna species known and potentially occurring within the Bonney Downs Wind Farm, will be monitored, reported and managed for the following environmental factors: Flora and Vegetation; and Terrestrial Fauna. Culturally significant environmental values identified for the Social Surroundings factor will be addressed in the relevant environmental factors identified above.

This EMP forms part of an overarching framework for environmental management for the Proposal and outlines the management actions to be implemented during construction and operation of the Bonney Downs Wind Farm.

This EMP has been prepared in accordance with the Western Australian (WA) Environmental Protection Authority's (EPA) *Instructions: How to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans* (EPA, 2024). Where appropriate, elements of this Plan have also been prepared in line with the Department of Climate Change, Energy, the Environment and Water (DCCEEW) *Environmental Management Plan Guidelines* (DCCEEW, 2024).

1.1 Proposal Background

Pilbara Energy (Generation) Pty Ltd (PEG), a wholly owned subsidiary of Fortescue Limited (Fortescue), is proposing to develop the Bonney Downs Wind Farm (the Proposal), comprising a wind farm and associated supporting infrastructure for power supply (Figure 1).

Separately to this Proposal, Fortescue is developing the Nullagine Pilot Wind Farm (the Pilot) (Figure 1). The Pilot comprises up to 17 wind turbines, 50 km of 220 kV transmission line to Christmas Creek Mine and associated electrical connection works and has been progressed under separate State approvals (Clearing Permit CPS 11067/1 issued under Part V of the Environmental Protection Act 1986 and Mining Development and Closure Plan REG ID 500678 approved under the Mining Act 1978). The Pilot is a stand-alone proof-of-concept project with independent purpose and utility. It will generate operational data and learning to inform future decision-making on larger developments, while also replacing the requirement for diesel powered generators at Christmas Creek. The Pilot received approval for construction and operation in 2025.

For the avoidance of doubt, the Pilot is not a staged "first phase" or component of the Bonney Downs Wind Farm and is excluded from the Bonney Downs referral. Notwithstanding this exclusion, the Bonney Downs Wind Farm may connect to the Pilot 220 kV transmission line at the Pilot's nominated grid connection point.

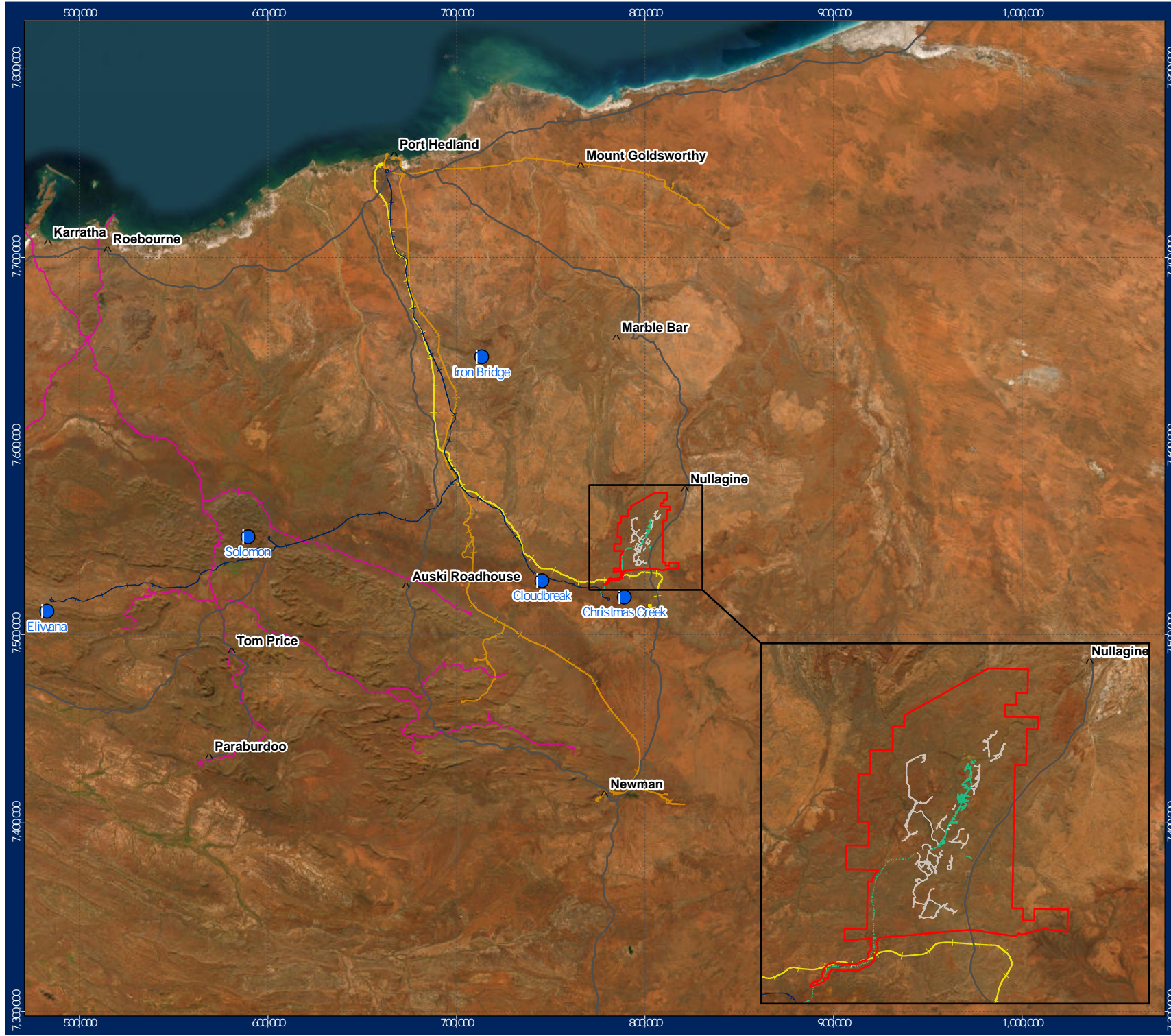
The Bonney Downs wind farm will involve the installation of up to 100 wind turbines and six substations, with a target installed renewable energy capacity of approximately 2.1 GW. The



actual power generation may differ to the target capacity, depending on the efficiency of the turbine equipment once installed and throughout the life of the wind farm.

The Bonney Downs wind farm will also include temporary infrastructure such as fuel storage, construction laydown areas, site offices, and permanent supporting infrastructure such as accommodation camps, operations support offices, communications towers, landfill facilities, and a series of access roads and corridors for overhead electrical reticulation.

Water infrastructure for the Bonney Downs wind farm may be required, including for turkey's nests, abstraction bores and pipelines. Fortescue has an existing 5C groundwater licence (GWL) to take water under the Rights in Water and Irrigation Act 1914 (RIWI Act) (GWL171278(7)) that will be sufficient for the supply of water for construction and operation of the wind farms. The existing production bores will supply the Proposal's construction, operational (i.e., road and corridor maintenance) and potable water (with the use of water treatment) requirements.



- Legend**
- Project Area
 - Indicative Disturbance Footprint (Bonney Downs)
 - Approved Disturbance (Nullagine Pilot Wind Farm)
 - ^ GOV Towns
 - Major Roads
 - + Fortescue Rail
 - + BHP Rail
 - + Rio Tinto Rail
 - + Roy Hill Rail

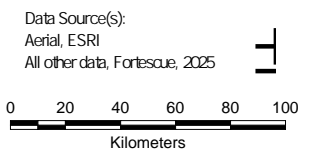


Figure 1-1
 Project Location

Requested By: R. Dorji	Date: 10/02/2026
Drawn By: R. Kerr	Size: A4L
Revised By: rykerr	Revision: 1
Approved By:	Confidentiality: 0
Scale: 1:2,750,000	
Coordinate System: GDA 1994 MGA Zone 50	
Project Name: 45190PO02_MP_EN_0093_BBAMP	
Document Name: 45190PO02_MP_EN_0093_CB8_r0_BBAMP_Location	

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1.2 Legislative context and definitions

Fortescue employees and contractors are obliged to comply with all relevant environmental legislation. Environment legislation directly relevant to this Plan is provided in Appendix A.

Definitions of terms and acronyms used throughout this Plan are provided in Appendix B.

1.3 Key Environmental Factors

This Plan addresses the following key environmental factors relevant to the Bonney Downs Wind Farm (Table 1-1), including:

- Flora and Vegetation (including culturally significant flora), and
- Terrestrial Fauna (including culturally significant fauna).

A summary of the existing environment, activities that may affect the factor, and any applicable site-specific environmental values for these factors are provided in Table 1-1.



Table 1-1: Overview of Key Environmental Factors, Existing Environment and Related Proposal Activities

Key Environmental Factor	Existing Environment	Related Proposal Activities	Site-Specific Environmental Values
Flora and Vegetation	<p>Vegetation</p> <p>The DE lies within the Pilbara Bioregion and the Chichester and Fortescue Subregions defined by the IBRA, Version 7 (DCCEEW, 2023). The Chichester subregion (PIL1) is described by Kendrick and Mckenzie (2001) as “undulating Archaean granite and basalt plains include significant areas of basaltic ranges”. The vegetation within this subregion consists of shrub steppe characterised by <i>Acacia inaequilatera</i> over <i>Triodia wiseana</i> (formerly known as <i>Triodia pungens</i>) hummock grasslands, with <i>Eucalyptus leucophloia</i> tree steppes on ranges.</p> <p>The Fortescue subregion (PIL2) is described by Kendrick (2001) as “Alluvial plains and river frontage”. Extensive salt marsh, mulga-bunch grass, and short grass communities on alluvial plains in the east. Deeply incised gorge systems occur in the western (lower) part of the subregion. River gum woodlands fringe the drainage lines. This subregion is noted as being the northern limit of Mulga (<i>Acacia aneura</i>).</p> <p>Pre-European vegetation mapping based on Beard (1975; 1990) describes five vegetation associations (VAs) within the DE. The DE is predominantly composed of VA 173 (98.34%). The remainder of the DE is comprised of VAs 18, 29, 93 and 562. All other VAs each represent less than 1.0% of the DE.</p> <p>A two-phased detailed flora and vegetation assessment identified 15 vegetation types within the DE based on floristic, cluster analysis and statistical results. Three similar <i>Acacia inaequilatera</i> dominated vegetation types (AiCpTe1, AiCpTe2, and AiSgTb) were mapped as a mosaic unit as they could not be consistently distinguished using aerial imagery. This area is referred as ‘Mosaic (Mos)’ and covers 56,633.25 ha, which represents most of the DE (62.94%).</p> <p>One PEC was identified within the DE: ‘Four plant assemblages of the Wona Land System’ (Priority (P) 1, P3) found in multiple locations throughout the DE. This PEC comprises four assemblages:</p> <ul style="list-style-type: none"> • Cracking clays of the Chichester and Mungaroona Range (P1), • Annual Sorghum grasslands on self-mulching clays with a moderate-dense overlay of rocks (P1), • Mitchell grass plains (<i>Astrebela spp.</i>) on gilgai (P3), and 	<ul style="list-style-type: none"> • Clearing of flora and vegetation in the Indicative Disturbance Footprint (IDF) to accommodate Proposal infrastructure, including access roads, turbine pads, transmission lines and substations. • Temporary clearing for the laydown of wind turbine and transmission line infrastructure. • Water abstraction during construction and operational activities. • Movement of construction vehicles and machinery around the site. 	<ul style="list-style-type: none"> • Temporary and permanent clearing of native vegetation, including permanent clearing of up to 881.32 ha of native vegetation in ‘Good to Excellent’ condition. • Permanent clearing of 42.28 ha of ‘Four plant assemblages of the Wona Land System’ PEC; and 5.66 ha of potential ‘Four plant assemblages of the Wona Land System’ PEC. • Clearing of 57.47 ha of habitat for significant Priority Flora species habitat. • Clearing 10 individuals of <i>Neptunia longipila</i>; 1 individual of <i>Paspalidium retiglume</i>; 23 individuals of <i>Dolichocarpa sp.</i> Hamersley Station (A.A. Mitchell PRP 1479) (P3); 72 individuals of <i>Euphorbia inappendiculata var. queenslandica</i>; 1 individual of <i>Iotasperma sessilifolium</i>; 18 individuals of <i>Swainsona thompsoniana</i>; and 35



Key Environmental Factor	Existing Environment	Related Proposal Activities	Site-Specific Environmental Values
	<ul style="list-style-type: none"> Mitchell grass and Roebourne Plain grass (<i>Eragrostis xerophila</i>) plain on gilgai (P3). <p>Vegetation type EcAcCs (supporting <i>Melaleuca argentea</i> and <i>Eucalyptus camaldulensis</i>) and parts of EvAcCc that supported <i>Eucalyptus camaldulensis</i> were considered to be GDV and accounted for 2,851.92 ha (3.17%) of the DE. The remaining parts of vegetation type EvAcCc (supporting only <i>Eucalyptus victrix</i>) is potential GDV and accounted for 1497.11 ha (1.66%) of the DE. Combined, this represents a total of 4,349.03 ha of groundwater dependent and potentially groundwater dependent vegetation within the DE. It is also noted that GDV and riparian vegetation is associated with culturally significant flora, including <i>Melaleuca argentea</i> and <i>Eucalyptus camaldulensis</i>. Culturally significant flora is discussed further below.</p> <p>Flora</p> <p>A total of 517 flora species, from 190 genera and 60 families were recorded within the DE during the field assessments.</p> <p>The desktop survey identified 59 Priority flora species identified by DBCA and/or Fortescue’s database that have previously been recorded within 50 km of the DE, of which ten species occurred within the DE. The surveys undertaken by ecologia (2025a) recorded 13 Priority flora species, including five species which were previously recorded within the DE. These included:</p> <ul style="list-style-type: none"> Acacia cyperophylla var. omearana (P1), <i>Stemodia</i> sp. Battle Hill (A.L. Payne 1006) (P1), Paspalidium retiglume (P2), <i>Dolichocarpa</i> sp. Hamersley Station (A.A. Mitchell PRP 1479) (P3), Euphorbia inappendiculata var. inappendiculate (P3), Euphorbia inappendiculata var. queenslandica (P3), Euphorbia stevenii (P3), Iotasperma sessilifolium (P3), Ipomoea racemigera (P3), Neptunia longipila (P3), 		<p>individuals of <i>Ptilotus mollis</i>.</p> <ul style="list-style-type: none"> Clearing of 1.56 ha of groundwater dependent vegetation; and 1.37 ha of potentially groundwater dependent vegetation.



Key Environmental Factor	Existing Environment	Related Proposal Activities	Site-Specific Environmental Values
	<ul style="list-style-type: none"> • Nicotiana umbratica (P3), • Swainsona thompsoniana (P3), and • Ptilotus mollis (P4). <p>Twenty-five introduced flora species were recorded within the DE with <i>*Cenchrus ciliaris</i> (Buffel Grass) and <i>*Cenchrus setiger</i> (Birdwood Grass) being the most prominent. <i>*Calotropis procera</i> was recorded within the DE from 17 locations (approximately 69 individuals), mostly associated with the disturbed areas of the BC Iron Nullagine mine (ecologia, 2025a). <i>*Calotropis procera</i> is a Declared Pest for the Pilbara region under the BAM Act however it is categorised as exempt, requiring no permit of conditions for keeping.</p> <p>Traditional ecological value surveys have identified a number of the flora species recorded in the DE are culturally significant species. A total of 28 culturally significant plants have been identified, including:</p> <ul style="list-style-type: none"> • Triodia ssp., • Ipomoea muelleri, • Acacia inaequilatera, • Vachellia farnesiana, • Aerva javanica, • Acacia pyrifolia, • Cyperus vaginatus, • Solanum diversiflorum, • Senna notabilis, • Acacia xiphophylla, • Vigna lanceolata, • Geohaps plumifera, • Cymbopogon ambiguous, • Stemodia grossa, 		



Key Environmental Factor	Existing Environment	Related Proposal Activities	Site-Specific Environmental Values
	<ul style="list-style-type: none"> • Phoenix dactylifera, • Capparis spinosa subsp. Nummularia, • Capparis lasiantha, • Carissa lanceolata, • Melaleuca argentea, • Capparis umbonate, • Eucalyptus camaldulensis, • Hakea lorea, • Grevillea wickhamii, • Acacia trachycarpa, • Melaleuca glomerata, • Grevillea pyramidalis, • Acacia maitlandii, and • Corymbia opaca / Corymbia hamersleyana. 		
Terrestrial Fauna	<p>Conservation Significant Fauna</p> <p>The majority of the DE was identified as plain (stony/gibber) habitat, representing 83.97% of the DE. This habitat was reported to be common and widespread in the Pilbara region. The granite outcrops (flat dome) habitat was reported to be restricted within the DE and within the broader region, this habitat comprises 0.01% of the DE. All other habitats were reported as common and widespread in the Pilbara.</p> <p>The consolidated terrestrial vertebrate fauna survey (ecologia, 2025b) determined the likelihood of occurrence of each species in the DE and surrounding area. The following conservation significant species were recorded, or allocated a high or moderate likelihood of occurrence within the DE:</p> <ul style="list-style-type: none"> • Recorded within the DE: <ul style="list-style-type: none"> ○ Northern Quoll (<i>Dasyurus hallucatus</i>) – Endangered under BC Act and EPBC Act, ○ Ghost Bat (<i>Macroderma gigas</i>) – Vulnerable under BC Act and EPBC Act, 	<ul style="list-style-type: none"> • Habitat loss from direct clearing of terrestrial vertebrate fauna and SRE habitat in the IDF to accommodate the Proposal infrastructure, including access roads, turbine pads, transmission lines and substations. • Fauna mortality and disturbance due to operation of wind turbines, transmission line infrastructure and 	<ul style="list-style-type: none"> • Clearing of fauna habitat within the DE, including permanent and temporary clearing. • Clearing of habitat critical for the survival of Threatened species (Northern Quoll, Ghost Bat, PLNB, Night Parrot, Grey Falcon, and Pilbara Olive Python), and other specially protected (Peregrine Falcon).



Key Environmental Factor	Existing Environment	Related Proposal Activities	Site-Specific Environmental Values
	<ul style="list-style-type: none"> o PLNB (<i>Rhinonictis aurantia</i> (Pilbara form)) – Vulnerable under BC Act and EPBC Act, o Grey Falcon (<i>Falco hypoleucos</i>) – Vulnerable under BC Act and EPBC Act, o Pilbara Olive Python (<i>Liasis olivaceus barroni</i>) – Vulnerable under BC Act and EPBC Act (culturally significant fauna to Palyku People), o Gane’s Blind Snake (<i>Anilius ganei</i>) – Priority 1 listed by the Department of Biodiversity, Conservation and Attractions (DBCA), o Brush-tailed Mulgara (<i>Dasycercus blythi</i>) – Priority 4 listed by DBCA, o Western Pebble-mound Mouse (<i>Pseudomys chapmani</i>) – Priority 4 listed by DBCA, and o Short-tailed Mouse (<i>Leggadina lakedownensis</i>) – Priority 4 listed by DBCA. • High likelihood of occurrence within DE: <ul style="list-style-type: none"> o Peregrine Falcon (<i>Falco peregrinus</i>) – Other Specially Protected under BC Act, and o Long-tailed Dunnart (<i>Antechinomys longicaudata</i>) – Priority 4 listed by DBCA. • Medium likelihood of occurrence within DE: <ul style="list-style-type: none"> o Night Parrot (<i>Pezoporus occidentalis</i>) – Critically Endangered under BC Act and Endangered under EPBC Act, o Australian Painted Snipe (<i>Rostratula australis</i>) – Endangered under BC Act and EPBC Act, o Common Greenshank (<i>Tringa nebularia</i>) – Endangered under BC Act and Endangered and Migratory under EPBC Act, o Sharp-tailed Sandpiper (<i>Calidris acuminata</i>) – Migratory under BC Act and Vulnerable and Migratory EPBC Act, o Common Sandpiper (<i>Actitis hypoleucos</i>) – Migratory under BC Act and EPBC Act, o Fork-tailed Swift (<i>Apus pacificus</i>) - Migratory under BC Act and EPBC Act, o Red-necked Stint (<i>Calidris ruficollis</i>) – Migratory under BC Act and EPBC Act, o Oriental Plover (<i>Charadrius veredus</i>) – Migratory under BC Act and EPBC Act, 	<p>increased vehicle movement during the construction and operational phases.</p> <ul style="list-style-type: none"> • Habitat fragmentation and behavioural change due to the long-term (30 years) operation of the wind farm, which includes the turbine movements and operation of the transmission line infrastructure. • Behavioural change resulting from disturbance associated with general construction and operational-related activities (i.e., artificial light, noise, increase of human activities). 	



Key Environmental Factor	Existing Environment	Related Proposal Activities	Site-Specific Environmental Values
	<ul style="list-style-type: none"> o Gull-billed Tern (<i>Gelochelidon nilotica</i>) – Migratory under BC Act and EPBC Act, o Caspian Tern (<i>Hydroprogne caspia</i>) – Migratory under BC Act and EPBC Act, o Glossy Ibis (<i>Plegadis falcinellus</i>) – Migratory under BC Act and EPBC Act, o Wood Sandpiper (<i>Tringa glareola</i>) – Migratory under BC Act and EPBC Act, and o Marsh Sandpiper (<i>Tringa stagnatilis</i>) – Migratory under BC Act and EPBC Act. <p>Short Range Endemic Invertebrates</p> <p>The Short Range Endemic (SRE) survey recorded a total of 73 species from SRE target groups. Of these, 12 re widespread species, 45 were potential SREs and one is a confirmed SRE, the keeled millipede <i>Antichiropus sloanae</i>. This species is listed as Priority 1 (P1) under WA conservation legislation. Forty species are currently only known from the Study Area ('Study Area endemics'). SREs identified in the Survey Area include:</p> <ul style="list-style-type: none"> • Opiliones (harvestmen; one taxon), • Pseudoscorpions (pseudoscorpions; 15 taxa), • Geophilomorpha (soil centipedes; six taxa), • Scolopendromorpha (tropical centipedes; three taxa), • Diplura (two-pronged bristletails, one taxon), • Isopoda (slaters; 13 taxa), and • Eupulmonata (land snails; one taxon). <p>One species collected in the DE, the Roy Hill Antichiropus Millipede (<i>Antichiropus sloanae</i>), is a DBCA Priority 1 listed species. This species has been recorded outside the SRE Survey Area.</p> <p>Introduced Fauna</p> <p>Three introduced fauna species were recorded within the DE and/or immediate surrounds (ecologia, 2025b) including:</p> <ul style="list-style-type: none"> • European Cattle (<i>Bos primigenius taurus*</i>), 		



Key Environmental Factor	Existing Environment	Related Proposal Activities	Site-Specific Environmental Values
	<ul style="list-style-type: none"> • Cat (<i>Felius catus</i>), and • House Mouse (<i>Mus musculus</i>). <p>Culturally Significant Fauna</p> <p>Traditional ecological value surveys have identified a number of the fauna species likely to occur in the DE are culturally significant species. A total of 16 culturally significant animals have been identified, including:</p> <ul style="list-style-type: none"> • Dingo (<i>Canis dingo</i>), • Crow (<i>Corvus orru</i>), • Witchetty Grub (<i>Abantiades atripalpis</i>), • Blue-winged Kookaburra (<i>Dacelo leachii</i>), • Brown Falcon (<i>Falco berigora</i>), • Pilbara Snake-Necked Turtle / Flat-Shelled Turtle (<i>Chelodina steindachneri</i>), • Spinifex Pigeon (<i>Geohaps plumifera</i>), • Emu (<i>Dromaius novaehollan</i>), • Bush Turkey (<i>Ardeotis australis</i>), • Echidna (<i>Tachyglossidea aculeatus</i>), • Spangled Perch (<i>Leiopotherappon unicolor</i>), • Argus monitor and Perentie (<i>Varanus panoptes</i> and <i>Varanus giganteus</i>), • Hill Kangaroo (<i>Osphranter robustus</i>), • Plains kangaroo (<i>Osphranter rufus</i>), • Pilbara Olive Python (Vu) (<i>Liasis olivaceus barroni</i>), and • Greater Bilby (Vu) (<i>Macrotis lagotis</i>). 		



1.4 Potential Impacts

1.4.1 Flora and Vegetation

Implementation of the Proposal would result in the permanent clearing of up to 443.39 ha of native vegetation.

Potential **direct** impacts to Flora and Vegetation in relation to the Proposal have been identified as:

- Permanent clearing up to 443.39 ha of native vegetation (including culturally significant flora species), including permanent clearing of 881.32 ha of vegetation in 'Good to Excellent' condition,
- Clearing up to 42.28 ha of 'Four plant assemblages of the Wona Land System' PEC (P1, P3),
- Clearing up to 5.66 ha of potential 'Four plant assemblages of the Wona Land System' PEC (P1, P3),
- Clearing up to 57.47 ha of habitat for significant Priority Flora species habitat, including:
 - 9.73 ha of Area 1 (VfAI),
 - 5.95 ha of Area 2 (VfAI),
 - 6.52 ha of Area 3 (VfAI),
 - 32.08 ha of Area 4 (EIAbTI),
 - 2.88 ha of Area 5 (ElGwTe), and
 - 0.31 ha of Area 6 (AcTe).
- Clearing up to 10 individuals of *Neptunia longipila* (P3),
- Clearing up to 1 individual of *Paspalidium retiglume* (P2),
- Clearing up to 23 individuals of *Dolichocarpa sp.* Hamersley Station (A.A. Mitchell PRP 1479) (P3),
- Clearing up to 72 individuals of *Euphorbia inappendiculata var. queenslandica* (P3),
- Clearing up to 1 individual of *Iotasperma sessilifolium* (P3),
- Clearing up to 18 individuals of *Swainsona thompsoniana* (P3),
- Clearing up to 35 individuals of *Ptilotus mollis* (P4),
- Clearing up to 1.56 ha of groundwater dependent vegetation, and



- Clearing up to 1.37 ha of potentially groundwater dependent vegetation.

Potential **indirect** impacts to Flora and Vegetation in relation to the Proposal include:

- Fragmentation of vegetation or flora species sub-populations,
- Edge effects on three conservation significant flora species,
- Fragmentation of and edge effects on a Priority Ecological Community,
- Introduction or spread of weed species,
- Impacts on Riparian or Groundwater Dependent Vegetation due to changes to the surface water flow regime,
- Increase of dust deposition, and
- Increased risk of bushfire incidents.

1.4.2 Terrestrial Fauna

Potential **direct** impacts to Terrestrial Fauna in relation to the Proposal have been identified as:

- Clearing of fauna habitat (including culturally significant fauna) within the DE, including permanent and temporary clearing (Table 1-2),
- Clearing of habitat critical for the survival of Threatened species (Northern Quoll, Ghost Bat, PLNB, Night Parrot, Grey Falcon, Pilbara Olive Python), and other specially protected (Peregrine Falcon) (Table 1-3),
- Clearing critical supporting habitat for the Northern Quoll,
- Clearing supporting habitat for Threatened Species, Priority Species and Migratory Species,
- Barrier effects to fauna movement from turbine placement, access roads and transmission lines
- Avifauna (i.e. bird) and bat collisions with wind turbines and transmission lines, as well as possible barotrauma,
- Electrocution from transmission power lines causing avian fauna mortality, and
- Fauna injury or mortality from vehicle collision during the construction and operational phase.

The permanent and temporary clearing of fauna habitat within the IDF is described in Table 1-2. Clearing of potential habitat for threatened and priority species is summarised in Table 1-3.



Potential **indirect** impacts to terrestrial fauna in relation to the Proposal include:

- Introduction of invasive species (weeds etc),
- Potential use of artificial features as habitat or increase in artificial nesting,
- Disruption to behaviour of nocturnal fauna due to artificial light, dust, noise and vibration, and
- Increased risk of bushfires associated with construction activities and operation of new electrical infrastructure.

Table 1-2: Clearing of Fauna Habitat within the Indicative Disturbance Footprint

Habitat	Total mapped extent in DE (ha)	Permanent clearing (ha)	Temporary clearing (ha)	Total IDF (ha)
Drainage line/river/creek (major)	1,657.22	0.83	0.59	1.42
Drainage line/river/creek (minor)	2,092.13	1.03	1.48	2.50
Gorges/gullies	41.51	0.00	0.00	0.00
Granite outcrops (flat dome)	12.48	0.21	0.18	0.39
Hills/ranges/plateaux	1,322.34	0.00	0.00	0.00
Plain (cracking clays)	5,366.12	42.68	44.51	87.19
Plain (stony/gibber)	75,547.94	378.20	408.60	786.80
Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways)	2,123.25	14.88	11.51	26.40
Woodland (open)	574.28	5.56	0.00	5.56
Woodland (closed)	392.02	0.00	0.00	0.00
Cleared	844.56	19.87	13.94	33.81
Total	89,973.85*	463.26	480.81	944.07



Table 1-3: Threatened Species Habitat Clearing within the Development Envelope

Species	Habitat importance	Total IDF (ha)
Threatened and Other Specially Protected Fauna Species		
Northern Quoll	Northern portion of DE - Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) – critical habitat	14.95
	Northern portion of DE - Gorges/gullies – critical habitat	0.00
	Northern portion of DE - Hills/ranges/plateaux – critical habitat	0.00
	Northern portion of DE 1 km buffer around critical habitat – critical supporting habitat	238.24
	Southern portion of DE - Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) – supporting habitat	0.00
	Southern portion of DE - Gorges/gullies – supporting habitat	11.45
	Southern portion of DE - Granite outcrops (flat dome) – supporting habitat	0.00
	Drainage line/river/creek (major) outside 1km buffer – supporting habitat	0.39
	Total Northern Quoll critical habitat	14.95
	Total Northern Quoll critical supporting habitat	238.24
	Total Northern Quoll supporting habitat	11.84
PLNB	Hills/ranges/plateaux – critical habitat	0.00
	Gorges/gullies – critical habitat	0.00
	Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) – critical habitat	26.40
	Drainage lines/river/creek (major) – critical habitat	1.42
	All other habitats – supporting habitat	882.44
	Total PLNB critical habitat	27.82
	Total PLNB supporting habitat	882.44
Grey Falcon	Drainage line/river/creek (major) – critical habitat	1.42
	All other habitat - supporting habitat	908.83



Species	Habitat importance	Total IDF (ha)
	Total Grey Falcon critical habitat	1.42
	Total Grey Falcon supporting habitat	908.83
Pilbara Olive Python ¹	Hills/ranges/plateaux – critical habitat	0.00
	Gorges/gullies – critical habitat	0.00
	Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) –critical habitat	26.40
	Drainage lines/river/creek (major) – critical habitat	1.42
	Total Pilbara Olive Python critical habitat	27.82
Ghost Bat	Hills/ranges/plateaux – critical habitat	0.00
	Gorges/gullies – critical habitat	0.00
	Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) – critical habitat	26.40
	Drainage lines/river/creek (major) – critical habitat	1.42
	All other habitats – supporting habitat	882.44
	Total Ghost Bat critical habitat	27.82
	Total Ghost Bat supporting habitat	882.44
Night Parrot	Patches of long unburnt vegetation with <i>Triodia longiceps</i> – critical habitat	11.45
	Patches of long unburnt plain (stony/gibber) – critical habitat	270.36
	Plain (cracking clays) – supporting habitat	87.19
	Total Night Parrot critical habitat	281.81
	Total Night Parrot supporting habitat	87.19
Australian Painted Snipe	Drainage lines/rivers/creeks (major) – supporting habitat	1.42
	Total Australian Painted Snipe supporting habitat	1.42
Common Greenshank	Drainage lines/rivers/creeks (major) – supporting habitat	1.42



Species	Habitat importance	Total IDF (ha)
	Total Common Greenshank supporting habitat	1.42
Peregrine Falcon (other specially protected)	Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) – critical habitat	26.40
	Drainage lines/rivers/creeks (major) – critical habitat	1.42
	All other habitats – supporting habitat	882.44
	Total Peregrine Falcon critical habitat	27.82
	Total Peregrine Falcon supporting habitat	882.44
Priority Fauna Species		
Gane's Blind Snake	Hills/ranges/plateaux – supporting habitat	0.00
	Plain (stony/gibber) – supporting habitat	786.80
	Gorges/gullies – supporting habitat	0.00
	Drainage line/river/creek (major) – supporting habitat	1.42
	Total Gane's Blind Snake supporting habitat	788.22
Brush-tailed Mulgara	Plain (stony/gibber) – supporting habitat	786.80
	Total Brush-tailed Mulgara supporting habitat	786.80
Short-tailed Mouse	Plain (cracking/clays) – supporting habitat	87.19
	Drainage lines/rivers/creeks (minor) – supporting habitat	2.50
	Total Short-tailed Mouse supporting habitat	89.69
Western Pebble-mound Mouse	Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) – supporting habitat	26.40
	Hills/ranges/plateaux – supporting habitat	0.00
	Plain (stony/gibber) – supporting habitat	786.80
	Total Western Pebble-mound Mouse supporting habitat	813.20
Long-tailed Dunnart	Rocky escarpments (ridges/mesa/cliffs/outcrops/breakaways) – supporting habitat	26.40



Species	Habitat importance	Total IDF (ha)
	Gorges/gullies – supporting habitat	0.00
	Granite outcrops (flat dome) – supporting habitat	0.39
	Hills/ranges/plateaux – supporting habitat	0.00
	Total Long-tailed Dunnart supporting habitat	26.79

¹ Culturally significant fauna for Palyku People.



1.5 Condition requirements

The Proposal is currently being assessed through an Environmental Review Document (ERD) under Part IV of the *Environmental Protection Act 1986* (EP Act). This Plan outlines Fortescue's monitoring and management approach and has been prepared to provide supporting information to this application. Condition requirements have therefore not yet been issued.

1.6 Rationale and approach

This section provides a summary of the rationale and approach to developing the mitigation and management strategies including:

- Environmental outcomes and objectives,
- Survey and study findings,
- Key assumptions and uncertainties, and
- Rationale for choice of indicators and/or management actions.

This Plan adopts outcome-based provisions which relate to monitoring and are applied when sufficient information exists to establish and evaluate specific measurable outcomes.

The relevant outcomes applicable for the Proposal and rationale are detailed in Table 1-4.

Table 1-4: Environmental Outcomes and Rationale

Environmental Factor Outcome	Rationale
Flora and Vegetation	
FV-1 Environmental Outcome: Clearing no more than 910.26 ha of native vegetation (including 881.32 ha of 'Good to Excellent') within DE, of which no less than 480.81 ha will be rehabilitated.	An outcome based provision was selected as the maximum extent of clearing of native vegetation is measurable and reportable. The maximum clearing extent has been calculated based on the indicative disturbance footprint encompassing all areas of disturbance required to construct and operate the Proposal. The trigger criterion have been set at a conservative level to indicate that the threshold is being approached. This allows for actions to be implemented in advance to minimise the risk of exceeding the threshold criteria and compromising the environmental outcome.
FV-2 Environmental Outcome: The implementation of the Proposal will not result in the change of conservation status of identified conservation significant vegetation, including: <ul style="list-style-type: none">• Direct disturbance of no more than 76.65 ha of 'Four plant assemblages of the Wona Land System' PEC (P1),	An outcome based provision was selected as the maximum required extent of clearing of recorded conservation significant vegetation is measurable and reportable. The maximum clearing extent has been calculated based on the indicative disturbance footprint within each relevant vegetation type, encompassing all areas of disturbance required to construct and operate the Proposal.



Environmental Factor Outcome	Rationale
<ul style="list-style-type: none"> • Direct disturbance of no more than 9.61 ha of potential 'Four plant assemblages of the Wona Land System' PEC (P1), • Direct disturbance of no more than 3.13 ha of groundwater dependent vegetation, • Direct disturbance of no more than 4.20 ha of potential groundwater dependent vegetation, • Direct disturbance of no more than 82.47 ha of habitat for significant Priority flora species, including: <ul style="list-style-type: none"> ○ 22.62 ha of Area 1 (VfAI), ○ No disturbance of Area 2 (VfAI) ○ 8.19 ha of Area 3 (VfAI), ○ 47.02 ha of Area 4 (EIAbTI), ○ 4.64 ha of Area 5 (EIGwTe), and ○ No disturbance of Area 6 (VfAI). 	<p>The trigger criteria have been set at a conservative level to indicate that the threshold is being approached. This allows for actions to be implemented in advance to minimise the risk of exceeding the threshold criteria and compromising the environmental outcome.</p>
<p>FV-3 Environmental Outcome: No direct or indirect disturbance to the Threatened flora species <i>Quoya zonalis</i>.</p>	<p>An outcome based provision was selected as the maximum required extent of clearing of recorded conservation significant flora is measurable and reportable. The maximum clearing extent has been calculated based on the number of individuals estimated within the indicative disturbance footprint, encompassing all areas of disturbance required to construct and operate the Proposal.</p>
<p>FV-4 Environmental Outcome: The implementation of the Proposal will not result in the change of conservation status of identified conservation significant flora species, including:</p> <ul style="list-style-type: none"> • No more than 0.4% of <i>Paspalidium retiglume</i> (P2) will be cleared, • No more than 5.3% of <i>Neptunia longipila</i> (P3) will be cleared, • No more than 3.1% of <i>Dolichocarpa</i> sp. Hamersley Station (A.A. Mitchell PRP 1479) (P3) will be cleared, • No more than 4.0% of <i>Euphorbia inappendiculata</i> var. <i>queenslandica</i> (P3) will be cleared, • No more than 20% of <i>Iotasperma sessilifolium</i> (P3) will be cleared, • No more than 2.0% of <i>Swainsona thompsoniana</i> (P3) will be cleared, <ul style="list-style-type: none"> ○ No more than 0.5% of <i>Ptilotus mollis</i> (P4) will be cleared, 	<p>The trigger criteria have been set at a conservative level to indicate that the threshold is being approached. This allows for actions to be implemented in advance to minimise the risk of exceeding the threshold criteria and compromising the environmental outcome.</p>
<p>FV-5 Environmental Objective: Implementation of the Environmental Management Plan monitor and minimise impacts on flora or vegetation from dust, weed spread, or changes to natural fire patterns when compared with existing environmental conditions.</p>	<p>An objective based provision was selected for indirect impacts on flora and vegetation as the specific impacts can be monitored within close proximity to the IDF and measures enforced to minimise the potential for disturbance as far as possible.</p> <p>The targets for this objective are:</p> <ul style="list-style-type: none"> • No impacts to flora or vegetation resulting from the introduction or spread of environmental weeds within the development envelope compared with pre-



Environmental Factor Outcome	Rationale
	<p>construction condition attributable to the Proposal.</p> <ul style="list-style-type: none"> • Minimise generation of dust from construction activities. • Minimise risk of accidental fire breakouts during construction. <p>It should be noted that the management actions associated with objective FV-5 will also manage indirect impacts to fauna and fauna habitat.</p>
Terrestrial Fauna	
<p>TF-1 Environmental Outcome:</p> <p>Disturbance of critical fauna habitat not to exceed:</p> <ul style="list-style-type: none"> • Clearing of no more than 1.42 ha of habitat identified as being critical to the survival of the Grey Falcon, • Clearing of no more than 14.95 ha of habitat identified as being critical to the survival of the Northern Quoll, • Clearing of no more than 238.24 ha of habitat identified as being critical supporting to the survival of the Northern Quoll, • Clearing of no more than 27.82 ha of habitat identified as being critical to the survival of the Ghost Bat and PLNB, • Clearing of no more than 27.82 ha of critical habitat for the Pilbara Olive Python within the DE will occur, • Clearing of no more than 281.81 ha of habitat identified as being critical to the survival of the Night Parrot, • Clearing of no more than 1.42 ha of potential Australian Painted Snipe and Common Greenshank dispersal and foraging habitat, and • Clearing of no more than 27.82 ha of habitat identified as being critical to the survival of the Peregrine Falcon. 	<p>An outcome based provision was selected as the maximum extent of clearing of these fauna habitats is measurable and reportable. The maximum clearing extent has been calculated based on the indicative disturbance footprint encompassing all areas of disturbance required to construct and operate the Proposal.</p> <p>The trigger criteria have been set at a conservative level to indicate that the threshold is being approached. This allows for actions to be implemented in advance to minimise the risk of exceeding the threshold criteria and compromising the environmental outcome.</p>
<p>TF-2 Environmental Outcome:</p> <p>Avoidance of habitat suitable for conservation significant fauna. Fauna Habitat Exclusion Zones (FHEZ) have been proposed to minimise impacts on critical fauna habitats and to ensure no disturbance occurs within these areas, these areas include:</p> <ul style="list-style-type: none"> • FHEZ of 5,894.74 ha of Rocky Escarpment habitat (including 1 km buffer), • FHEZ of 5,441.33 ha of Major Drainage Line/River/Creek habitat (including 500 m buffer, which allows for clearing but no turbines to be installed), and • FHEZ of 1,815.59 ha of Hills/Ranges/Plateaux (including 1 km buffer). 	



Environmental Factor Outcome	Rationale
<p>TF-3 Environmental Objective: Implementation of the Bird and Bat Adaptive Management Plan (BBAMP) to monitor and minimise collision risk impacts to species.</p>	<p>An objective based provision was selected for collision impacts to birds and bats as specific management measures are required to minimise the risk of impact for bird and bat species. Direct impacts through collision with the Proposal are measurable and adaptive management will be implemented through adherence to the BBAMP to minimise impacts to avifauna species.</p>

1.6.1 Survey and Study Findings

Several studies and surveys were completed to support the development and operation of the Proposal. An overview of these studies and key findings are discussed within Table 1-5.

Table 1-5: Overview of Surveys and Studies Related to the Proposal

Reference	Survey/Study Type
Flora and Vegetation	
Bonney Downs Consolidated Flora and Vegetation Assessment (ecologia, 2025a)	Detailed flora and vegetation surveys and a targeted flora survey. Location: Study Area comprised 108,841 ha and covers a larger extent than the DE.
Terrestrial Fauna	
Fortescue Metals Group Limited Bonney Downs: Terrestrial Vertebrate Fauna Survey Consolidation (ecologia, 2025b).	Detailed and targeted terrestrial vertebrate fauna surveys were completed for the Proposal within Bonney Downs North (ecologia, 2024a) and Bonney Downs South (Spectrum Ecology, 2024). ecologia consolidated the results of these assessments into a single report that covers the entire Bonney Downs Wind Generation Project ('the Survey Area') (ecologia, 2025b). This assessment incorporated data collected during seven field surveys between June 2023 to August 2024. Location: Survey Area comprised of 102,802.56 ha and covers a larger extent than the DE.
Bird and Bat Site Utilisation Survey (ecologia, 2026).	Seasonal bird and bat utilisation surveys. Timing of the BBSUS was designed to coincide with seasonal variation in the Pilbara region, with surveys undertaken in summer (December-February), autumn (March-May), winter (June-August) and spring (September-November) each year. All eight bird and bat site utilisation surveys have been completed approximately every three months between October 2023 and August 2025 (ecologia, 2026). Location: Selected survey sites throughout the DE.
Short-Range Endemic Terrestrial Invertebrate Survey (HBI, 2024).	Detailed short-range endemic terrestrial invertebrate survey. Location: The SRE Survey Area covered an area of approximately 102,943 ha over an area larger than the DE.
Traditional Ecological Knowledge	Traditional Ecological Knowledge (TEK) assessments have commenced within the DE to identify and document plants and animals of traditional use or value to Palyku traditional owners. Cultural associations to ecological features and areas containing culturally significant species will be documented. These assessments were undertaken in consultation with Traditional Owner knowledge holders and nominated representatives. Niyaparli did not raise impacts to TEK values as a concern given the minimal disturbance on their country. Their concerns were around maintaining biodiversity which can be addressed through the Flora and Fauna studies.



Reference	Survey/Study Type
	TEK assessments are still ongoing for the Proposal.

1.6.2 Key assumptions and uncertainties

Key assumptions and uncertainties include:

- Baseline surveys have accurately recorded the presence of conservation significant species, vegetation and habitat types within the DE,
- Protection of critical habitat will enable persistence of conservation significant fauna within the DE,
- Limited studies and research on the sensitivity of conservation/culturally significant fauna to increases in dust, noise and vibration, and
- It is anticipated that culturally significant species can be managed in accordance with standard flora / fauna management strategies outlined within this document. Management of GDV and riparian vegetation will protect culturally significant flora associated with these vegetation types.



2 MANAGEMENT PLAN COMPONENTS

2.1 Management Provisions

A series of outcome and objective based management provisions have been developed to mitigate environmental impacts that could potentially be caused by implementation of the Proposal.

Outcome-based provisions are detailed for Flora and Vegetation in Table 2-1 and Terrestrial Fauna in Table 2-3. Objective-based provisions are detailed for indirect impacts to Flora and Vegetation in Table 2-2 and Terrestrial Fauna in Table 2-4.



Table 2-1: Measures to Address the Flora and Vegetation Environmental Outcomes

EPA factor and objective: Flora and Vegetation – “To protect flora and vegetation so that biological diversity and ecological integrity are maintained.”

Outcomes:

- **FV-1:** Clearing no more than 910.26 ha of native vegetation (including 881.32 ha of ‘Good to Excellent’) within DE, of which no less than 480.81 ha will be rehabilitated.
- **FV-2:** The implementation of the Proposal will not result in the change of conservation status of identified conservation significant vegetation, including:
 - Direct disturbance of no more than 76.65 ha of ‘Four plant assemblages of the Wona Land System’ PEC (P1),
 - Direct disturbance of no more than 9.61 ha of potential ‘Four plant assemblages of the Wona Land System’ PEC (P1),
 - Direct disturbance of no more than 3.13 ha of groundwater dependent vegetation,
 - Direct disturbance of no more than 4.20 ha of potential groundwater dependent vegetation,
 - Direct disturbance of no more than 82.47 ha of habitat for significant Priority flora species,
- **FV-3:** No direct or indirect disturbance to the Threatened flora species *Quoya zonalis*.
- **FV-4:** The implementation of the Proposal will not result in the change of conservation status of identified conservation significant flora species.

Key Environmental Values: Vegetation in ‘Good to Excellent’ condition; Priority ecological communities; Groundwater dependent and riparian vegetation; Habitat for conservation significant flora; National, State or Reginal level vegetation; and Conservation Significant Flora species.

Key Impacts and Risks: Clearing of native vegetation; clearing of priority ecological community; clearing of conservation significant flora; introduction and spread of weeds.

Environmental Outcomes: FV-1, FV-2 and FV-3

Environmental criteria	Response actions	Monitoring	Timing / Frequency of Monitoring	Reporting
<p>Trigger Criterion:</p> <ul style="list-style-type: none"> • 90% of permitted clearing extent for any specified vegetation / community / priority flora is reached. <p>Threshold Criterion:</p> <ul style="list-style-type: none"> • Permitted clearing extent for any specified vegetation type / community / priority flora is reached. 	<p>Trigger level actions:</p> <ul style="list-style-type: none"> • Undertake review of remaining clearing to ensure compliance with permitted clearing extents will be achieved – calculate remaining clearing required to ensure within threshold limits. • Communicate extents of clearing for each vegetation type / community / priority flora to key personnel, noting percentage cleared to date. This includes no adverse impacts to priority flora. <p>Threshold contingency actions:</p> <ul style="list-style-type: none"> • Clearing will cease immediately. • Environmental incident will be recorded and investigated if threshold is exceeded. • DWER will be notified along with investigation report if threshold is exceeded. • Rehabilitation of any clearing exceedance areas will be undertaken. 	<ul style="list-style-type: none"> • All clearing areas will be checked and confirmed post-clearing. Site inspection will be undertaken prior to and following clearing to confirm clearing is appropriately demarcated. Disturbance will be managed using Fortescue’s Land Use Certificate system (Fortescue, 2023). 	<ul style="list-style-type: none"> • Weekly during clearing activities. 	<ul style="list-style-type: none"> • Internal construction reporting. • Ground disturbance permit signed off by Fortescue Superintendent. • Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with EPA’s Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR), Post Assessment Guideline No. 2. • In the event that trigger criteria were exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions that have been implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.
<p>Trigger Criterion:</p> <ul style="list-style-type: none"> • Monitoring of rehabilitation finds that temporary cleared areas are not meeting rehabilitation completion criteria of pre-disturbance conditions within 3 years post-construction. <p>Threshold Criterion:</p> <ul style="list-style-type: none"> • Monitoring of rehabilitation finds that temporary cleared areas have not met rehabilitation completion criteria within 5 years post-construction. 	<p>Trigger level actions:</p> <ul style="list-style-type: none"> • Undertake rehabilitation of outstanding temporarily cleared areas to ensure compliance with pre disturbance conditions will be achieved. <p>Threshold contingency actions:</p> <ul style="list-style-type: none"> • Immediately carry out rehabilitation works in outstanding temporarily cleared areas and monitor against completion criteria. 	<ul style="list-style-type: none"> • Ground survey and use of aerial imagery of clearing areas and comparison to the IDF. • Monitoring of rehabilitation areas to be undertaken in accordance with Fortescue’s standard procedure – Rehabilitation and Revegetation Monitoring Procedure (45-GU-EN-0009). 	<ul style="list-style-type: none"> • Bi-annual ground surveys. • Annual monitoring basis for the first three years to determine initial establishment, then on a biennial basis to determine trajectory towards reference sites and 	<ul style="list-style-type: none"> • Annual compliance reporting. • Maintain records of all rehabilitation.



Environmental criteria	Response actions	Monitoring	Timing / Frequency of Monitoring	Reporting
established completion criteria.				
Environmental Outcomes: FV-3, and FV-4				
<p>Trigger Criterion:</p> <ul style="list-style-type: none"> Loss of Priority 2 species <i>Paspalidium retiglume</i> within the DE exceeds 0.4% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Dolichocarpa sp.</i> Hamersley Station (A.A. Mitchell PRP 1479) within DE exceeds 3.5% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Euphorbia inappendiculata var. queenslandica</i> within DE exceeds 4.0% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Neptunia longipila</i> within DE exceeds 5.5% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Swainsona thompsoniana</i> within DE exceeds 2.0% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Iotasperma sessilifolium</i> within DE exceeds 20.0% of known individuals within 50km of the Proposal. Loss of Priority 4 species <i>Ptilotus mollis</i> within DE exceeds 0.5% of known individuals within 50km of the Proposal. <p>Threshold Criterion:</p> <ul style="list-style-type: none"> Loss of Priority 2 species <i>Paspalidium retiglume</i> within the DE exceeds 1.0% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Dolichocarpa sp.</i> Hamersley Station (A.A. Mitchell PRP 1479) within DE exceeds 5.0% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Euphorbia inappendiculata var. queenslandica</i> within DE exceeds 6.0% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Neptunia longipila</i> within DE exceeds 7.0% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Swainsona thompsoniana</i> within DE exceeds 4.0% of known individuals within 50km of the Proposal. Loss of Priority 3 species <i>Iotasperma sessilifolium</i> within DE exceeds 25.0% of known individuals within 50km of the Proposal. Loss of Priority 4 species <i>Ptilotus mollis</i> within DE exceeds 1.0% of known individuals within 50km of the Proposal. 	<p>Trigger level actions:</p> <ul style="list-style-type: none"> Review future proposed clearing areas to ensure threshold criteria is not exceeded. Review existing Land Use Certificate's (LUC) from Fortescue's system (Fortescue, 2023) and do not approve any future LUCs to ensure threshold criteria is not exceeded <p>Threshold contingency actions:</p> <p>Ground truth the direct clearing to validate extent of clearing and cause. Once the direct clearing has been validated:</p> <ul style="list-style-type: none"> Where the direct clearing was caused by construction, operation, or decommissioning activities: <ul style="list-style-type: none"> Review the LUC process and implement any further measures including changes to the process to reduce the potential for clearing outside approved areas. Implement actions to remediate/rehabilitate the clearing where possible. Where the direct clearing was not caused by construction, operation, or decommissioning activities: No further action required. 	<ul style="list-style-type: none"> Reconciliation of disturbance data with the respective year's aerial imagery and flora records. 	<ul style="list-style-type: none"> Quarterly when clearing has occurred. 	<ul style="list-style-type: none"> Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with EPA's Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR), Post Assessment Guideline No. 2. In the event that a trigger/threshold criterion was exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.



Table 2-2: Measures to Address the Flora and Vegetation Environmental Objectives

EPA factor and objective: Flora and Vegetation – “To protect flora and vegetation so that biological diversity and ecological integrity are maintained.”

Objectives:

- FV-5: Implementation of the Environmental Management Plan monitor and minimise impacts on flora or vegetation from dust, weed spread, or changes to natural fire patterns when compared with existing environmental conditions.**

Key Environmental Values: Vegetation in ‘Good to Excellent’ condition; Priority ecological communities; Groundwater dependent and riparian vegetation; Habitat for conservation significant flora; National, State or Reginal level vegetation; and Conservation Significant Flora species.

Key Impacts and Risks: Vegetation and flora loss and degradation through direct and indirect impacts.**

Management Actions	Management Targets	Monitoring	Timing / Frequency of Monitoring	Reporting
<ul style="list-style-type: none"> Mapping shall be undertaken in areas in which construction or activities (e.g. geotechnical surveys) are planned prior to commencement. Surveys shall map weed occurrence. High risk areas (e.g., areas identified as infested with Declared Plants (DPs), Weeds of National Significance (WoNS)) are to be identified on site map. The known weed status of each section of the IDF shall be clearly marked on the site map to inform entry procedures/requirements. The site induction program will include hygiene training to ensure all staff and sub-contractors are aware of the requirements to avoid the spread and introduction of weeds. Inductions will include weed identification guides and maps. Weed control shall be undertaken within construction areas (through topsoil mapping) to eradicate populations of declared and environmental weeds with particular emphasis in priority areas. Weed control activities to be undertaken within operational areas. Declared or environmental weeds to be targeted to be eradicated within operational areas. Any vehicles / plant planning to enter areas within the DE but outside of construction or operational areas are to be certified clean on entry. Any vehicles / plant planning to enter construction areas in which weeds are present to be clean on exit. Imported fill will be weed free. 	<p>No impacts to flora and vegetation resulting from the introduction or spread of environmental weeds within the development envelope compared with pre-construction condition attributable to the Proposal.</p>	<p>Pre-construction and post weed monitoring of construction areas. Site map shall be updated following annual weed treatment during operational phases.</p>	<p>Prior to ground disturbing activities in each construction phase. Weed monitoring for 3 years post-construction.</p>	<p>Maintain Site Maps.</p>
		<p>Periodic review of construction / staff induction program.</p>	<p>Continuously throughout Proposal life.</p>	<p>Training / Induction records.</p>
		<p>Site wide weed surveys to identify weed infestations. Post treatment surveys to confirm adequacy of control. To include monitoring for potential indirect impacts within 20 m of the IDF. Pre-construction monitoring.</p>	<p>Six monthly during construction. Annual monitoring during operations.</p>	<p>Monthly post treatment monitoring for very high priority weeds. Evidence of weed control activity being conducted.</p>
		<p>Routine audits of Clean on Entry / Exit implementation.</p>	<p>Continuously throughout Proposal life. Prior to and During construction.</p>	<p>Site access rules. Training/inductions records.</p>
		<p>Fill certifications to be acquired prior to fill usage.</p>	<p>When acquiring imported fill material.</p>	<p>Certifications of clean fill maintained.</p>
		<p>The following standard dust mitigation measures will be implemented throughout construction phase:</p> <ul style="list-style-type: none"> use of dust suppression to manage dust generation from construction activities, access roads and cleared areas, use of water sprays to manage dust generation from material transport and stockpiling, limit the number and height of stockpiles, and vehicles confined to designated routes with speed limits strictly enforced. 	<p>Minimise generation of dust from construction activities.</p>	<p>Monthly inspections of vegetation adjacent to IDF during construction to review effectiveness of current dust mitigation strategies.</p>
<p>Implementation of fire risk management measures will be undertaken, including:</p> <ul style="list-style-type: none"> clearing activities would not be undertaken when fire danger ratings are extreme or above; manage and monitor hot works through implementation of hot works permit system; ensure appropriate disposal of potential fire-starting waste, e.g., cigarette butts to minimise the risk of bushfires as a result of the Proposal; 	<p>Minimise risk of accidental fire breakouts during construction.</p>	<p>During construction, ongoing review of local fire danger ratings, and restrictions and subsequent communication to relevant personnel.</p>	<p>During construction</p>	<p>Internal construction reporting.</p>



Management Actions	Management Targets	Monitoring	Timing / Frequency of Monitoring	Reporting
<ul style="list-style-type: none">• firefighting equipment will be located around the site and in vehicles. Fire response procedures and personnel training, including site inductions on fire prevention and management, will also be provided; and• maintenance of cleared areas around turbine locations.				

** It should be noted that the management actions associated with outcome FV-5 will also manage indirect impacts to fauna and fauna habitat.



Table 2-3: Measures to Address Terrestrial Fauna Environmental Outcomes

WA EPA factor and objective: Terrestrial Fauna – “To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.”

Outcomes:

- **TF-1: Disturbance of critical fauna habitat not to exceed:**
 - Clearing of no more than 1.42 ha of habitat identified as being critical to the survival of the Grey Falcon,
 - Clearing of no more than 14.95 ha of habitat identified as being critical to the survival of the Northern Quoll,
 - Clearing of no more than 238.24 ha of habitat identified as being critical supporting to the survival of the Northern Quoll,
 - Clearing of no more than 27.82 ha of habitat identified as being critical to the survival of the Ghost Bat and PLNB,
 - Clearing of no more than 27.82 ha of critical habitat for the Pilbara Olive Python within the DE will occur,
 - Clearing of no more than 281.81 ha of habitat identified as being critical to the survival of the Night Parrot,
 - Clearing of no more than 1.42 ha of potential Australian Painted Snipe and Common Greenshank dispersal and foraging habitat, and
 - Clearing of no more than 27.82 ha of habitat identified as being critical to the survival of the Peregrine Falcon.
- **TF-2: Avoidance of habitat suitable for conservation significant fauna. Fauna Habitat Exclusion Zones (FHEZ) have been proposed to minimise impacts on critical fauna habitats and to ensure no disturbance occurs within these areas.**

Key Environmental Values: Habitat for conservation significant and priority fauna; and Conservation significant and priority fauna.

Key Impacts and Risks: Fauna habitat loss and injury through direct and indirect impacts.

Environmental Outcomes: TF-1

Trigger Criteria / Threshold Criteria	Trigger Level Actions / Threshold Contingency Actions	Monitoring	Timing / Frequency of Monitoring	Reporting
<p>Trigger Criterion:</p> <ul style="list-style-type: none"> • 90% of permitted clearing extent for any specified fauna habitat is reached. <p>Threshold Criterion:</p> <ul style="list-style-type: none"> • Permitted clearing extent for any specified fauna habitat is reached. 	<p>Trigger level actions:</p> <ul style="list-style-type: none"> • Undertake review of remaining clearing to ensure compliance with permitted clearing extents will be achieved – calculate remaining clearing required to ensure within threshold limits. • Communicate extents of clearing for each specified fauna habitat type to key personnel, noting percentage cleared to date. <p>Threshold contingency actions:</p> <ul style="list-style-type: none"> • Clearing will cease immediately. • Environmental incident will be recorded and investigated. • DWER will be notified along with investigation report if threshold is exceeded. • Rehabilitation of any clearing exceedance areas will be undertaken. This will be undertaken in accordance with Fortescue’s standard procedures. 	<ul style="list-style-type: none"> • Regular construction area inspections to visually check / review clearing boundaries. • All clearing areas will be checked and confirmed post-clearing. Site inspection will be undertaken prior to and following clearing to confirm clearing is appropriately demarcated. Disturbance will be managed using Fortescue’s Land Use Certificate system (Fortescue, 2023). 	<ul style="list-style-type: none"> • Weekly during clearing activities. • Annual for compliance reporting. 	<ul style="list-style-type: none"> • Internal construction reporting. • DWER investigation reporting to be completed. • Ground disturbance permit signed off by Fortescue Superintendent. • Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with EPA’s Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR), Post Assessment Guideline No. 2. • In the event that trigger criteria were exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions that have been implemented to manage the impact and any adaptive management measures applied as a result of the exceedance. • Maintain records of all rehabilitation.
		<ul style="list-style-type: none"> • Ground survey and use of aerial imagery of clearing areas and comparison to the IDF. 	<ul style="list-style-type: none"> • Bi-annually when clearing has occurred. 	
		<ul style="list-style-type: none"> • Under Fortescue’s environmental management framework, performance against compliance targets is monitored and internally reported to management on a monthly basis. 	<ul style="list-style-type: none"> • Monthly. 	
		<ul style="list-style-type: none"> • Monitoring of Rehabilitation areas in line with Fortescue’s ‘Rehabilitation and Revegetation Monitoring Guideline’ (45-GU-EN-0009) 	<ul style="list-style-type: none"> • Annual basis for the first three years to determine initial establishment, then on a biennial basis to determine trajectory towards reference sites and established completion criteria. 	
		<ul style="list-style-type: none"> • Ground survey and use of aerial imagery of construction areas and comparison to the IDF. 	<ul style="list-style-type: none"> • Monthly when clearing has occurred. 	<ul style="list-style-type: none"> • Annual compliance reporting.

Environmental Outcomes: TF-2

<p>Trigger Criterion:</p> <ul style="list-style-type: none"> • Direct disturbance within 50m of the mapped FHEZ boundaries. 	<p>Trigger level actions:</p> <ul style="list-style-type: none"> • Ground truth the direct clearing to validate extent of clearing and cause. 	<ul style="list-style-type: none"> • Ground survey and use of aerial imagery of clearing areas and comparison to the IDF. 	<ul style="list-style-type: none"> • Bi-annually when clearing has occurred. 	<ul style="list-style-type: none"> • Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with EPA’s Post Assessment Guideline for Preparing a Compliance
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Trigger Criteria / Threshold Criteria	Trigger Level Actions / Threshold Contingency Actions	Monitoring	Timing / Frequency of Monitoring	Reporting
<p>Threshold Criterion:</p> <ul style="list-style-type: none"> Direct disturbance within the mapped FHEZs other than what is existing/approved. 	<ul style="list-style-type: none"> Review future proposed clearing areas to ensure threshold criteria is not exceeded. <p>Threshold contingency actions:</p> <ul style="list-style-type: none"> Ground truth the direct clearing to validate extent of clearing and cause. Where the direct clearing was caused by construction, operation, or decommissioning activities: <ul style="list-style-type: none"> Review the LUC process and implement any further measures including changes to the process to reduce the potential for clearing outside approved areas. Implement actions to remediate/rehabilitate the clearing where possible. Where the direct clearing was not caused by construction, operation, or decommissioning activities: <ul style="list-style-type: none"> No further action required 			<p>Assessment Report (CAR), Post Assessment Guideline No. 2.</p> <ul style="list-style-type: none"> In the event that trigger criteria were exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions that have been implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.

Table 2-4: Measures to address the Terrestrial Fauna Environmental Objectives

<p>EPA factor and objective: Terrestrial Fauna – “To project terrestrial fauna so that biological diversity and ecological integrity are maintained.”</p> <p>Objectives:</p> <ul style="list-style-type: none"> TF-3: Implementation of the Bird and Bat Adaptive Management Plan (BBAMP) to monitor and minimise collision risk impacts to species. <p>Key Environmental Values: Habitat for conservation significant and priority fauna; and Conservation significant and priority fauna.</p> <p>Key Impacts and Risks: Fauna habitat loss and injury through direct and indirect impacts.</p>				
Management Actions	Management Targets	Monitoring	Timing / Frequency of Monitoring	Reporting
<ul style="list-style-type: none"> All employees, contractors and visitors during the construction (inclusive of site preparation) and operation of the Proposal will adhere to the measures set out in the BBAMP. Specific details of the management actions, targets, monitoring and reporting requirements are provided in the Bird and Bat Adaptive Management Plan for the Proposal (549PG-5692-PL-EN-0002). 				



3 MONITORING

An effective long-term monitoring program is adaptive. Innovations in monitoring techniques and methods should be incorporated into the program design over time. This would, however, be dependent on, and driven by, the quality and quantity of data collected from site. Any changes will be detailed in the annual monitoring report and captured in the next revision of the Plan.

Key monitoring actions have been identified to monitor the potential impacts of the Proposal to Flora and Vegetation, and Terrestrial Fauna and associated habitat. Monitoring will be undertaken by suitably qualified individuals for the methodology type specified. The proposed monitoring program will be developed as the approval process progresses and key monitoring actions associated with the key environmental factor outcomes for the Proposal are identified in Table 2-1 and Table 2-3.

3.1 Data handling and statistical analysis

Data will be handled in accordance with the data handling protocol established as part of the annual monitoring tender. The protocol will include the requirements as to data storage and protection, data extraction, quality control, analysis, interpretation, reporting and presentation. The protocol will also directly reference and align with the requirements detailed in *Document Control, Information Management* (100-ST-DC-001) and *Geographic Information Systems and Raw Data Guidelines* (100-GU-EN-0009).

Statistical analysis of data will be undertaken to compare baseline values of parameters to each subsequent monitoring event, and between indirect impact sites values to reference sites values (where possible). Comparisons should be replicable.

Statistical (univariate and multivariate) analysis methods for environmental monitoring will be undertaken where data permits. Where data capture allows, analysis will include univariate or multivariate analysis, as deemed appropriate, to determine whether there are any statistical variations in monitoring data. Robust statistical analysis shall be completed for all programs. Error analysis shall also be completed to understand the accuracy of the monitoring results.



4 ADAPTIVE MANAGEMENT AND REVIEW

Fortescue will implement adaptive management practices to learn from the implementation of mitigation measures, monitoring and evaluation against criteria, to more effectively meet the environmental outcome. Adaptive management practices that will be assessed for the management and monitoring program as part of this approach include the following as required:

- Evaluation of the monitoring program, data and comparison to baseline data and reference sites on an annual basis to verify whether responses to project activities are the same or similar to predictions,
- Evaluation of assumptions and uncertainties of the management and monitoring program,
- Re-evaluation of the risk assessment and revision of risk-based priorities as a result of monitoring outcomes,
- Review of data and information gathered over the review period that has increased understanding of site environment in the context of the regional ecosystem,
- Review of management actions as the project matures and new management measures and technologies become available that may be more effective for environmental management,
- Assessment of changes which are outside the control of the project and the management measures identified (i.e., a new project within the area or region; regional change affecting vegetation health management), and
- Evaluation and introduction of new or different monitoring methods due to changes in technology.

The overarching monitoring program will be technically assessed and reviewed every five years. The main objective of the assessment and review will be to ensure that the methods, parameters and frequency used are considerate and appropriate to the findings of the monitoring program. If no criteria are exceeded (detailed in Section 2) after five years, the frequency of monitoring will be reduced to a frequency supported by the review.

In addition, this Plan may be reviewed based on regulators (EPA and/or DCCEEW) and decision-making authorities comments during the Proposal approval process.



5 STAKEHOLDER CONSULTATION

Fortescue has undertaken stakeholder consultation whereby landowners, regulators and other relevant parties (i.e., Palyku and Nyiyaparli) have been consulted with regarding investigation and design throughout the environmental approval process.

Table 5-1 will be updated following receipt of stakeholder comments as a result of the review and approval process.

Table 5-1: Stakeholder Consultation

Stakeholder	Stakeholder comments/advice received on key environmental issues	Fortescue's response
DWER	Fortescue: Submission of s38 referral for the Project, including <i>Environmental Management Plan</i> (plan name; doc id; rev number) as part of Bonney Downs submission.	EMP is included in s38 referral



6 ENVIRONMENTAL MANAGEMENT ROLES AND RESPONSIBILITIES

Fortescue implements and maintains an Environmental Management System (EMS) that aligns with the principles of ISO14001 International Standard for Environmental Management Systems. Fortescue also maintains an Environment Policy that is publicly available on the Fortescue website¹. The Policy is endorsed by the Chief Executive Officer and the Board, stating that compliance with environmental laws and obligations is the minimum standard to which Fortescue will operate. It is the responsibility of all Fortescue employees and contractors to comply with the Environment Policy.

The Fortescue environmental management framework is managed by environmental personnel, within corporate, site operations and projects. Position descriptions for relevant environmental personnel outlines the requirements to manage and implement Fortescue's EMS sitewide. Fortescue identifies the environmental aspects of its projects and operations through a systematic risk assessment process. Environmental risks are reviewed and updated annually, with Environmental Improvement Plans (EIPs) established for high-risk environmental aspects.

Operational controls (management plans, procedures, guidelines and work instructions) will be identified and developed for each environmental risk. Environmental management programs established at Operational and Project sites detail the implementation of operational controls and monitoring of their effectiveness. Effectiveness of critical environmental controls implemented for high-risk environmental aspects is audited annually as part of Fortescue environmental management framework to identify improvement opportunities that may reduce the consequence or likelihood of occurrence of environmental risks or gaps.

All Fortescue employees, including supervisors, receive training during inductions outlining their responsibilities in relation to complying with the Environment Policy. Environmental personnel at Operational Sites and Projects deliver targeted training on specific regulatory requirements, site specific approval conditions and use of Fortescue management plans and procedures to ensure that personnel understand their environmental responsibilities when undertaking their day-to-day work.

Fortescue maintains a database that is accessible to all Fortescue personnel to capture, maintain and report details of non-compliances and corrective actions. Performance against compliance targets is monitored and internally reported to management on a monthly basis, ensuring that non-compliance triggers and adverse environmental trends are identified and appropriate corrective and remedial actions can be implemented. Monthly analysis and reporting to Senior Managers is undertaken for environmental incidents and actions

¹ <https://cdn.fortescue.com/docs/default-source/corporate-governance/environment-policy.pdf>



completed. Regular biennial reporting of environmental performance to regulators is undertaken in accordance with the Statutory Reporting Schedule.

Environmental personnel at Operational and Project sites undertake monthly auditing against high-risk environmental obligations (those obligations where non-compliance could potentially lead to environmental harm). Results of audits are internally reported to Senior Managers, with corrective actions arising from non-compliance captured, reviewed and reported.

Records relating to environmental management (including compliance, monitoring and reporting) are maintained within Fortescue in accordance with Fortescue's Record Keeping Policy.

Continuous improvement of Fortescue's EMS and environmental performance is driven through the environmental governance processes within the business, including monthly reporting to Senior Managers, quarterly reporting to the Board and quarterly environmental management review meetings with Site and Head Office management. Improvement actions identified in relation to the effectiveness of Fortescue EMS and environmental performance are identified through feedback from the Senior Environmental Management team.

6.1 Proposal Specific Roles and Responsibilities

The implementation of this EMP requires clear identification of roles and responsibilities. Table 6-1 specifies the roles and responsibilities associated with this EMP.

Table 6-1: EMP Related Roles and Responsibilities

Role	Responsibility
Approval Holder	Implementation of a final approved EMP and associated decision making.
Site Manager	The Site Manager is responsible for implementation of the provisions of this EMP.
Site Environmental Advisor	Implementation of inductions and training for all site personnel. Reporting and investigation of any incidents related to non-conformances with the provisions of this EMP.
Manager of Nature and Science	All correspondence with DCCEEW and/or DBCA. This may include notification of incidents, identification of threatened species and EMP associated reporting. Appointing suitably qualified ecologists to implement the technical aspects of the final approved EMP, coordination and oversight of the qualified ecologists. Audit and periodic review of the effectiveness of final approved EMP and any corrective actions. Implementation of the required monitoring, management of suitably qualified ecologists, training of site personnel, data analysis and reporting.
Site Personnel (all)	Undertake site induction on environmental management (e.g. weed identification and hygiene management). Reporting of any identified non-compliance to the Site Manager.



7 ENVIRONMENTAL TRAINING

Fortescue will ensure that all individuals employed in the construction of the Proposal have the appropriate training and experience required to successfully implement this Plan.

All personnel will receive environmental awareness training, applicable to their roles and responsibilities. Environmental awareness training may include the following formats:

- Toolbox talks - delivered as part of pre-start briefings to the workforce,
- Site inductions,
- Incident response training, and
- Task briefings.



8 COMMUNICATION

8.1 Complaints Procedure

All complaints will be recorded within a register that will be developed and maintained by Fortescue. Community grievances can be raised with Fortescue via email (feedback@fortescue.com), by sending a letter to Fortescue's Head Office (Ground Floor, 256 St Georges Terrace, Perth WA 6000) or Community Offices or via the phone numbers listed below:

- 1800 867 086 (AUS), and
- +61 3 7047 7881 (WhatsApp).

Complaints will be recorded in Fortescue's Stakeholder Relationship Management system (SRM) and regular updates provided to the complainant. All grievances and complaints are assessed on their maximum potential consequence and classified in accordance with Fortescue's Risk Management Standard. Grievances are investigated and corrective actions identified as required. Once corrective actions have been completed, the complainants are consulted to confirm if a satisfactory resolution of the complaint has occurred.

8.2 Emergency Response

Fortescue will prepare both a construction and operations phase Emergency Response Plan. This Plan will detail how emergencies are responded to within the DE.



9 REFERENCES

Beard, J. S. (1975). Map and Explanatory Notes to Sheet 5: The Vegetation of the Pilbara Area. Nedlands, Western Australia: University of Western Australia Press.

Beard, J. S. (1990). Plant Life of Western Australia. Kenthurst: Kangaroo Press.

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

DCCEEW. (2023). Australia's bioregions (IBRA). Available at: <https://www.dcceew.gov.au/environment/land/nrs/science/ibra>. Accessed on 17/12/2024.

Department of Primary Industries and regional Development, 2022. Soil Landscape Mapping - Best Available (DPIRD-027). Available at: <https://catalogue.data.wa.gov.au/dataset/soil-landscape-mapping-best-available>. Accessed on: 05/07/2024.

DWER. (2018a). RIWI Act, Rivers (DWER-036). Available at: <https://catalogue.data.wa.gov.au/dataset/riwi-act-rivers>. Accessed on: 05/07/2024.

DWER. (2018b). Public Drinking Water Source Areas (DWER-033). Available at: <https://catalogue.data.wa.gov.au/dataset/public-drinking-water-source-areas>. Accessed on: 05/07/2024.

DWER. (2020). Contaminated Sites Database (DWER-059). Available at: <https://catalogue.data.wa.gov.au/dataset/contaminated-reported-sites-dwer-059>. Accessed on: 05/07/2024.

DWER, 2024a. Public Drinking Water Source Areas (DWER-033). Available at: <https://catalogue.data.wa.gov.au/dataset/public-drinking-water-source-areas>. Accessed on: 17/12/2024.

DWER, 2024b. Hydrographic Catchments - Catchments (DWER-028). Available at: <https://catalogue.data.wa.gov.au/dataset/hydrographic-catchments-catchments#:~:text=This%20dataset%20is%20the%20Western,Catchments%20and%20Basins%20to%20Divisions>. Accessed on: 17/12/2024.

Ecologia Environment (Ecologia), 2024. Bonney Downs North: Terrestrial Vertebrate Fauna Assessment.

Ecologia Environment (Ecologia), 2025a. Bonney Downs Consolidated Flora and Vegetation Assessment. Prepared for Fortescue Ltd.

Ecologia Environment (Ecologia), 2025b. Fortescue Metals Group Limited Bonney Downs: Terrestrial Vertebrate Fauna Survey Consolidation.

Ecologia Environment (Ecologia), 2025c. Fortescue Limited Bonney Downs Wind Farm Bat and Bird Site Utilisation Report – year 1.

Environmental Protection Authority (EPA). (2024). Instructions: How to prepare Environmental Protection Act 1986 Part IV environmental management plans, EPA, Western Australia.



Fortescue. (2013). Document Control, Information Management (Document number:100-ST-DC-001).

Fortescue. (2017). Rehabilitation and Revegetation Monitoring Procedure (Document number: 45-GU-EN-0009).

Fortescue. (2019). Geographic Information Systems and Raw Data Guidelines (Document number: 100-GU-EN-0009).

Fortescue. (2023). Land Use Certification: Acquisitions & Tenements (Business Process Owner) (Document number: 100-PR-TA-001).

George, Alexander S.; Mckenzie, Norman L.; Doughty, Paul. Ed. (2011). A biodiversity survey of the Pilbara region of Western Australia, 2002-2007. Western Australian Museum.

Kendrick P. (2001). Pilbara 2 (PIL2 – Fortescue Plains subregion). 'Biodivers. Audit West. Aust. 53 Biogeographic Subregions 2002. pp. 559-567. Department of Conservation and Land Management.

Kendrick P, McKenzie N., (2001). Pilbara 1 (PIL1 – Chitchester subregion). 'Biodivers. Audit West. Aust. 53 Biogeographic Subregions 2002. pp. 466-479. Department of Conservation and Land Management.

Korner-Nievergel, F. K., O. Behr, R. Brinkmann, M. A. Etterson, M. P. Huso, D. Dalthorp, and P. Korner-Nievergelt. (2015). Mortality estimation from carcass searches using the R-package carcass — a tutorial. *Wildlife Biology* 21:30–43.

Van Vreeswyk, A.M.E, Payne, A.L., Leighton, K.A. and Hennig, P. (2004). Technical Bulletin No. 92. An inventory and condition survey of the Pilbara region, Western Australia.



DOCUMENT CONTROL

Environmental Management Plan		
Status	IFU - Issued for Use	17-Feb-26
Summary of Changes	N/A	
Author	Dominic Flynn - Jacobs Group (Australia) Pty Ltd	_____ Signature
Checked or Squad Review# (if applicable)	Sofie Springer, Jacob Azzarello, Jane Humphrey, Vlad Rios Vera	_____ Signature
Approved	Matt Dowling	_____ Signature
Next Review Date (if applicable)	Enter a date	



APPENDIX A RELEVANT LEGISLATION

Legislation	Application
<i>Biodiversity Conservation Act 2016 (WA)</i>	Conservation and protection of biodiversity and biodiversity components.
<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>	Protection on environmental matters of national significance.
<i>Environmental Protection Act 1986 (WA)</i>	Prevention, control and abatement of pollution and conservation protection and enhancement of environment.
Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (WA)	Regulates the clearing of native vegetation.
<i>Mining Act 1978 (WA)</i>	Identify, evaluate and manage the environmental impacts of mining proposals.
<i>Rights in Water and Irrigation Act 1914 (WA)</i>	Relates to rights in water resources, to make provisions for the regulation, management, use and protection of water resources, to provide for irrigation schemes and for related purposes.



APPENDIX B ACRONYMS AND DEFINITIONS

Acronym / term	Definition
AUS	Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
DBCA	Department of Biodiversity Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DE	Development Envelope
DP	Declared Plant
DPIRD	Department of Primary Industries and Regional Development
DPLH	Department of Planning, Lands and Heritage
DWER	Department of Water, Environment and Regulation
EPA	Environmental Protection Authority
EPBC Act	<i>Environmental Protection Biodiversity and Conservation Act 1999</i>
ERD	Environmental Review Document
Fortescue	Fortescue Ltd
GW	gigawatts
GWOS	Groundwater Operating Strategy
ha	hectares
IDF	Indicative Disturbance Footprint
kV	kilovolt
LUC	Land Use Certificate. A certificate issued to confirm that proposed land use activities adhere to approvals granted by Government departments. A LUC is required whenever any work (e.g., access, ground disturbance, maintenance, rehabilitation) is undertaken. The LUC has sensitivity checks against GIS spatial data to determine if the area proposed for works intersects with any mapped constraints, including conservation significant flora/vegetation, weeds, and environmental exclusion zones datasets. Depending on the type of constraint, proposed works will be referred for assessment or blocked. The LUC is then assessed by key Fortescue stakeholders to determine if the activities can be approved. Approval may be unconditional, or subject to conditions.
m	metres
mbgl	metres below ground level
PEC	Priority ecological community
PEG	Pilbara Energy (Generation) Pty Ltd
PLNB	Pilbara Leaf-nosed Bat
Q	quarter
WA	Western Australia
VA	Vegetation Associations
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i>
s38	Section 38
SRE	Short Range Endemic
SRM	Stakeholder Relationship Management system
WoNS	Weeds of National Significance

