CopperString

Stage 1 MNES Management Plan

EPBC 2019/8416

Client:	Powerlink Queensland
Reference:	J0105

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Abbreviations

Abbreviation	Description
ADR	Accepted Development Requirement Code for operational work that is constructing or raising waterway barrier works (DPI, 2025)
CEMP	CopperString Construction Environmental Management Plan
CEV	Controlled Environment Vault
DA	Development Approval
DCCEEW	Department of Climate Change, the Environment, Energy and Water
DoEE	Department of the Environment and Energy
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ESCMP	Erosion and Sediment Control Management Plan
ha	Hectares
hrs	Hours
km	Kilometres
kV	Kilovolt
MNES	Matters of National Environmental Significance
m	Metres
OEMP	CopperString Operational Environmental Management Plan
Stage 1 PCSR	Pre-clearance Survey Report for Stage 1 of the CopperString Project.
RE	Regional Ecosystem
WAF	Workforce Accommodation Facility
WoNS	Weeds of National Significance

Defined Terms

Contractor – Any firm directly contracted to the Principal for the design, clearing, construction and operational phases of the Project, including any sub-contractors.

Corrective Actions Plan – A step-by-step plan developed and implemented to prevent Incidents and Non-compliances from recurring. The plan documents investigations into Incidents and Non-compliances, identifies their root causes and describes a plan for rectifying them.

Disturbance Areas – Any areas required to be cleared or otherwise disturbed by Project Activities.

Ecologist – A person who is a suitably qualified ecologist, that is, experienced in undertaking ecological assessments, analysing ecological data, preparing ecological reports, and holds a relevant tertiary qualification in the area of Ecology, Environmental Science, or a related field.

Environmental Work Plan/s (EWP) – provide a geospatial representation of key ecological, land and water-based data sets which are of relevance to the Project. Environmental Work Plans will be used by Powerlink and Contractors for the identification of key environmental features and/or constraints which have been highlighted to enable works to be undertaken on or in association with the Project during construction and operation.

Exclusion Zone – Designated 'no-go' area that is clearly identified and appropriately delineated to prevent unwanted disturbance to MNES habitats. Exclusion Zones may be used to define the approved clearing footprint, exclude vehicles, machinery and/or personnel from habitat areas, or provide temporary fauna exclusion measures to prevent MNES from entering parts of the Project.

Fauna Spotter Catcher – A person qualified and authorised under a current rehabilitation permit granted under the *Nature Conservation (Animals) Regulation 2020* to take, keep or use an animal whose habitat is about to be destroyed by human activity.

Fauna Spotter Catcher Survey – Survey undertaken by a Fauna Spotter Catcher within 72 hours of clearing or disturbance works within confirmed MNES habitat.

General Environmental Inspections – Regular environmental inspections undertaken by the Project Environmental Representative as outlined in Section 6.0.

Incident – Any event which has the potential to, or does, impact on any protected matter other than as authorised by the EPBC Act Approval.

Non-compliance – Any potential or actual non-compliance with the EPBC Act Approval conditions or commitments made in this MNES Management Plan.

Permit to Disturb – An internal permitting system to be implemented by the Contractor prior to vegetation clearing or disturbance to land (e.g. earthworks) within each site/worksite.

Pre-construction Biosecurity Survey – Survey conducted by an Ecologist or other suitably qualified person prior to commencement of construction to assess the presence and abundance of:

- Weeds within the Stage 1 Clearing Footprint; and
- Pests within the Julia Creek WAF and Flinders Substation footprint.

Pre-construction Fauna Survey – Survey undertaken by an Ecologist within 10 days prior to any vegetation clearing or disturbance works with the potential to impact on MNES and MNES habitat.

Principal – Queensland Electricity Transmission Corporation Limited t/a Powerlink Queensland. The Principal is the owner and operator of the Project.

Project Activities – Any activity associated with the construction or operation of Stage 1 of the Project, including all of the permanent infrastructure and construction activities described in Section 1.2 and 1.3.

Project Environmental Representative – The person with overall responsibility for environmental management for the Project. This includes responsible for monitoring the implementation of this MNES

Management Plan, approving annual reporting, liaising directly with DCCEEW, and implementing any ongoing management and monitoring required during operation.

Protected Matters –A matter protected under a controlling provision in Part 3 of the EPBC Act. The protected matters listed under Attachment A of the EPBC Act Approval and were identified in the Stage 1 PCSR as occurring or potentially occurring within the Stage 1 Construction Zone:

- Australian painted snipe (*Rostratula australis*)
- Painted honeyeater (*Grantiella picta*)
- Julia Creek dunnart (*Sminthopsis douglasi*)
- Plains death adder (*Acanthophis hawkei*).

Project-specific speed limits – Vehicle speed limits restricted to 40 km/hr or less on unsealed and off-road access tracks in the Project Area. Additional reductions to speed limits will be applied during night works in locations where Julia Creek dunnart have been identified for a period of three months from the sighting.

Rainfall Event – Greater than 25 mm of rainfall received over a 24-hour (hr) period.

Rehabilitation Areas –areas within the Project Area which, as part of the Action, will be cleared for construction, but are not required to remain cleared for the Action during operation.

Site/Worksite – A discrete area within the Stage 1 Construction Zone where Project Activities or associated monitoring activities are undertaken.

Site Supervisor – Person responsible for managing Project Activities at a site/worksite.

Stage 1 Indicative Clearing Footprint – Indicative area required to be cleared or disturbed within the Stage 1 Construction Zone for all permanent infrastructure and temporary construction activities based on the current detailed design. This indicative footprint is illustrative only and subject to changes during construction and operation.

Stage 1 Clearing Footprint – Final area required to be cleared within the Stage 1 Construction Zone to accommodate all Project Activities (as outlined in Section 1.1). The Stage 1 Clearing Footprint will be based on the final detailed design, As Constructed drawings, or operational requirements (e.g. transmission line clearing).

Stage 1 Clearing Limits – Approved clearing limits as outlined in Condition 2A of the EPBC Act Approval and the total potential impact on habitats for Protected Matters in Stage 1.

Stage 1 Construction Zone – Outer limit of the area where all clearing and disturbance for Stage 1 of the Project will occur. The Stage 1 Construction Zone is wholly located within the Project Area.

Stage 1 Project Area – Stage 1 of the approved Project Area as shown on Attachments B1 and B2 of the in the Project's Approval Conditions (EPBC ref 2019/8416) and illustrated on Figure 1.

Suitably Qualified Carer – A person authorised to care for sick, injured, or orphaned protected animals and holding a current rehabilitation permit authorised under the Queensland *Nature Conservation Act 1992*.

Temporary Disturbance Areas – Areas cleared for construction, but not required to be cleared for operation, and therefore to be rehabilitated as part of construction works (referred to as Rehabilitation Areas under the EPBC Act Approval).

Unexpected Finds Procedure – Procedure to manage any newly discovered MNES within the Stage 1 Project Area to satisfy condition 4 of the EPBC Act Approval.

VPEM – Vehicles, plant, equipment and machinery.

1.0 Introduction

Powerlink Queensland engaged Base Consulting Group Pty Ltd (Base) to prepare a Matters of National Environmental Significance (MNES) Management Plan (this MNES Management Plan) for Stage 1 of the CopperString Project (the Project). The Project was approved under the EPBC Act subject to the varied conditions of approval EPBC 2019/8416 (EPBC Approval) dated March 2025 and as described in Section 2.1.

The EPBC Act Approval requires the preparation and implementation of a MNES Management Plan for each stage to avoid, mitigate and manage impacts to Protected Matters. The EPBC Act Approval requires the MNES Management Plan to be approved by DCCEEW prior to the commencement of the action in the stage and implemented no later than commencement within the stage and for the entire duration of all clearing, construction and operation within that stage.

1.1 Purpose and Scope

Under Conditions 13, 14 and 15 of the EPBC Act Approval, the preparation and implementation of a MNES Management Plan is required to avoid, mitigate and manage impacts on EPBC Act Protected Matters during clearing, construction and operation within that stage. For the purposes of this MNES Management Plan, EPBC Act Protected Matters are those MNES:

- Outlined in Attachment A of the EPBC Act Approval
- Any additional MNES that were listed as threatened under the EPBC Act as of 14 May 2019 (the referral decision) and identified within the Stage 1 Project Area during pre-clearance surveys.

The objective of this MNES Management Plan is to demonstrate how impacts on MNES and their habitat will be avoided, minimised, mitigated and managed. This MNES Management Plan has been developed in accordance with the:

- Varied EPBC Act Approval (EPBC 2019/8416)
- Environmental Management Plan (EMP) Guidelines (DCCEEW, 2024b).

The relevant EPBC Act Approval conditions are summarised in Section 2.2 and are cross referenced to sections of this document where each EPBC Act Approval condition has been addressed.

This MNES Management Plan once approved must be implemented prior to and during clearing, construction and operation within Stage 1.

1.2 Project Description

The Project involves the construction of a transmission line and related substation assets between south of Townsville and Mount Isa. The transmission system is to connect into the existing 275 kV transmission line network between Ross and Strathmore, approximately 70 km south of Ross.

The Project comprises four stages (Stage 1 to Stage 4). Stages 1 and 2 will be undertaken in accordance with the EPBC Act Approval. Separate referrals have been made for Stages 3 and 4. The Project Area and Project staging are shown on Attachments B1 to B6 of the EPBC Act Approval.

1.3 Stage 1

This MNES Management Plan has been developed for Stage 1 of the Project. Under the EPBC Act Approval, the Stage 1 Project Area is shown on Attachments B1 and B2 of the EPBC Approval and on Figure 1 in this Plan. The Stage 1 Project Area spans from the eastern edge of the Kennedy

Developmental Road Reserve boundary in Flinders Shire Council and extends to the western boundary of the Proa Road Reserve in McKinlay Shire Council.

The permanent infrastructure for Stage 1 is expected to include:

- Approximately 220 kilometre (km) double circuit 330 kilovolt (kV) transmission line within a 120 metre (m) wide easement
- New substation (Flinders Substation)
- Controlled Environment Vault (CEV) near Nonda
- Permanent access tracks and waterway crossings

The Temporary Disturbance Areas required for the construction of Stage 1 include:

- Julia Creek Workforce Accommodation Facility (WAF)
- Transmission line construction areas
- Other ancillary construction activities and temporary infrastructure such as laydown areas, stockpile areas, borrow pits, quarries, and concrete batching facilities
- Temporary access tracks and waterway crossings.

1.3.1 Construction works

It is anticipated that the construction of the substation could be completed within two years from the commencement of construction, subject to project planning and delivery priorities with the balance of the CopperString Project. The main components of the substation construction are clearing and bulk earthworks, electrical and ancillary facilities construction, and commissioning. All works for construction of the substation will be located within a static worksite within the Stage 1 Construction Zone.

It is anticipated that construction of the Stage 1 transmission line could be completed within two years from commencement of construction, subject to project planning and delivery priorities with the balance of the CopperString Project. Construction works are proposed to be progressed as short, discrete stages along the length of the transmission line within the Stage 1 Construction Zone. The main stages for construction are access and clearing, foundations, assembly and erection, stringing, and rehabilitation. Each stage of works is typically only a few days to a week at each tower location and progresses in a linear sequence along the line.

Construction works for Stage 1 are proposed to include the following clearing and earthworks activities:

- Construction of the transmission line:
  - New or upgraded access tracks and associated infrastructure such as waterway crossings and drainage infrastructure
  - Tower footprints and assembly areas
  - Brake and winch sites for stringing
  - Within the easement for stringing and electrical clearance
- Construction of the Flinders Substation
- Construction of the Julia Creek WAF
- Construction of other supporting ancillary construction activities and infrastructure including:
  - Laydown areas
  - Borrow pits and quarries
  - Concrete batching facilities.

Following the completion of construction works, Temporary Disturbance Areas no longer required for operations will be rehabilitated.

1.3.2 Operational works

Following construction and commissioning of the transmission line, access and activity within the transmission line easement will decrease significantly. Operation of the transmission line is planned for 40 years. During operation, maintenance measures will be implemented to ensure the safe, reliable and responsible delivery of electricity transmission services.

Maintenance measures through the operational phase of the transmission line will be implemented in accordance with the Principal's asset management strategy which includes:

- Routine and condition-based preventative asset maintenance programs
- Corrective asset maintenance as required
- Land asset inspections and other asset condition monitoring
- Monitoring of the forced outage data that could be linked to vegetation or fire
- Asset audits, including safety.

Typically, during the operational phase of the Project, a condition assessment will be undertaken at a minimum of every four years and maintenance measures implemented as determined by this risk-based assessment. Onsite maintenance works during operation may include:

- Clearing of incompatible vegetation for electrical clearance along the transmission line
- Maintenance of transmission line infrastructure
- Maintenance of access tracks and associated infrastructure such as waterway crossings and drainage infrastructure.

1.4 Stage 1 Construction Areas

1.4.1 Stage 1 Construction Zone

All clearing and disturbance activities required to construct and operate Stage 1 are to be located within the Stage 1 Construction Zone, which is located within the Stage 1 Project Area. An overview of the Stage 1 Construction Zone is shown on Figure 1 with detailed maps provided in Appendix A to Appendix D.

In accordance with EPBC Act Approval Condition 11, pre-clearance surveys to determine the presence of MNES have been completed within the Stage 1 Construction Zone. The Stage 1 pre-clearance survey results are provided in the Stage 1 PCSR (BASE, 2025). The results of the Stage 1 PCSR have been used to inform this MNES Management Plan.

One area within Stage 1 (Lot 14D15766) could not be accessed and is yet to be surveyed. The Stage 1 PCSR modelled habitat for MNES within Lot 14D15766, and this modelled habitat has been considered in this MNES Management Plan. The Stage 1 PCSR will be amended once Lot 14D15766 is surveyed. If any changes to this Stage 1 MNES Management Plan are required following the additional survey, an amendment will be made in accordance with the EPBC Approval conditions.

If the Stage 1 Construction Zone is required to be amended, any areas not surveyed during pre-clearance surveys will be surveyed prior to clearing or disturbance being undertaken. In this case, if required, the Stage 1 PCSR and this MNES Management Plan would be amended in accordance with the EPBC Approval conditions.

1.4.2 Stage 1 Clearing Footprint

The indicative clearing and Disturbance Areas for construction of Stage 1, based on the current design, is referred to as the Stage 1 Indicative Clearing Footprint and is shown on the maps in Appendix A to

Appendix D of this MNES Management Plan. As the Project progresses toward, and into, construction, modifications to the design may be required due to engineering constraints, landholder requirements or unexpected environmental or cultural heritage finds. In such circumstances, the design and associated clearing areas may change; however, the final clearing footprint (i.e. Stage 1 Clearing Footprint) will remain within the Stage 1 Construction Zone as referred in Section 1.4.1 of this MNES Management Plan. The Stage 1 Clearing Footprint, including any changes to the Stage 1 Indicative Clearing Footprint, will not exceed the allocated clearing limits in Condition 2A of the EPBC Act Approval.

1.4.3 Stage 1 Clearing Limits

As stated above, Condition 2A of the EPBC Act Approval sets the allocated clearing limits for each MNES for Stage 1 of the Project. Under this condition, Stage 1 of the Project must not clear:

- Any Koala habitat
- Any Squatter Pigeon (southern) breeding habitat or any foraging habitat
- Any Southern Black-throated Finch breeding habitat or any foraging habitat
- Any Night Parrot breeding habitat or any foraging habitat
- More than 22.6 ha of Australian Painted Snipe habitat
- More than 81.8 ha of Painted Honeyeater habitat
- More than 410.3 ha of Julia Creek Dunnart habitat
- Any Ornamental Snake habitat
- More than 374.3 ha of Plains Death Adder habitat.

1.5 MNES Relevant to Stage 1

The MNES that were either confirmed as present or have suitable habitat within the Stage 1 Construction Zone are detailed in the Stage 1 PCSR. The MNES that are relevant to Stage 1, and the subject of this MNES Management Plan, are shown in Table 1 along with the approved Clearing Limits as per Condition 2A of the EPBC Act Approval.

Table 1: Clearing Limits for relevant MNES identified as occurring within Stage 1

MNES	EPBC Act status	Stage 1 Clearing Limits (ha)
Julia Creek dunnart (*Sminthopsis douglasi*)	Vulnerable	410.3
Plains death adder (*Acanthophis hawkei*)	Vulnerable	374.3
Painted honeyeater (*Grantiella picta*)	Vulnerable	81.8
Australian painted snipe (*Rostratula australis*)	Endangered	22.6

Condition 17(f) of the EPBC Act Approval requires the MNES Management Plan also to include avoidance and mitigation measures for the:

- Black ironbox (*Eucalyptus raveretiana*) – Vulnerable under the EPBC Act
- Pink gidgee (*Acacia crombiei*) – Vulnerable under the EPBC Act
- Waxy cabbage palm (*Livistona lanuginosa*) – Vulnerable under the EPBC Act

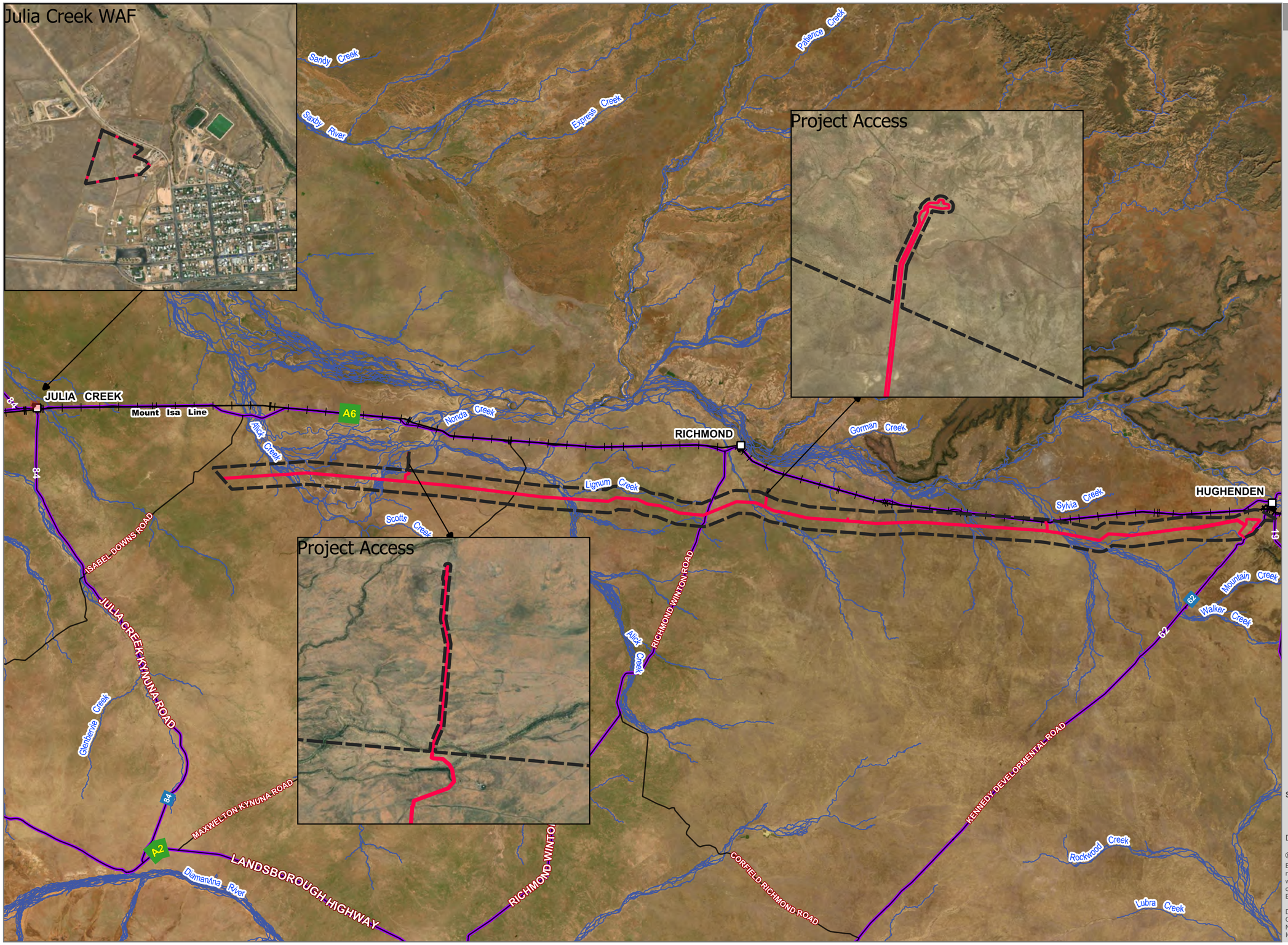
- Red goshawk (*Erythrotriorchis radiatus*) – Endangered under the EPBC Act.

The presence of these MNES, or their habitat, were not identified within the Stage 1 Construction Zone during extensive surveys undertaken to inform the Stage 1 PCSR. Therefore, these MNES have not been included in this MNES Management Plan. Nevertheless, the management measures outlined in Section 5.0 are considered relevant to these MNES if their presence is confirmed during pre-construction surveys or during construction. Further, an Unexpected Finds Procedure (Appendix E) has been developed and will be followed if these species are found present during construction or operation.

Stage 1 Project Area and Construction Zone

Figure 1

BASE/



Legend

- Stage 1 Project Area
- Stage 1 Construction Zone
- Cities / Towns
- Rail
- Roads
- State Controlled Roads
- Watercourse / Drainage Features

Scale @ A3: 1 : 638022

0 20 40 km

N

Datum: GDA2020 **Job Number: J0105.1**

DATA SOURCE:
QSPATIAL _2025; The State of Queensland (Department of Resources) 2025; Esri, Nearmap, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community;

1.6 Associated Plans

The documents listed in Table 2 are relevant to this MNES Management Plan.

Table 2: Other plans associated with this MNES Management Plan

Document title	Relevance to this plan
CopperString, Stage 1 Pre-clearance Survey Report (PCSR)	Data from the PCSR was used to inform the management and mitigation measures identified in this document. The Stage 1 PCSR identifies the location and extent of habitat for the four Protected Matters included in this MNES Management Plan, pre-clearance vegetation communities, and expected impacts to the Protected Matters within Stage 1.
CopperString, Stage 1 Construction Environmental Management Plan (CEMP)	The CEMP or equivalent documentation, including subplans, will incorporate management and monitoring measures, responsibilities and reporting requirements outlined in this MNES Management Plan for the construction phase. Where the CEMP and/or any subplans have an inter-relationship with MNES, they will be developed prior to the commencement of construction of the relevant parts of Stage 1, to ensure they align with the management measures outlined in this MNES Management Plan.
CopperString, Stage 1 Operational Environmental Management Plan (OEMP)	The OEMP will incorporate management and monitoring measures, responsibilities and reporting requirements outlined in this MNES Management Plan for the operational phase. Where the OEMP has an inter-relationship with MNES, it will be developed prior to the commencement of operation of the relevant part of Stage 1, to ensure it aligns with the management measures outlined in this MNES Management Plan.
Relevant State approvals and processes	The Project was assessed by an Environmental Impact Statement (EIS). The Coordinator-General published an Evaluation Report. Following EIS approval, land use planning approvals and development permits under the Queensland *Planning Act 2016* are required. The pathway to obtaining these approvals and to address the recommended conditions from the Coordinator-General's Evaluation Report on the EIS is via Queensland's MID process.

2.0 Regulatory Requirements

2.1 Conditions of Approval

The EPBC Act Approval decision (EPBC 2019/8416) was received on 11 November 2022 and included 54 conditions. The EPBC Act Approval conditions were varied on 7 March 2025 and are current as at the date of this plan. This revision of the Stage 1 MNES Management Plan has been prepared in accordance with the EPBC Act Approval conditions dated 7 March 2025.

2.2 Approval Condition Reference Table

The EPBC Act Approval conditions relevant to this MNES Management Plan for Stage 1 are provided in Table 3 with section references indicating where in the report the condition is satisfied.

Table 3: Approval conditions reference table

EPBC 2019/8416		
Condition	**Summary of condition**	**Relevant section of report**
Condition 1	The approval holder must not clear outside of the project area.	Measures to avoid clearing outside of the Stage 1 Project Area are described in Sections 5.4, 6.4 and 6.9.
Condition 2	The approval holder must not clear more than: a) 640.5 ha of koala habitat b) 56.2 ha of Squatter Pigeon (southern) breeding habitat c) 244.4 ha of Squatter Pigeon (southern) foraging habitat d) 203.0ha of Southern Black-throated Finch breeding habitat e) 642.7 ha of Southern Black-throated Finch foraging habitat f) 53.5 ha of Night Parrot breeding habitat g) 84.3 ha of Night Parrot foraging habitat) h) 190.8 ha of Australian Painted Snipe habitat i) 965.9 ha of Painted Honeyeater habitat j) 630 ha of Julia Creek Dunnart habitat k) 54.7 ha of Ornamental Snake habitat l) 562.8 ha of Plains Death Adder habitat.	Measures to monitor compliance with Clearing Limits are outlined in Sections 5.4, 6.4 and 6.9.

EPBC 2019/8416		
Condition	**Summary of condition**	**Relevant section of report**
Condition 2A	Within Stage 1, the approval holder must not clear: a) any Koala habitat b) any Squatter Pigeon (southern) breeding habitat c) any Squatter Pigeon (southern) foraging habitat d) any Southern Black-throated Finch breeding habitat e) any Southern Black-throated Finch foraging habitat f) any Night Parrot breeding habitat g) any Night Parrot foraging habitat h) more than 22.6 ha of Australian Painted Snipe habitat i) more than 81.8 ha of Painted Honeyeater habitat j) more than 410.3 ha of Julia Creek Dunnart habitat k) any Ornamental Snake habitat l) more than 374.3 ha of Plains Death Adder habitat.	Measures to monitor compliance with Stage 1 Clearing Limits are outlined in Sections 5.4, 6.4 and 6.9.
Condition 3	To avoid direct impacts on Red Goshawk, the approval holder must not remove or damage nests.	Section 5.4 includes measures to avoid the removal of or damage to Red Goshawk nests.
Condition 4	NEWLY DISCOVERED PROTECTED MATTERS If, during pre-clearance surveys, construction or operation of any stage, the approval holder becomes aware that: a) any protected matters are present in the project area that was not described in the EIS as likely to occur in the project area and was listed as threatened under the EPBC Act as of 14 May 2019; or b) any protected matter is present in the project area that could be significantly impacted by the Action that was not described in the EIS as likely to be significantly impacted by the Action and	Sections 3.3 and 5.4, and Appendix E.

EPBC 2019/8416		
Condition	**Summary of condition**	**Relevant section of report**
	was listed as threatened under the EPBC Act as of 14 May 2019 then the approval holder must: c) cease all clearing, and construction activities associated with that stage of the Action, excluding surveys, that may impact the newly discovered protected matter(s) until the Minister has confirmed in writing what components of the action may commence and when; d) notify the department in writing, within two business days of becoming aware of any of the above circumstance for protected matters, of the information of which it has become aware; and e) submit to the department, within 30 business days of becoming aware of any of the above circumstance for protected matters, a detailed report of the presence and distribution of the protected matters, the potential impacts of the action on the protected matters, and proposed offsets where significant impacts are identified. The report must be written by a suitably qualified expert.	
Condition 11	For each stage, the approval holder must ensure both the Matters of National Environmental Significance Management Plan ('MNES Management Plan') and Offset Management Plan for that stage consider the implications for protected matters of the PCSR for that stage. The approval holder must demonstrate, within both of these plans for that stage, that the plans have been informed by the PCSR, address all impacts to protected matters resulting from that stage and include references to the PCSR within the plans.	Section 1.6 describes the link between the PCSR and this MNES Management Plan. The data from the Stage 1 PCSR has been used to inform sections throughout this document.
Condition 12	At the completion of construction in any stage, the approval holder must ensure the Rehabilitation Areas are reinstated to the pre-disturbance vegetation community for each location as identified in the PCSR. Rehabilitation plantings must include a mix of local native species for that location informed by the PCSR. The rehabilitation plantings will exclude taller tree species directly under the transmission line corridor to the extent these	Refer to Section 7.0 for measures to undertake and monitor rehabilitation.

EPBC 2019/8416		
Condition	**Summary of condition**	**Relevant section of report**
	species would be incompatible with safety and bushfire risk management.	
Condition 13	For each stage, the approval holder must submit a Matter of National Environmental Significance (MNES) Management Plan (MNES Management Plan) for the Minister's written approval to avoid, mitigate and manage impacts to protected matters.	This plan
Condition 14	For each stage, the approval holder must not commence that stage until the Minister has approved the MNES Management Plan for that stage in writing.	Section 5.4
Condition 15	For each stage, the approval holder must commence implementing the approved MNES Management Plan no later than the commencement within that stage and for the entire duration of clearing, construction, and operation within that stage.	Section 5.4
Condition 17	The MNES Management Plans must be consistent with the Environmental Management Plan Guidelines, and must include:	This plan is consistent with the DCCEEW's EMP Guidelines.
Condition 17a	Details of the relevant protected matters and a reference to EPBC Act approval conditions to which the plan refers.	Sections 1.6
Condition 17b	A table of commitments made in the plan to achieve the environmental outcomes, and a reference to exactly where these commitments are detailed in the plan.	Commitments are outlined in Section 10.0.
Condition 17c	Commitments capable of ensuring that the environmental outcomes are achieved.	The commitments outlined in Section 10.0 are capable of achieving the objectives in Sections 5.2, 6.9 and 7.6.
Condition 17d	Reporting and review mechanisms to demonstrate compliance with the commitments made in the plan.	Sections 5.4, 6.0, 7.6.2 and 8.0
Condition 17e	An assessment of risks relating to achieving the environmental outcomes and risk management strategies and/or mitigation measures that will be applied to address identified risks.	Section 11.0

EPBC 2019/8416		
Condition	**Summary of condition**	**Relevant section of report**
Condition 17f	Impact avoidance, mitigation and/or repair measures, and the timing of those measures. Particular measures for, but not limited to, the following protected matters should be given: i) Black Ironbox ii) Pink Gidgee iii) Waxy Cabbage Palm; and iv) Red Goshawk.	Sections 1.4, 5.4 and 7.0
Condition 17g	A monitoring program, which must include: i) measurable performance indicators ii) trigger values for corrective actions iii) the timing and frequency of monitoring, ensuring monitoring is capable of detecting trigger values and changes in the performance indicators, and iv) proposed corrective actions if trigger values are reached. v) progress against completion criteria of proposed rehabilitation activities.	Sections 6.0 and 7.0
Condition 17h	References to other relevant plans or conditions of approval (including state approval conditions).	Sections 1.6 and 5.3
Condition 42	The approval holder must prepare a compliance report for each 12-month period following the commencement of the action, or as otherwise agreed to in writing by the Minister.	Section 8.3.2
Condition 46	The approval holder must notify the department electronically, within 2 business days of becoming aware of any Incident and/or potential Non-compliance and/or actual Non-compliance with the conditions or commitments made in a plan.	Section 8.3.1
Condition 47	The approval holder must specify in the notification: a) Any condition or commitment made in a plan which has been or may have been breached b) A short description of the incident and/or potential Non-compliance and/or actual Non-compliance	Section 8.3.1

EPBC 2019/8416		
Condition	**Summary of condition**	**Relevant section of report**
	c) The location (including co-ordinates), date, and time of the Incident and/or potential Non-compliance and/or actual Non-compliance. Note: If the exact information cannot be provided, the approval holder must provide the best information available.	
Condition 48	The approval holder must provide to the department in writing, within 12 business days of becoming aware of any Incident and/or potential Non-compliance and/or actual Non-compliance, the details of that Incident and/or potential Non-compliance and/or actual Non-compliance with the conditions or commitments made in a plan. The approval holder must specify: a) Any corrective action or investigation which the approval holder has already taken b) The potential impacts of the Incident and/or Non-compliance c) The method and timing of any corrective action that will be undertaken by the approval holder.	Section 8.3.1
Condition 49	The approval holder must ensure that an independent audit of compliance with the conditions is conducted for every three-year period following the commencement of the action until this approval expires, unless otherwise specified in writing by the Minister.	Section 8.2

3.0 Existing Environment

The Stage 1 Project Area is located within the Flinders Shire Council, Richmond Shire Council, and McKinlay Shire Council Local Government Areas. The Stage 1 Project Area is dominated by agricultural activities, broad acre cattle and sheep production with some limited cropping. Large areas of land within the Stage 1 Project Area have been extensively cleared to support these uses and as such the Stage 1 Project Area has varying levels of disturbance associated with the ongoing agricultural activities.

3.1 Vegetation Communities

The Stage 1 Project Area is located within the Mitchell Grass Downs and Gulf Plains bioregions. The Mitchell Grass Downs bioregion, which represents approximately 90% of the Stage 1 Project Area, consists largely of treeless plains with some occasional ridges, rivers and gorges. The dominant vegetation type is Mitchell grass tussock grasslands. The Gulf Plains bioregion, which represents the remainder of the Stage 1 Project Area is characterised by extensive alluvial plains and savannas.

As detailed in the PCSR, three main vegetation communities were identified within the Stage 1 Construction Zone. These vegetation communities are described as:

- Grassland Communities: *Astrebla* spp. (Mitchell grass) and *Dichanthium* spp. (bluegrass) tussock grasslands
- Mixed species woodlands including:
    - Open woodlands: *Atalaya hemiglauca* (whitewood), *Lysiphyllum* spp., *Acacia tephrina* (boree), wooded downs.
    - *Eucalyptus* spp. dominated open forest and woodlands on drainage lines and alluvial plains.

3.2 Weeds and Pests

Weed species have been recorded in the Stage 1 Construction Zone, including the following Weeds of National Significance (WoNS) and restricted weeds listed under the Queensland *Biosecurity Act 2014:*

- Prickly acacia (*Vachellia nilotica*)
- Parkinsonia (*Parkinsonia aculeata*) (E2M, 2024).

Fauna pests have been recorded in the Stage 1 Construction Zone and include five restricted fauna species listed under the Queensland *Biosecurity Act*, *2014* as listed below. Although none were observed, it is likely wild dogs also occur within the Stage 1 Construction Zone:

- Feral cat (*Felis catus*)
- Feral pig (*Sus scrofa*)
- European rabbit (*Oryctolagus cuniculus*)
- European fox (*Vulpes vulpes*) (E2M, 2024).

Notably, feral cats or feral cat activity (scat / tracks) was observed in preconstruction ecology and biosecurity surveys on 17 of the 30 properties in Stage 1. These surveys were undertaken during daylight hours when cat activity is typically lowest. This demonstrates the well understood presence of feral cats within Northwest Queensland. The Northwest Queensland Regional Biosecurity Plan also identifies the species as established within the region and promotes asset control as the preferred mechanism of management.

These species, particularly feral cats and pigs are also well known for boom–bust cycles. These boom-bust cycles in pest species in central Queensland are well-documented, with episodic heavy rainfall triggering rapid population increases (booms) that are swiftly followed by dramatic declines (busts) due

to resource depletion and disturbance events (Donovan et al., 2018). This inherent variability—further corroborated by established theoretical frameworks on population fluctuations (Caughley, 1977; Krebs, 2009) identifying changes population levels associated with macro-climatic drivers.

While not recorded within the Stage 1 Project Area, three species of tramp ants of national priority occur in localised incursions within Queensland, including:

- Red Fire ant (*Solenopsis invicta*)
- Yellow crazy ant (*Anoplelepis gracilipes*)
- Electric ant (*Wasmannia auropunctata*).

Due to the possibility of these pests being introduced into the Project Area during transport of materials and equipment, this MNES Management Plan includes management for these tramp ant species.

3.3 MNES Fauna Species

Surveys undertaken for the Stage 1 PCSR confirmed the presence of Julia Creek dunnart. In addition, suitable habitat was identified for the following four MNES fauna species:

- Australian painted snipe (*Rostratula australis*) – Endangered
- Painted honeyeater (*Grantiella picta*) – Vulnerable
- Julia Creek dunnart (*Sminthopsis douglasi*) – Vulnerable
- Plains death adder (*Acanthophis hawkei*) – Vulnerable.

The abovementioned four species are included in this MNES Management Plan. As outlined in Section 1.6, the presence of the black ironbox, pink gidgee, waxy cabbage palm and red goshawk or their habitat, were not identified within the Stage 1 Project Area. Therefore, these MNES have not been included in this MNES Management Plan. However, management measures outlined in Section 5.4 are relevant to these MNES if their presence is confirmed. The Unexpected Finds Procedure is included in Appendix E and will be followed if these species are identified.

The process in condition 4 of the EPBC Act Approval will apply to any newly discovered protected matters identified during preclearance surveys, construction or operation of Stage 1.

A detailed profile of each of the four relevant species is provided below.

3.3.1 Julia Creek Dunnart (*Sminthopsis douglasi*)

Description

The Julia Creek dunnart is a small, carnivorous nocturnal marsupial, located within the Mitchell Grass Downs country of north-west Queensland. It is sandy brown in colour, with an almost white belly and specked grey back. The face has reddish-brown hair at the base of the ears, and on the cheeks, with a dark face tripe running from the top of the head to behind the nose. A fine ring of darker hair encircles the eyes. It is the largest of the 19 species of *Sminthopsis* found in Australia, with a body measuring approximately 13.5 cm long and a 12-13 cm tail. It may weigh up to 70 grams, and stores food in its tail as fat. A swollen tail base on a Julia Creek dunnart is an unofficial way of confirming food abundance in the region.

Plate 1: Julia Creek Dunnart (Photo: Elliot Budd)

Distribution

The Julia Creek dunnart inhabits the Mitchell Grass Downs region in northwest Queensland, characterised by grass-covered cracking clay soils, mainly ashy and stony types. Until 1992, the species was only recorded from four specimens collected in a limited area spanning between Richmond and Julia Creek in northwest Queensland. Subsequent surveys in the late 1990's revealed a broader distribution across both the Mitchell Grass Downs and Desert Uplands bioregions, though sightings of the Julia Creek dunnart have been sporadic. Based on available data and reliable sighting records from WildNet, the known southern extent of the species is around 10 km south of Winton. Based on DCCEEW's indicative distribution map (DCCEEW, 2024), the species is predicted to occur as far south as Stonehenge, north to Fielding, east to around Hughenden, and west to around Cloncurry.

Habitat preferences

The Julia Creek dunnart is endemic to Mitchell Grass Downs and Desert Uplands bioregions within north-western Queensland. The preferred habitat for this species is tussock Mitchell grasslands dominated by Mitchell grass (*Astrebla* spp.) and/or Flinders grass (*Iseilema* spp.) on cracking clay soils. Preferred habitat includes areas where abundant cracks and holes are known to be present in the dry season, high density ground cover vegetation is known to be present in the wet season, and Prickly Acacia (*Vachellia nilotica*) is not abundant. This species is adaptable, taking refuge in soil cracks during dry periods when ground cover is sparse, and among vegetation when the cracks close up after rainfall.

Foraging habitat

The preferred foraging habitat for the Julia Creek dunnart consists of tussock Mitchell grasslands within cracking clay soils, where the extent and density of grass cover are indicative of habitat quality (DERM, 2009). Dense grass coverage provides crucial shelter for the Julia Creek dunnart whilst foraging, offering protection from predators and harsh environmental conditions (DERM, 2009). The diet of Julia Creek dunnart varies depending on resource availability, including insects, spiders, centipedes, scorpions, skinks and Long-tailed Planigales (QPWS, 2005). The Julia Creek dunnart is nocturnal, seeking refuge during the day within cavities in cracking clay soils and in vegetation (Woolley, 1998). Literature suggested that individuals appear to be more frequently associated increasing densities of cracks and holes, and with the extent and density of grass cover (Woolley, 1998).

Breeding habitat

Seasonal changes in climatic conditions alter the areas in which the Julia Creek dunnart seeks refuge and breed within suitable habitat areas. Research suggested that clay soil swells after Rainfall Events, which usually occur during summer months, whereby clay swelling results in increased vegetation

growth. During these months of the year when vegetation coverage is abundant, Julia Creek dunnarts will seek refuge within grass tussocks and opportunistically breed (BAAM, 2011). Overtime, as soil moisture content decreases, large deep cracks form within the clay soil. The Julia Creek dunnart utilise deep cracks within the soil as habitat during the months of the year where ground coverage is sparse (Woolley, 1998).

Suitable habitat within the Stage 1 Construction Zone

The majority of the Stage 1 Construction Zone supports suitable habitat for the Julia Creek dunnart. The species was identified during pre-clearance surveys in two locations with the nearest sighting approximately 25 m from the easement centreline on the western end of the Stage 1 Construction Zone. The extent of Julia Creek dunnart habitat within the Stage 1 Construction Zone is shown in Appendix A. As outlined in the Stage 1 PCSR, the Stage 1 Clearing Limit for Julia Creek dunnart habitat within the Stage 1 Construction Zone is 410.3 ha.

Key threats

Major threats to the Julia Creek dunnart population include predation, grazing pressures, and abundance of weed species within their habitat distribution (DERM, 2009). Julia Creek dunnarts face significant predation pressure from feral cats, barn owls, and foxes (DERM, 2009). The documented presence of these predators in the species' habitat poses a serious threat to its survival. Feral cats, along with other predators pose a major threat to the population of the Julia Creek dunnart. Given the vulnerability of the species to predation and its low abundance and sparse distribution, areas where known predators are absent are considered to provide higher quality habitat for the Julia Creek dunnart.

The risk of predation may intensify when the habitat utilised by the species for shelter, such as soil cracks and grass tussocks, is compromised. This could occur due to heightened grazing pressure, resulting in the removal of grass cover, the crushing of soil cracks, and alterations in the surrounding biosphere near water sources. Additionally, an increase in prickly acacia (*Vachellia nilotica*) or exotic pasture grass cover could further impact the habitat by reducing native grass cover and affecting soil cracking.

Heavy grazing is also a major threat to the population of Julia Creek dunnarts and can have detrimental effects on the habitat features required for the species survival. The relatively small known habitat distribution of the species occurs within agricultural lands used for intensive grazing by sheep and cattle (TSSC, 2016).

Julia Creek dunnarts change where they seek refuge within their habitat in response to seasonal changes and climatic conditions (DERM, 2009). During the dry months, individuals seek refuge within cracks in the soil and hide within vegetation coverage after Rainfall Events (DERM 2009). Intensive grazing disrupts the natural rhythm of vegetation regrowth, leading to decreased availability of refuge sites for Julia Creek dunnarts after Rainfall Events when the number of soil cracks diminishes. Because intact grasslands with minimal disturbance are crucial for the species' survival, areas with no signs of grazing or with low grazing pressure are deemed to offer superior habitat quality.

3.3.2 Plains Death Adder (*Acanthophis hawkei*)

Description

The plains death adder is a relatively short (averaging 70 cm, maximum of 1.2 m) solidly built snake, with a triangular head and narrow neck. The body is pale brown to grey, with irregular dark transverse bands (DEPWS, 2021b). The tip of the tail is cream to black in colour, and slim and wormlike, and is used to lure prey within striking distance, whilst the dorsal scales are smooth or weakly keeled (NT Department of Environment, Parks and Water Security, 2021).

Plate 2: Plains Death Adder

Distribution

The precise distribution of the species remains uncertain. Considering the availability of suitable habitat, the potential range spans from northern western Queensland to Western Australia and the Northern Territory, with fragmented populations observed in the Mitchell Grass Downs.

Habitat preferences

Suitable habitat for the species consists of flat, treeless, cracking-soil riverine floodplains.

Foraging habitat

Suitable foraging habitat for the plains death adder is characterised as occurring on flat, treeless, cracking soil riverine floodplains (Cogger, 2000). The presence of temporary inundated landscapes, particularly abundant depressions that support frog species, is crucial for the plains death adder's foraging habitat quality. Depressions within the riverine floodplains of cracking soil act as natural reservoirs, gathering and holding water, creating habitats that attract native frogs and support their presence within the environment (Romanowski, 2010).

Native frogs make up a significant portion of the species' diet when young, where the availability of suitable frog habitats directly impacts the plains death adder's food resources (Webb et al., 2005). As plains death adders grow, their diet shifts from frogs to rodents and other medium sized mammals, in which their new food items also seek refuge and resources within depressions in the ground (Webb et al., 2005). Abundant depressions that support frog species and mammals provide ample opportunities for plains death adders to locate and ambush their prey, contributing significantly to their foraging success (DSEWPC, 2012).

Suitable cracking soils are also essential for the plains death adder foraging success. Many small mammals seek refuge within deep cracks in clay soils (Pavey et al., 2015), in which the plains death adder ambush prey items sheltering within cracks.

Breeding habitat

Limited information is available on where the species breeds and reproduces within their habitat; however, it is likely that plains death adders utilise cracks within soil for breeding activities (DEPWS, 2021b). The plains death adder has adapted to the flat, treeless, cracking-soil riverine floodplains of northern Australia, and relies on soil cracks as essential shelter sites, especially during the dry season (DSEWPC, 2012), providing refuge from harsh environmental conditions.

As an ambush predator, the plains death adder further utilises cracks within soil as strategic locations for hunting and resting, enhancing its survival during periods of limited activity.

Suitable habitat within the Stage 1 Construction Zone

The species was not observed during surveys by Base ecologists. There are no records of the plains death adder within the Stage 1 Construction Zone and all six publicly available records of this species in Queensland have questionable validity and are likely to be of the similar species, *Acanthophis rugosus* which is known to occur in the Mount Isa region.

Field-verified potential habitat for the plains death adder in the Stage 1 Construction Zone was closely associated with areas that are regularly inundated in proximity to waterways and drainage lines, but outside of the wooded riparian areas. The extent of plains death adder habitat within the Stage 1 Construction Zone is shown in Appendix B. As outlined in the Stage 1 PCSR, the Stage 1 Clearing Limit for plains death adder habitat within the Stage 1 Construction Zone is 374.3 ha.

Key threats

The plains death adder faces multiple threats to its survival and habitat integrity, with the most significant being the introduction of cane toads, and habitat modification due to grazing (DSEWPC, 2012).

The invasion of cane toads poses a severe and imminent threat to the plains death adder's survival (DSEWPC, 2012). As an ambush predator which utilises its tapered tail to lure and attract prey, the plains death adder inadvertently attracts cane toads (DSEWPC, 2012). The toxins present in cane toads' skin are lethal to the plains death adder, leading to high mortality rates when cane toads invade an area inhabited by the snake (DSEWPC, 2012). It is predicated that by 2030, cane toads will have invaded almost all of the species' range, exacerbating the threat and potentially leading to local extinctions (Phillips et al., 2003).

Habitat alteration from excessive cattle grazing and unsuitable fire management practices pose potential threats to the plains death adder. Grazing pressure reduces ground cover and alters vegetation structure, diminishing habitat quality and prey availability for the species (DSEWPC, 2012). Moreover, widespread grazing practices often result in increased competition for resources and habitat degradation, further exacerbating the impact on plains death adder populations (DSEWPC, 2012).

3.3.3 Painted Honeyeater (*Grantiella picta*)

Description

The painted honeyeater exhibits distinctive features, sporting white underparts and black upperparts, accompanied by black spots on its flanks and yellow edges on its flight and tail feathers. Its eye is adorned in red, complemented by a pink bill. Females, smaller in size, tend to be browner on the back compared to males, with fewer streaks or spots on their flanks and breast (DoE, 2015).

Plate 3: Painted Honeyeater (Photo: Matt Wright)

Distribution

The species is sparsely distributed from south-eastern Australia to north-western Queensland and eastern Northern Territory. The greatest concentrations and almost all records of breeding come from south of 26ºS, on inland slopes of the Great Dividing Range between the Grampians, Victoria and Roma, Queensland (Higgins et al., 2001).

The species undergoes seasonal migrations from north to south primarily influenced by the fruiting patterns of mistletoe, aligning closely with its breeding season. Many birds move after breeding to semi-arid regions such as north-eastern South Australia, central and western Queensland, and central Northern Territory.

Habitat preferences

Woodland ecosystems, as well as riparian woodlands and Acacia scrubs. The species relies heavily on grey mistletoe (*Amyema quandang*) and needle-leaf mistletoe (*Amyema camb*agei) for breeding and foraging.

Large populations have been found within woodland areas dominated by *Acacia oswaldii, Acacia harpophylla, Alectryon oleifolius* and *Calitris glaucophylla* where trees are more mature, the canopy cover is higher and the ratio of mistletoes to trees is noticeably higher than woodlands not observed to support the species.

The species inhabits mistletoes in eucalypt forests/woodlands, riparian woodlands of black box and river red gum, box-ironbark-yellow gum woodlands, acacia-dominated woodlands, paperbarks, casuarinas, callitris, and trees on farmland or gardens.

Foraging habitat

The painted honeyeater is a migratory to nomadic bird with a specialised diet reliant on mistletoe fruits. Foraging habitat for the species predominantly occurs within woodlands, riparian areas, and acacia shrubs containing the presence of *Amyema* species, particularly grey mistletoe and / or needle-leaf mistletoe. 40% of their protein intake is sourced from mistletoe fruit, with the remainder being derived from arthropods including termites, grasshoppers, and spiders (DAWE, 2021; DoE, 2015).

Breeding habitat

Suitable painted honeyeater habitat required for shelter and breeding is characterised as woodland ecosystems, as well as riparian woodlands and Acacia scrubs that contain mistletoe species including grey mistletoe and / or needle-leaf mistletoe species (DAWE, 2021). Pairs nest in *Eucalyptus* spp., *Acacia homalophylla* and *Callitris glaucophylla* with nests chosen in relation to proximity to mistletoe availability. Painted honeyeater not only utilise mistletoe as a food resource within their habitat but also construct nests within tree species that contain mistletoe bunches (DAWE, 2021; DoE, 2015). Painted honeyeaters construct nests made from plant fibre, spiders webs, and rootlets within the outer foliage of trees between 3-20 m above the ground (DAWE, 2021). Research suggested that various tree

species have been utilised by painted honeyeaters for nesting; however, observed trees are often mature tall trees containing high abundances of mistletoe bunches (DAWE, 2021). The breeding season coincides with mistletoe fruiting timing, in which nesting within trees with fruiting mistletoe provides multiple benefits to the species (DAWE, 2021). The majority of breeding records for the species are from the inland slopes of the Great Dividing Range between the Grampians in Victoria to the south and Roma in Queensland to the north (DoE, 2015). Therefore, breeding habitat for the painted honeyeater is not expected to occur within the Stage 1 Project Area.

Suitable habitat within the Stage 1 Construction Zone

No painted honeyeaters were observed within the Stage 1 Construction Zone during surveys undertaken for the Stage 1 PCSR. However, field-verified suitable foraging habitat does occur and is generally restricted to remnant riparian woodlands along waterways. The Stage 1 Construction Zone lacks patches of eucalyptus woodland and acacia scrub outside of riparian areas. The Stage 1 Project Area is outside of the known breeding range for painted honeyeaters. Therefore, suitable habitat is likely to only support foraging and potentially, dispersal habitat for the species. The extent of painted honeyeater habitat within the Stage 1 Construction Zone is shown in Appendix C. As outlined in the Stage 1 PCSR, the Stage 1 Clearing Limit for painted honeyeater habitat within the Stage 1 Construction Zone is 81.8 ha.

Key threats

Major threats to the painted honeyeater include habitat loss due to vegetation clearing for development and agricultural land use, habitat degradation from land use practices and eucalyptus dieback, competition for resources, and adverse impacts of climate change (DAWE, 2021; DoE, 2015). Vegetation clearing reduces the abundance of mature trees able to support mistletoe, as well as habitat patch size and connectivity, consequently reducing the availability of resources required by the painted honeyeater to meet their foraging and breeding needs.

The presence of competition species, particularly larger and more aggressive honeyeaters like the noisy miner and yellow-throated miner, pose a significant threat to the painted honeyeater (DAWE, 2021). These aggressive honeyeater species compete for food resources and may negatively impact the breeding success and survival of the painted honeyeater through reduced abundances of resources required to meet foraging and breeding needs.

Habitat degradation caused by overgrazing, particularly in agricultural areas, pose a significant threat to the painted honeyeater (DAWE, 2021). Grazing by livestock, native macropods, and invasive herbivores inhibits tree recruitment, leading to a decline in mature trees necessary to support the foraging and breeding requirements of the species. Alterations of natural tree recruitment processes by grazing animals additionally promote uneven age structures of mistletoe host trees, which are critical for the persistence of mistletoe resources. Additionally, landholders with livestock often remove mistletoes from trees, further reducing available food resources and nesting sites for painted honeyeaters.

3.3.4 Australian Painted Snipe (*Rostratula australis*)

Description

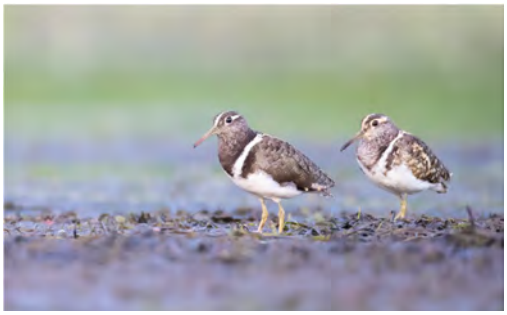


Plate 4: Australian Painted Snipe (Photo: Matt Wright)

The Australian painted snipe, a robust wading bird, boasts a lengthy pinkish bill and measures around 25 cm in length. Distinguishing between genders, the female stands out with vibrant hues, featuring a chestnut coloured head accented by a white crown stripe and eye encircled with white. A pale stripe runs from its shoulder down the upper back in a 'V' shape. In contrast, the adult male appears smaller and less vivid, sporting buff spots on its wings. Notably, the male lacks the chestnut tones seen on the head, nape, and throat (DCCEEW, 2024a).

It is commonly seen in pairs, or by itself. Small flocks may occur in the breeding season, and immediately after the breeding season, where groups comprising of a male and several offspring have been observed.

Distribution

The Australian painted snipe has been recorded at wetlands in all states of Australia (Barrett et al., 2003). It is most common in eastern Australia, where it has been recorded at scattered locations throughout much of Queensland, NSW, Victoria and south-eastern South Australia.

The area of occupancy of the Australian painted snipe is estimated, with low reliability, to be 1,000 km² (Garnett & Crowley, 2000), a figure which has declined due to the removal of approximately 50% of Australian wetlands since European settlement. The species is infrequently recorded at scattered sites throughout much of its historical range, which makes it difficult to determine potential absence from a site or region. The reporting rate of the species has notably dwindled since the 1950's, even with heightened survey efforts in recent years, strongly implying a reduction in its former widespread distribution.

Habitat preferences

The fringe of a wide variety of permanent and/or temporary shallow, brackish and freshwater wetlands. Suitable wetlands usually support a mosaic of low, patchy vegetation, as well as lignum and cane grass. Nesting occurs within a scrape on the ground amongst reeds and tussocks which is lined with twigs, leaves and stalks of grass.

Foraging habitat

The Australian painted snipe is highly dependent on suitable wetland habitats for foraging, with a preference for ephemeral wetlands with a combination of dense low cover and bare mud (DEPWS, 2021a). These habitats support a diverse range of invertebrates, vegetation, and aquatic organisms, which are essential components of the Australian painted snipe's diet (Marchant & Higgins, 1993).

Breeding habitat

Australian painted snipe breeding habitat requirements are dependent on the abundance of temporary inundated wetlands with moderate to dense ground cover, presence of small islands within wetlands, and low coverage on the peripheries of wetlands. Recorded nesting sites have been observed within wetlands containing a combination of shallow water, open mudflats, dense low cover, and small islands (DCCEEW, 2024a; Rogers et al., 2005).

The Australian painted snipe has also been recorded nesting in and near swamps, cane grass swamps, flooded areas including samphire, grazing land, among cumbungi, sedges, grasses, salt water couch

(*Paspalum* spp.), saltbush and grass, in ground cover of water-buttons and grasses, at the base of tussocks and under low saltbush (Marchant & Higgins, 1993).

The Australian painted snipe typically constructs their nests in scrapes on the ground among reeds and tussocks, often in close proximity to water (DCCEEW, 2024a). The nest is usually a shallow bowl-shaped nest of dry grass or other plant material (Marchant & Higgins, 1993). The species can use modified habitats, such as low-lying woodlands converted to grazing pasture, sewage farms, dams, bores and irrigation schemes (Marchant & Higgins, 1993), however they do not necessarily breed in such habitats.

Suitable habitat within the Stage 1 Construction Zone

No Australian painted snipes were observed within the Stage 1 Construction Zone during surveys undertaken for the Stage 1 PCSR. Field-verified suitable foraging habitat for the Australian painted snipe was observed and was generally associated with the fringes of ephemeral drainage lines or on floodplains in proximity to waterways, on cracking clay or sandy loam soils. The extent of Australian painted snipe habitat within the Stage 1 Construction Zone is shown in Appendix D. As outlined in the Stage 1 PCSR, the Stage 1 Clearing Limit for Australian painted snipe habitat within the Stage 1 Construction Zone is 22.6 ha.

Key threats

The population size and viability of the Australian painted snipe faces several significant threats within Queensland habitats. Habitat loss, degradation, and alteration of wetland habitats due to the diversion of water for agricultural purposes and drainage pose a major risk, as they diminish crucial breeding and foraging habitat for the species (TSSC, 2013).

Livestock populations pose another major threat to the species, as livestock decrease habitat quality through trampling vegetation, grazing on grass tussocks, and causing erosion and sedimentation within the waterway (DEPWS, 2021a; TSSC, 2013). Decreased vegetation coverage further increases the risk of nest predation by invasive species, such as European fox (*Vulpes vulpes*) and cats (*Felis catus*).

Loss of breeding habitat due to changes in flooding regimes and patterns, irrigation, and vegetation structures further exacerbates the key threats to the Australian painted snipe. Climate change-induced reductions in rainfall and altered seasonal patterns also pose future risks to the species (CSIRO, 2011). Given its sensitivity to seasonal changes, dryer conditions in the future may combine with other threats to pose significant impact risks on the species.

4.0 Potential Impacts

This section summarises the potential impacts from Project Activities on the relevant MNES as outlined in Section 1.5 (Table 1) and described in Section 3.3. Potential impacts for each species constitute direct and indirect impacts and are described below.

As described in Section 1.3, construction of the transmission line is anticipated be undertaken in short, discrete stages progressing along the length of the transmission line within the Stage 1 Construction Zone. Direct impacts on MNES associated with construction of the transmission will occur during these discrete construction stages, particularly during access and clearing activities for access tracks, tower footprints and within the easement for stringing and electrical clearance. Apart from potential habitat fragmentation as a result of vegetation clearing, the duration of these potential direct impacts on MNES from construction of the transmission line are typically short term, as construction works progress along the length of the transmission line.

Potential indirect impacts on MNES during construction of the transmission line are typically limited in scale given the small areas of disturbance (typically less than 0.25 ha for tower footprints) and general lack of human presence outside of the discrete construction stages resulting in low risks to MNES. While overnight works are not currently planned for the Project's construction, there is potential for works to occur in the early morning or late evening to manage heat stress.

The potential direct and indirect impacts to MNES during operation and maintenance of the transmission line are considered to be low. Following commissioning, access and activity within the Stage 1 Project Area will be limited to periodic maintenance of the transmission line easement and assets.

As described in Section 1.3, construction and operation of the Flinders Substation will be located within a static worksite within the Stage 1 Construction Zone. Apart from loss of MNES habitat as a result of vegetation clearing for the substation footprint, there is a low risk of potential indirect impacts on MNES during construction. There will also be limited long term impacts on MNES from operation of the substation.

The Julia Creek WAF will be constructed and operated to support construction of the Project. Construction of the WAF will require clearing vegetation as a Temporary Disturbance Area. Operation of the WAF during construction, such as waste generation, vehicle movements and lighting, has the potential for indirect impacts on MNES. Following the completion of construction, the Julia Creek WAF will be rehabilitated mitigating long-term impacts on MNES.

Mitigation measures for these impacts to be applied in construction and operation are outlined in Section 5.4 while the risk assessment for the Project including pre and post mitigation risk levels is presented in Section 11.0.

4.1 Direct Impacts

The Stage 1 construction activities outlined in Section 1.3.1 have the potential to result in direct impacts to MNES, including:

- Clearing/loss of fauna habitat
- Injury or mortality of fauna through vehicle/machinery strike or entrapment.

Details of potential direct impacts, including timing of impacts and potential consequences on the relevant MNES are provided in Table 4. An unmitigated risk rating has been attributed to each potential impact in Table 4 using the risk assessment process outlined in Section 11.0.

Table 4: Potential direct impacts on MNES resulting from Project Activities

Potential impact	Unmitigated risk	Potential consequence
Construction		
Clearing/loss of fauna habitat	High	• Direct loss of MNES habitat • Injury and mortality of MNES fauna during clearing of fauna habitat • Fauna displacement • Habitat fragmentation
Injury or death of fauna through vehicle/ machinery strike or entrapment	High	• Direct loss of MNES fauna • Decline in local MNES fauna populations
Operation		
Clearing of fauna habitat	Low	• Direct loss of MNES habitat • Injury and mortality of MNES fauna during clearing of fauna habitat • Fauna displacement
Injury or death of fauna through vehicle/ machinery strike or entrapment	Medium	• Direct loss of MNES fauna • Decline in local MNES fauna populations

Direct impacts on MNES fauna and their habitat may occur during construction and operation of Stage 1. However, to mitigate these impacts, management measures will be implemented during the construction phase and operation phase as outlined in Section 5.4.

4.2 Indirect Impacts

Indirect impacts on MNES that may occur as a result of the Project include:

- Altered hydrology
- Erosion and sedimentation
- Contamination from hazardous substances
- Increased weeds and pests
- Disturbance from construction noise, light spill and dust deposition at the Julia Creek WAF and Flinders Substation, during heli-stringing, and during night works.
- Uncontrolled bushfire caused by the Project.

Details of potential indirect impacts, timing of impacts and potential consequences on the relevant MNES are provided in Table 5. An unmitigated risk rating has been attributed to each potential impact in Table 5 using the risk assessment process outlined in Section 11.0. Mitigated risks are outlined in Section 11.0.

Table 5: Potential indirect impacts on MNES resulting from Project Activities

Potential impact	Unmitigated risk	Potential consequence
Construction		
Altered hydrology	Medium	• Reduced inflows into downstream aquatic habitats • Increased stormwater runoff
Erosion and sedimentation	High	• Increased erosion of habitat features • Sedimentation of waterbodies • Reduced water quality
Contamination from hazardous substances	Medium	• Contamination of soils • Contamination of water sources
Increased weeds	High	• Increased cover of weeds • Weed encroachment into retained vegetation leading to reduced habitat suitability
Introduction of new pests	High	• Increased competition for resources between native and pest species • Alteration of habitats
Increased pests	Low	• Increased predation on native fauna from pest species • Increased competition for resources between native and pest species • Alteration of habitats
Disturbance from construction noise, artificial lighting and dust deposition at the Julia Creek WAF and Flinders Substation, during heli-stringing, and during night works	Low	• Alteration of foraging and/or breeding behaviour • Loss or disturbance of foraging or breeding habitat by species avoiding areas • Dust may affect the health of plants and, therefore, foraging resources for fauna • Altered movement patterns of fauna if they avoid areas with elevated dust levels
Uncontrolled bushfire caused by the Project	High	• Loss of native flora and fauna habitat • Injury and mortality of fauna • Displacement of fauna until burnt areas regenerate
Illegal access to the Project through trespassing.	Low	• Alteration of habitats

Potential impact	Unmitigated risk	Potential consequence
Operation		
Erosion and sedimentation	Low	• Increased soil exposure • Increased erosion • Sedimentation of waterbodies • Reduced water quality • Altered surface flows
Contamination from hazardous substances	Low	• Contamination of soils • Contamination of water sources
Increased weeds	Medium	• Increased cover of weeds • Weed encroachment into retained vegetation leading to reduced habitat suitability
Introduction of new pests	Medium	• Increased competition for resources between native and pest species • Alteration of habitats
Increased pests	Low	• Increased competition for resources between native and pest species • Alteration of habitats
Disturbance from artificial lighting installed at Flinders Substation	Low	• May alter foraging and/or breeding behaviour • Increased predation from visual predators
Uncontrolled bushfire caused by the Project	High	• Loss of native flora and fauna habitat • Injury and mortality of fauna • Displacement of fauna until burnt areas regenerate
Illegal access to the Project through trespassing.	Low	• Alteration of habitats

Indirect impacts on MNES fauna and their habitat may occur during the construction and operation of Stage 1. However, to mitigate these impacts, management measures that will be implemented during the construction phase and operation phase, as outlined in Section 5.4.

5.0 Environmental Management of MNES

The purpose of this MNES Management Plan is to avoid, minimise, mitigate and manage impacts of the Project on the relevant MNES for Stage 1, through the development of suitable and effective management and monitoring measures. The management measures, monitoring and corrective actions outlined in this MNES Management Plan will be implemented during the construction and operation phases of the Project. This MNES Management Plan is consistent with relevant guidelines and policies on the protection of MNES under the EPBC Act at the time of writing. The corrective actions allow for adaptive management in the event trigger for further action is required.

The principles of avoidance and minimisation have been prioritised during Project design, with mitigation measures relied upon to address impacts only when they could not be avoided or minimised. Offsets are required when impacts could not be avoided, minimised or mitigated and the remaining (or residual) impacts are considered to be significant. For example, tower placement has been designed to avoid riparian areas as much as possible, and any temporarily disturbed riparian areas will be mitigated through rehabilitation as per Condition 12.

5.1 S.M.A.R.T Principles

The management measures in this MNES Management Plan have been developed in accordance with the S.M.A.R.T principles, which are:

- **Specific** – Measures are focused, specific and identify a tangible outcome.
- **Measurable** – Measures are quantified with an indicator of progress.
- **Achievable** – Reviewing what can realistically be achieved given available resources.
- **Relevant** – Measures are developed and utilise resources to purposefully contribute to MNES management.
- **Time-bound** – Measures are time-bound with a specified timeframe in which they can be achieved.

Management measures developed for this MNES Management Plan are outlined in Section 5.4 and are specific to the four relevant MNES outlined in Section 1.5. The performance of the measures in managing impacts will be assessed through ongoing monitoring as outlined in Section 6.0. The management measures are designed to be practical and implementable on the Project throughout the life of the approval.

5.2 Management Objectives

The key environmental management objectives to mitigate the potential impacts described in Section 4.0 that the Principal commits to, are outlined below:

- Limiting and/or avoiding loss habitat for MNES
- Successfully rehabilitating Temporary Disturbance Areas
- Minimising injury or mortality of MNES
- Maintaining hydrology to Australian painted snipe habitat
- Minimising erosion and sedimentation to MNES habitat
- Avoidance of contamination from hazardous substances to MNES habitat
- Minimising risk of weed introduction and/or spread as a result of Project Activities
- Minimise risk to MNES from increased pest animals as a result of Project Activities

- Minimising impacts on MNES from construction noise, artificial lighting and dust deposition at the Julia Creek WAF, Flinders Substation and during heli-stringing and night works.
- Minimising degradation of MNES habitat from an increased risk of bushfires resulting from Project Activities.

These management objectives will be achieved through implementing the management measures outlined Section 5.4 and monitoring in accordance with Section 6.0.

5.3 Relevant Plans and Guidelines

The conservation advice and recovery plan documents relevant to each of the four MNES covered by this MNES Management Plan are outlined in Table 6. These documents outline the threatening processes for each species and actions and objectives required to address the threatening processes. These documents have been reviewed in preparing this MNES Management Plan to develop the management measures outlined in Section 5.4 which are relevant to the four MNES species and consistent with the conservation advice and recovery plans.

Table 6: Relevant conservation advice, recovery plans and threat abatement plans, and relationships to management objectives

MNES	Relevant conservation advice and plans	Key threats	Management objectives
Julia Creek dunnart (*Sminthopsis douglasi*)	Conservation Advice (*Sminthopsis douglasi*) Julia Creek dunnart (TSSC, 2016) National recovery plan for the Julia Creek dunnart (*Sminthopsis douglasi*) (DERM, 2009) Threat abatement plan for predation by feral cats (DoE, 2015) Threat abatement plan for predation by the European red fox (DEWHA, 2008).	Predation by feral cats (*Felis catus*) and foxes (*Vulpes vulpes*) Habitat degradation and overgrazing Habitat change due to weed invasion Interactive effects of fire and predators.	Limiting and/or avoiding habitat loss for MNES Successfully rehabilitating Temporary Disturbance Areas Minimising injury or mortality of MNES from Project Activities Minimising risk of weed introduction and/or spread as a result of Project Activities Minimise risk to MNES from increased pest animals as a result of Project Activities Minimising impacts from noise, artificial lighting and dust deposition on MNES habitats at the Julia Creek WAF, Flinders Substation, and during heli-stringing and night works Minimising habitat degradation of MNES habitat from risk of bushfires resulting from Project Activities.
Plains death adder (*Acanthophis hawkei*)	Conservation Advice for (*Acanthophis hawkei*) Plains Death Adder (DSEWPC, 2012) Commonwealth listing advice for (*Acanthophis hawkei*) Plains Death Adder (TSSC, 2012).	Cane toads Habitat modification – over grazing and inappropriate fire regimes.	Limiting and/or avoiding habitat loss for MNES Successfully rehabilitating Temporary Disturbance Areas Minimise risk to MNES from increased pest animals as a result of Project Activities Minimising impacts from noise, artificial lighting and dust deposition on MNES habitats adjacent to the Julia Creek WAF, Flinders Substation, during heli-stringing and night works

MNES	Relevant conservation advice and plans	Key threats	Management objectives
			Minimising habitat degradation of MNES habitat from risk of bushfires resulting from Project Activities.
Painted honeyeater (*Grantiella picta*)	Conservation Advice (*Grantiella picta*) Painted Honeyeater (DoE, 2015) National Recovery Plan for the Painted Honeyeater (*Grantiella picta)* (DAWE, 2021).	Habitat loss Habitat degradation – over-grazing Competition with native bird species Predation by invasive species Vehicle strike Nest predation by bird species.	Limiting and/or avoiding habitat loss for MNES Successfully rehabilitating Temporary Disturbance Areas Minimising injury or mortality of MNES from Project Activities Minimise risk to MNES from increased pest animals as a result of Project Activities Minimising habitat degradation of MNES habitat from risk of bushfires resulting from Project Activities.
Australian painted snipe (*Rostratula australis*)	Conservation Advice for (*Rostratula australis)* Australian Painted Snipe (DSEWPC, 2013) Commonwealth Listing Advice on *Rostratula australis)* Australian Painted Snipe (TSSC, 2013) National Recovery Plan for the Australian Painted Snipe (*Rostratula australis*) (DCCEEW, 2022).	Wetland loss and degradation Grazing and trampling of wetland vegetation by livestock Predation by feral animals.	Limiting and/or avoiding habitat loss for MNES Successfully rehabilitating Temporary Disturbance Areas Minimising injury or mortality of MNES from Project Activities Maintaining hydrology to Australian painted snipe habitat Minimising erosion and sedimentation to MNES habitat Minimising contamination from hazardous substances to MNES habitat Minimise risk to MNES from increased pest animals as a result of Project Activities.

5.4 Management Measures

Where potential direct and indirect impacts on MNES are unavoidable during construction and operation of the Project, management measures will be implemented to address these risks to the relevant MNES. As described in Section 4.0, impacts on MNES are anticipated to differ between construction and operation. As such, management measures have been structured to delineate these two phases and manage the differing impacts on MNES. Additional details on how management measures for construction and operation have been informed are provided below.

Construction

During construction, works will be undertaken in short, discrete stages progressing along the length of the transmission line as described in Section 1.3. Management measures have been developed to address the risks to MNES during construction, including access and clearing activities. The management measures and specific management techniques to be implemented during construction are outlined in Table 7. Management measures detailed in this plan will be implemented in accordance with the timing of the staged development of the Flinders Substation and transmission line as described in Section 1.3. Where works are proposed to occur, all relevant monitoring and management measures associated with the specific impact location will begin immediately prior to construction commencement. For example, as the Flinders Substation will likely begin construction in advance of the transmission line, the avoidance, mitigation and management measures outlined in this document will be applied to this specific location, not the Project in its entirety.

Operation

During operation, maintenance measures will be implemented for the safe operation of the transmission line in accordance with the Principal's asset management strategy. This will include selective clearing of incompatible vegetation species as needed for safe operation of the transmission line. This selective clearing will be within the easement cleared during construction and is substantially less invasive on MNES habitats than construction phase clearing works. The relative risk of all impacts on MNES is considerably lower during operation due to the decreased access and activity levels relative to construction. The management measures and specific management techniques to be implemented during the operational phase are outlined in Table 8.

5.4.1 Construction phase management measures

Table 7: Management measures relevant to Stage 1 Project Activities – Construction Phase

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
Implement clearing protocols that identify vegetation to be cleared or retained to prevent inadvertent damage to MNES habitat	Plant and equipment used for clearing activities must utilise spatial location services (i.e. geofencing, field maps, or GPS). Datasets used will include the Stage 1 Clearing Footprint and Exclusion Zone to guide clearing at all times. Exclusion Zones and clearing boundaries will be physically delineated (e.g. by using high-visibility flagging, surveyors' pegs or star pickets) prior to clearing or disturbance commencing. Markers must be clearly located so that the clearing boundary can be easily identified. Environmental Work Plans (EWPs) covering all clearing and disturbance works within Stage 1 will be prepared and include a map which will be kept up to date, showing the locations of: • MNES habitat values and MNES active breeding places • Extent of the Stage 1 Clearing Footprint • Location of Exclusion Zones. Environmental Work Plan/s will be: • Incorporated into the Permit to Disturb and environmental work method statements relevant to the worksite • Discussed in daily toolbox talks • Made available to all personnel who require access to construction areas and/or Exclusion Zones. A Permit to Disturb process will be developed and implemented prior to any disturbance or clearing of MNES habitat. The Permit to Disturb will require:	Prior to and during clearing	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Clearing Footprint boundary to be clearly marked using high visibility flagging, tape or similar • Exclusion Zones identified and boundaries to be clearly marked using high visibility flagging, tape or fencing • MNES habitat features within the Disturbance Area to be managed in accordance with the Fauna Spotter Catcher Procedure (Appendix F) and Habitat Tree Felling Procedure (Appendix G). The Project Environmental Representative, the Site Supervisor, Ecologist and/or Fauna Spotter Catcher will be involved in preparing the Permit to Disturb. The Site Supervisor of the clearing or disturbance works will acknowledge the controls be implemented in the permit through signing the permit. The Project Environmental Representative will confirm all requirements of the Permit to Disturb were met during and following clearing of each worksite (refer Section 6.2.1). Internal training (refer to Section 9.0) will be provided to all personnel involved in vegetation clearing to ensure they are aware of the Stage 1 Clearing Footprint and Exclusion Zones. Cleared vegetation will not be stacked or pushed against other retained woody vegetation that supports MNES habitat. Trees will be felled away from retained vegetation, to minimise damage on retained vegetation. No red goshawk nest will be directly cleared and/or impacted.			
Implement specific clearing methods to minimise impacts	Sequential and staged clearing of MNES habitat will be undertaken in accordance with methods outlined in the tree felling procedure (Appendix G). Chain clearing of habitat will not be undertaken.	During clearing	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
to MNES and MNES habitat during vegetation clearing	To reduce exposure timeframes, clearing of riparian areas for waterway crossings will commence when construction is imminent., unless crossings are required for access to other sections of the Project. Where possible, clearing of habitat trees within riparian areas will retain the stumps to minimise erosion risk as much as possible. An example of where this will not be possible is clearing for access tracks. In areas where vegetation does not need to be fully cleared, the ground and shrub layer will be retained to maintain habitat connectivity within the understory. To avoid impacting cracking clays, compaction of surfaces will only be undertaken in locations required for construction and operation (e.g. for access and tower pads), and vehicle movements will be limited to trafficable surfaces.			
Implement adaptive micro-siting of infrastructure and tracks to reduce unnecessary removal or damage of MNES habitat	MNES habitat features will be avoided as much as possible during construction by incorporating Pre-construction Fauna Survey results to determine final design (e.g. adjusting the path of an access track to avoid a confirmed breeding place). An example of where avoidance may not be possible is when a habitat feature (e.g. cracking clays) extends across the entire width of the Stage 1 Construction Zone and therefore, cannot be avoided. Where available, existing access tracks and cleared areas will be used, including designated waterway crossings (e.g. where an existing access track is present and provided permission for their use has been granted). Construction laydown areas and stockpiles will be located in already cleared areas (e.g. historically cleared areas with no MNES habitat) as a priority to minimise unnecessary clearing of MNES habitat. If no such areas are available within a reasonable distance from the works area (e.g. no historically cleared areas devoid of MNES habitat present), an alternative	Prior to and during clearing	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	location will be selected based on the lowest risk to MNES habitats and will remain within the Stage 1 Clearance Limits. Stockpiles will avoid being placed against trees to prevent damage to the root system.			
Ensure any newly discovered Protected Matters found unexpectedly during the Project are reported to DCCEEW and managed	In the event that any additional Protected Matters which this MNES Management Plan does not cover are found within the Stage 1 Project Area (including black ironbox, pink gidgee, waxy cabbage palms, red goshawk nests or other MNES that were listed as threatened under the EPBC Act as of 14 May 2019), the Unexpected Finds Procedure outlined in Appendix E will be implemented.	Prior to and during clearing and construction	Contractor	All
Implement heli-stringing methods to avoid and minimise impacts on MNES	Stringing will be primarily undertaken using helicopters where practicable to avoid and minimise vegetation clearing within riparian areas and minimise soil compaction from excessive vehicle movements in MNES habitat.	During construction (stringing)	Contractor	All
Rehabilitate all Temporary Disturbance Areas	Rehabilitation of Temporary Disturbance Areas will be completed within 12 months of an area no longer being required for construction in Stage 1. Rehabilitation will be completed and monitored in accordance with Section 7.0 of this MNES Management Plan. Material cleared during construction will be reused where practicable during rehabilitation, including: • Mulch accumulated from site clearing activities. • Habitat features (i.e. rocks, logs, salvaged vegetation suitable for shelter and breeding opportunities for fauna). • Root systems and stumps (where present) to remain in place.	Commence during construction when areas are no longer required to be disturbed	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	Where stockpiles of felled vegetation have been left for 24 hours prior to reuse, the stockpile will be inspected by a Fauna Spotter Catcher prior to disturbance. Before being used for rehabilitation, topsoil stockpiles will be treated for weeds in the area from which they were sourced (if weeds are present) to reduce the spread/dispersion of weeds. Stockpiles will avoid being placed against trees to prevent damage to the root system. Earth formations in waterways will be rehabilitated using original topsoil, where practicable and configured in a way that mirrors the original slope of the terrain in a manner that prioritises bank stability..			
Implement measures to avoid or mitigate injuries or mortality to MNES during clearing and disturbance works	Completion of a Pre-construction Fauna Survey within all areas of MNES habitat (refer Appendix A to Appendix D) to be cleared or disturbed. This requires a survey by an Ecologist within 10 days prior to clearing to verify: • Extent of MNES habitat including habitat to be retained • Identify MNES fauna breeding places such as nests • Location of Exclusion Zones which will include MNES fauna habitat to be retained and breeding places. Within 72 hours of vegetation clearing within confirmed MNES habitat, the Fauna Spotter Catcher will complete a Fauna Spotter Catcher Survey in areas to be cleared in accordance with the Fauna Spotter Catcher Procedure (Appendix F). The Fauna Spotter Catcher Survey will verify: • Active MNES breeding places including requirements for relocation of nests/young	Prior to and during clearing	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Installation of Exclusion Zones. Active MNES breeding places within the Stage 1 Clearing Footprint will be recorded with a GPS and an Exclusion Zone (50 m radius) installed around the breeding place. These will be managed following the procedures outlined in Appendix F. Works will recommence once the eggs and/or young have been removed by a Fauna Spotter Catcher, taken to a suitably qualified wildlife carer or vet, and the breeding place has been appropriately managed or removed as outlined in Appendix F. All MNES fauna identified within the Stage 1 Clearing Footprint will be relocated to the nearest suitable habitat outside of the Stage 1 Clearing Footprint by a Fauna Spotter Catcher. Fauna Spotter Catcher will be present to identify MNES during all clearing activities. If any new MNES not covered under this MNES Management Plan are identified during the surveys, the Unexpected Finds Procedure (Appendix E) will be implemented. Any injured fauna will be reported to the Project Environmental Representative and taken to a suitably qualified wildlife carer or vet as soon as possible (within 24 hours). Injuries or deaths to any MNES will be managed as an Incident in accordance with Section 8.3.1. The Principal will provide to DCCEEW in writing within 12 business days of becoming aware of any event which has the potential to, or does, impact on any MNES other than as authorised by the EPBC Act Approval.			

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
Manage open excavations (tower foundations) to reduce MNES fauna mortality	Leaving open excavations (tower foundations) will be avoided during construction works. In the event these excavations are to be left open overnight, tower foundations will be covered with boards or similar. Open tower foundations will be checked by the Environmental Representative or Fauna Spotter Catcher every day (no later than 2 hours after sunrise) prior to commencement of work to ensure no animals have become trapped.	During construction	Contractor Fauna Spotter Catcher	Julia Creek dunnart plains death adder
Avoid and minimise injuries or mortality to MNES from vehicle or machinery strikes through implementation of staff training and project-specific road rules	Driver awareness training during site inductions regarding enforcement of Project-specific speed limits to minimise fauna strike. Driving activities will be restricted to pre-determined access tracks and roads between work areas and will adhere to all Project-specific speed limits, which will be clearly signposted. Project specific induction to include the following information: • No driving is to occur off the designated access tracks. • Travel and vehicle movements near dawn, dusk and at night will be minimised by planning for works. • Drive to conditions which may include reducing speed. A register of MNES sightings will be maintained to identify current areas that have a risk of collision. Any injured fauna will be reported to the Project Environmental Representative and taken to a suitably qualified wildlife carer or vet as soon as possible (within 24 hours). Where Julia Creek dunnarts are identified as present in construction areas, signage to indicate the reduced speed limit will be installed on the alignment	During construction	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	at a distance of 250 m on either side of the sighting. Signage will be left in place for three months from the date of the most recent sighting. During night works, a reduced speed limit of 30 km/hr within signed Julia Creek dunnart areas will apply. Injuries or deaths to any MNES will be managed as an Incident in accordance with Section 8.3.1.			
Minimise changes to hydrology and erosion and sedimentation to wetlands and waterways	An Erosion and Sediment Control Management Plan (ESCMP) will be prepared by a Certified Person in Erosion and Sediment Control (CPESC) prior to construction. A CPESC is a person who specialises in the science of surface erosion and sediment control and subsequently the adverse effects of environmental pollutants, whether natural or manmade, as it relates to soil, water, and air; and has a current CPESC certification. The ESCMP will be developed prior to construction in accordance with relevant guidelines, including: • *Best Practice Erosion and Sediment Control* (International Erosion Control Association, November 2008) • *Construction Phase Stormwater Management Design Objectives* (Department of Infrastructure, Local Government and Planning, July 2017) • The ESCMP will be implemented in accordance the above guidelines during construction The ESCMP will include the following Erosion and Sediment Controls (ESC) which have been identified by an Ecologist as relevant to managing sedimentation and airborne dust impacts on wetlands and waterways during construction to reduce impacts on Australian painted snipe habitat:	During construction, especially prior to and during earthworks and clearing	Contractor and CPESC	Australian painted snipe

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• ESC will be installed prior to (or immediately upon) any disturbance to vegetation or soil. These controls will remain in place until revegetation, stabilisation or hard scaping has occurred • All ESC will be maintained until the upstream work areas are stabilised • Silt and sediment traps and basins will have 70% operational capacity maintained at all times. • Waterway crossings will be constructed and maintained in accordance with a development approval (DA) under the Planning Act and Fisheries Act or the *Accepted Development Requirement Code for operational work that is constructing or raising waterway barrier works* (ADR) (DPI, 2025). These requirements include (but are not limited to) standards for bed level crossing dimensions and design, bed level crossing configurations and stream bed scour protection suitable for the type of waterway. • Where available, existing access tracks and cleared areas will be used, including designated waterway crossings (e.g. where an existing access track is present and permission for its use has been granted by the owner). • Stockpiles will be located at least 50 m from all drains, watercourses, or their flood banks where practicable. Where this is not practicable (e.g. where temporary stockpiles are required for construction within drains, watercourses, or their flood banks), they will be managed through appropriate ESC devices. • Training, as outlined in Section 9.0, will be undertaken to ensure relevant staff (e.g. engineers, Site Supervisors, construction labourers, Environmental Representative) are skilled to be able to install, inspect, and maintain ESC during the construction of the Project.			

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Environmental inspections of waterway crossings will be undertaken during their construction and after Rainfall Events during construction. Waterway crossings inspections will occur at least annually in accordance with the ADR (DPI, 2025). • Water quality sampling to be conducted during construction works on waterway crossings following Rainfall Events (refer Section 6.7).			
Manage hazardous substances and implement spill management procedures	Hazardous substance and spill management procedures will be implemented to minimise impacts on MNES habitat within the Stage 1 Project Area. Where hazardous substances are being stored for Project Activities: • General purpose spill kits will be provided at the fuel and chemical storage areas these are to be kept free of rubbish and adequately stocked with spill equipment at all times. Spill response equipment will clearly identifiable and appropriate to the type, location and volume of hazardous substances being stored at all times. All machinery and vehicles carrying additional fuel/oil/diesel over 20 L will always be equipped with a spill kit. • Inspections of the hazardous substances storage areas will be conducted weekly. Any findings relating to chemical storage, status of bund (visible staining / spills / leaks etc.), and spill kit stock levels and availability will be documented. All hazardous substances will be stored in an impervious bunded area (at least 120% capacity of stored volume) a minimum of 50 m away from: • Rivers, creeks, waterways, drainage lines, or any areas of concentrated water flow • Flood prone or poorly drained areas • Slopes above 10%.	During construction	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	All fuel and chemical spills will be reported to the Project Environmental Representative, controlled/contained, cleaned up, and affected areas remediated. Spill kits will be replenished. Infield refuelling will occur at designated locations and will not occur within 50 m of a waterway or drainage line except where the plant cannot move from the floodplain due to the type of equipment (i.e. piling rig). To mitigate the risk for plant that is unable to be moved, portable bunds and drip trays will be utilised to mitigate potential risks of spills and contamination. Daily pre-checks of all vehicles and machinery will be undertaken to minimise the chance of leaks or drips of lubricants, fuel or other fluid spills. Port-a-loos with untreated sewage will not be located within 50 m of a waterway or drainage line. Rehabilitation of areas used to store hazardous substances will commence as soon as possible (within 1 month) after the area is no longer required for hazardous substance storage during construction. Rehabilitation will include removal of any stored hazardous substances from the site.			
Manage weed species	Weed management measures will be implemented to minimise impacts on MNES by weeds within the Stage 1 Project Area: • Prior to clearing in any area, all WoNs and restricted invasive plants under the Queensland *Biosecurity Act 2014* will be identified within the Stage 1 Clearing Footprint and any areas to be used for construction (e.g. existing tracks). Biosecurity matters identified as a risk of being spread as a result of Project Activities will be treated prior to construction. • Biosecurity zones will be developed for the Project, which will be informed by landholder requirements and prevalence of weed species and density. Washdowns will be required when moving VEPM between zones during construction.	Prior to and during construction	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Application of herbicides will avoid impacts to MNES habitats. If impacts cannot be avoided, impacts will be minimised to only what is required to carry out weed treatment. • Imported Project materials and supplies, such as sand, gravel, and sediment controls, will be sourced from locations certified as weed free. • For Project materials and supplies with a high risk of transporting biosecurity matters (due to the type of materials and supplies and/or source of the materials and supplies), these will be inspected by a certified person, and cleaned down as required, to ensure that they are free of biosecurity matters prior to arriving at a worksite. A certified person is an individual holding the national competency AHCBIO201 Inspect and clean machinery for plant, animal and soil material (or equivalent). Only a certified person can inspect and issue cleandown certificates on the Project. • If Project materials and supplies arrive at a worksite and are not free of biosecurity matters, then they must be cleaned down at a designated washdown facility either offsite or at a Workforce Accommodation Facility washdown and a declaration will be completed by a certified person prior to the materials and supplies being transported to worksite. • Prior to arriving to a worksite, all new vehicles, plant, equipment and machinery (VPEM) must be cleaned down in accordance with the *Come clean go clean* (Department of Primary Industries, 2024) washdown procedure advice or similar. All VPEM must then be inspected with a declaration stipulating that the VPEM is clean by a certified person. • If new VPEM arrive at a worksite without being washed down and/or without a declaration stipulating that the VPEM has been inspected and is clean by a certified person, then the VPEM must be cleaned down at a designated washdown facility, either offsite or at the Julia Creek WAF washdown, and declaration completed by a certified person prior to undertaking work on a worksite. • Any loads of plant material must be covered during transport.			

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• All new personnel entering a worksite must ensure boots and clothing is free of biosecurity matters. If personnel arrive at a worksite with dirty boots or clothing, then these need to be cleaned (i.e. brushed down or washed) either offsite or at the Julia Creek WAF washdown. • The location of temporary washdown facilities will consider the following: - Located within transmission line corridor, road reserve or along an existing and agreed access for off corridor location on private property - Located as close as possible to the property boundary - Not located in environmentally or other sensitive locations. • Temporary washdown facilities will: - Be located at least 50 m from waterways, drainage lines, or environmentally sensitive areas - Be designed to contain weed seeds and sediments to prevent vehicle recontamination - Manage runoff to prevent sediment, grease, oil and viable plant material entering adjacent land or waterways - Be well maintained, including all equipment, in a serviceable and usable condition - Ensure appropriate disposal of all material potentially contaminated with Biosecurity Matters in accordance with the Biosecurity Act requirements - Be decommissioned at the end of construction or when no longer required, with the geofabric and contaminated materials disposed of at a licensed waste disposal facility, and the disturbance area rehabilitated. • Records must be kept by the Contractor of all inspection and clean down of VPEM through each washdown facility. A copy of the clean down			

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	records will be provided to the Principal Environmental Representative monthly or on request. • Annual targeted weed monitoring will be undertaken during construction, and a Post-construction Biosecurity Survey will be undertaken following construction. Where an increase in targeted weed cover or the presence of new weed species is recorded relative to the Pre-construction Biosecurity Survey, appropriate weed control measures (e.g. physical, mechanical, chemical, or biological control) will be implemented by a suitably qualified contractor.			
Manage pest fauna	Prior to commencement of construction on the transmission line component of Stage 1, Powerlink will make a one-off contribution to an existing, landscape scale pest management program operating within the local government area. The following pest fauna management measures will be implemented during construction: • Pre-construction Biosecurity Surveys will be undertaken for the Flinders Substation and Julia Creek WAF as they represent the highest risk to increasing pest fauna species. • Pest species will be monitored as part of General Environmental Inspections. Where pest species are identified above baseline levels at the Flinders Substation or Julia Creek WAF, controls will be implemented, such as engaging a specialist pest management contractor to implement pest animal controls (e.g. live targeted trapping or a feral cat/fox management program). • Fences will be installed to exclude feral cats and foxes from food and water sources at the Julia Creek WAF. • Food scraps and other putrescible waste will be appropriately stored to avoid attracting rodents (and therefore feral cats and foxes). This will include covering of these bins. • Waste containers will be regularly emptied.	Prior to and during clearing and construction	Contractor	All, in particular Julia Creek dunnart, plains death adder, and painted honeyeater

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species

	• To avoid inadvertent poisoning of MNES fauna species, such as the Julia Creek dunnart, poison baits will not be used at the Flinders Substation or Julia Creek WAF.
	• Construction will avoid creating breeding habitat for cane toads (i.e. water ponding).
	• Project personnel will be informed that they must not feed any animals.
	• Domestic pets owned by Project staff will not be permitted in the Stage 1 Project Area.
	• All personnel will complete a site environmental induction which will include detailed Project biosecurity requirements.
	• Workers must report all biosecurity incidents/events to the Project Environmental Representative, and any action to exacerbate the risk must not be taken.
	• If tramp ants are identified within the Project Area, the Project Environmental Representative must be notified as soon as possible so that Biosecurity Queensland can be notified within 24 hrs.
	• A Pest Register will be maintained, recording:
	  - Species of pest animal sighted
	  - Location of sightings
	  - Biosecurity classification of the pest.
	In addition to the above, the following avoidance measures will also be implemented:
	• For Project materials and supplies with a high risk of transporting biosecurity matters (due to the type of materials and supplies and/or source of the materials and supplies), these will be inspected by a certified person, and cleaned down as required, to ensure that they are free of biosecurity matters prior to arriving to a worksite. A certified person is an individual holding the national competency *AHCBIO201 Inspect and clean*			

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	machinery for plant, animal and soil material (or equivalent). Only a certified person can inspect and issue clean down certificates on the Project.			
Limit excessive construction noise during the construction of the Julia Creek WAF and Flinders Substation.	Mitigation measures to mitigate impacts from excessive construction noise during construction of the Julia Creek WAF and Flinders Substation include: • Appropriate plant and equipment to be selected for each task to minimise the noise contributions. • Ensure machinery is fitted with appropriate noise attenuation devices and is maintained in accordance with the manufacturer's recommendations. • Shut down any LPG/petrol/diesel powered equipment generating loud, extraneous (unusual) noise until the source of the noise can be identified and rectified. • All transport vehicles will be in good working order and will avoid using exhaust brakes in built up areas adjacent to the work site. • Plant to be turned off when not in use. • Plant is to be regularly maintained and repaired or replaced if it becomes noisier. • Non-tonal reversing alarms to be used as a preference over tonal reversing alarms.	During construction of the Julia Creek WAF and the Flinders Substation	Contractor	All
Minimise light spill into MNES habitat around the Julia Creek WAF and during night works	Permanent lighting at the Julia Creek WAF and the Flinders Substation will be designed and installed in accordance with the AS lighting standard for fauna (AS/NZS 4282:2023) and shielded to minimise light spill to the surrounding environment.	During construction of the Julia Creek WAF and the Flinders Substation and	Contractor	Australian painted snipe, painted honeyeater, Julia Creek dunnart

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	During night works, artificial light is to be directed onto the works area requiring illumination. Use shielding on lights to prevent light spill outside the works area.	during night works		
Minimise dust generation to reduce impacts on MNES during the construction of the Julia Creek WAF and Flinders Substation and during heli-stringing.	Dust suppression will be undertaken to manage the risk of adverse impacts associated with excessive dust deposition. The following dust control measures will be implemented: • Water carts and soil binders will be used to suppress dust on disturbed areas and stockpiles • Temporary Disturbance Areas will be rehabilitated as soon as practicable and within 12 months of the completion of construction works. • All loads transported to or from worksites that pose a dusk risk will be covered • Dust suppression rates will be adjusted as needed to effectively control dust emissions • Speed limits will be limited to 40 km/hr on non-gazetted roads and tracks to minimise dust generation • Additional watering of exposed areas during heli-stringing.	During construction of the Julia Creek WAF and the Flinders Substation and during heli-stringing	Contractor	All
Prevent uncontrolled fire events caused by Project Activities	Burning of vegetation is prohibited on the Project. Designated smoking areas and appropriate cigarette disposal facilities will be provided during construction to minimise pollution and the risk of fire. Fire management will include: • Prior to construction at each worksite, identify all risks, hazards, and mitigation measures relating to construction activities that could cause a fire • Establish and maintain access tracks to aid firebreaks	During construction	Contractor	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Fire-fighting equipment will be installed on plant and machinery and inspected during daily prestart inspections • Maintaining fire-fighting equipment to the manufacturer's standards • Actively manage mulch piles, vegetation stacks, chemical, equipment, and machinery to prevent unplanned fires.			
Prevent illegal access to the Project through trespassing.	Install and maintain locked gates where access is required to the transmission line easement.	During operation	Principal	All
Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities	As outlined in Section 9.0, prior to site entry, all relevant site personnel, including contractors, will undergo site inductions. All site personnel will be required to sign the induction form to state they have read and understand all relevant material. All site personnel involved in Project Activities will be informed of Exclusion Zones in place and where they occur, and areas identified for vegetation clearance, stockpiling, and avoidance. These areas will be clearly defined and detailed in site inductions and toolbox talks. Information regarding MNES sightings and workers' responsibilities to manage MNES for their relevant activities will be communicated during toolbox talks. Toolbox talks will include discussions on the EWP relevant to the worksite for each crew.	Prior to commencing on site During construction	Contractor	All

5.4.2 Operation phase management measures

Table 8: Management measures relevant to Stage 1 Project Activities – Operation Phase

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
Implement clearing protocols for maintenance clearing to prevent inadvertent damage to MNES habitat Implement specific clearing methods to minimise impacts to MNES and MNES habitat during maintenance clearing	An EWP covering each area requiring maintenance clearing will be prepared and will include a map, showing the locations of: • Environmental constraints such as MNES habitat • Location of Exclusion Zones. Environmental Work Plan/s will be: • Approved by the Project Environmental Representative prior to implementation • Incorporated into environmental work method statements relevant to each worksite • Discussed in daily toolbox talks • Made available to all personnel involved in maintenance clearing. Internal training (refer to Section 9.0) will be provided to all personnel involved in maintenance clearing to ensure they are aware of their responsibilities to comply with the EWP. Cleared vegetation will not be stacked or pushed against other retained woody vegetation that supports MNES habitat. Trees will be felled away from retained vegetation, to minimise damage on retained vegetation. Where possible, clearing of habitat trees within riparian areas will retain the stumps to minimise erosion risk as much as possible. An example of where this will not be possible is clearing for access tracks. No red goshawk nest will be directly cleared and/or impacted.	Prior to and during maintenance clearing	Principal	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
Ensure any newly discovered Protected Matters found unexpectedly during operations are reported to DCCEEW and managed	In the event that any additional Protected Matters which this MNES Management Plan does not cover are found within the Stage 1 Project Area (including black ironbox, pink gidgee, waxy cabbage palms, red goshawk nests or other MNES that were listed as threatened under the EPBC Act as of 14 May 2019), the Unexpected Finds Procedure outlined in Appendix E will be implemented.	During operation	Principal	All
Rehabilitate all areas that are temporarily disturbed	Any areas that are temporarily disturbed during maintenance works will be rehabilitated as soon as practicable and monitored in accordance with Section 7.0 of this MNES Management Plan. Material cleared will be reused during rehabilitation where practicable, including: • Mulch accumulated from site clearing activities • Habitat features (i.e. rocks, logs, salvaged vegetation suitable for shelter and breeding opportunities for fauna). Where stockpiles of felled vegetation have been left for 24 hours prior to reuse, the stockpile will be inspected by a Fauna Spotter Catcher prior to disturbance. Topsoil stockpiles will be treated for weeds and used for rehabilitation in the area it was sourced from to reduce the spread/dispersion of weeds. Stockpiles will avoid being placed against trees to prevent damage to the root system. Earth formations in waterways will be rehabilitated using original topsoil and configured in a way that mirrors the original slope of the terrain.	Following construction within each area	Principal	All
Implement measures to avoid or mitigate injuries or mortality	Within 72 hours prior to vegetation clearing within confirmed MNES habitat, the Fauna Spotter Catcher will complete a Fauna Spotter Catcher Survey in	Prior to and during	Principal	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
to MNES during clearing and disturbance works	areas to be cleared in accordance with the Fauna Spotter Catcher Procedure (Appendix F). The Fauna Spotter Catcher Survey will identify: • Active MNES breeding places including requirements for relocation of nests/young • Location of any Exclusion Zones. If vegetation to be cleared or disturbed for maintenance is found to contain MNES individuals or breeding places, the requirements outlined in the Fauna Spotter Catcher Procedure (Appendix F) will be followed.	maintenance clearing		
Avoid and minimise injuries or mortality to MNES from vehicle or machinery strikes through implementation of staff training and project-specific road rules	Contractor training regarding enforcement of speed limits to minimise fauna strike. VEPM will be restricted to pre-determined access tracks and roads between work areas and will adhere to all speed limits, which will be clearly signposted. Contractor inductions to include the following information: • No driving is to occur off the designated access tracks • Travel and vehicle movements near dawn, dusk and at night will be minimised by planning for works • Drive to conditions which may include reducing speed. A register of MNES sightings will be maintained to identify current areas that have a risk of collision. Any injured fauna will be reported to the Project Environmental Representative and taken to a suitably qualified wildlife carer or vet as soon as possible (within 24 hours).	During operation	Principal	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	Injuries or deaths to any MNES will be managed as an Incident in accordance with Section 8.3.1.			
Minimise changes to hydrology and erosion and sedimentation to wetlands and waterways	In accordance with the Principal's asset management strategy, the following measures will be implemented to manage ESC impacts on MNES habitat during operation: • Maintenance of access tracks and associated infrastructure such as waterway crossings and drainage infrastructure • Only the designated access tracks within the easement will be used during maintenance works. • If maintenance works identify dust as a possible risk (e.g. if clearing machinery or earthworks are required), then dust mitigation measures will be implemented (e.g. use or water carts for dust suppression).	During operation	Principal	All, particularly Australian painted snipe
Manage hazardous substances and implement spill management procedures	Hazardous substance and spill management procedures will be implemented to minimise impacts on MNES habitat within the Stage 1 Project Area. Where hazardous substances are being stored for Project Activities: • General purpose spill kits will be provided at the fuel and chemical storage areas these are to be kept free of rubbish and adequately stocked with spill equipment at all times • Inspections of the hazardous substances storage areas will be conducted weekly. Any findings relating to chemical storage, status of bund (visible staining / spills / leaks etc.), and spill kit stock levels and availability will be documented. All hazardous substances will be stored in an impervious bunded area (at least 120% capacity of stored volume) a minimum of 50 m away from: • Rivers, creeks, waterways, drainage lines, or any areas of concentrated water flow	During operation	Principal	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Flood prone or poorly drained areas • Slopes above 10%. Spill response equipment will be available, clearly identifiable and appropriate to the type, location and volume of hazardous substances being stored at all times. All machinery and vehicles carrying additional fuel/oil/diesel over 20 L will always be equipped with a spill kit. All fuel and chemical spills will be reported to the Project Environmental Representative and controlled/contained/cleaned up. Any affected areas will be remediated. Spill kits will be replenished. Infield refuelling will occur at designated locations and will not occur within 50 m of a waterway or drainage line except where the plant cannot move from the floodplain due to the type of equipment. To mitigate the risk for plant that is unable to be moved, portable bunds and drip trays will be utilised to mitigate potential risks of spills and contamination. Daily pre-checks of all VPEM will be undertaken to minimise the chance of leaks or drips of lubricants, fuel or other fluid spills. Port-a-loos with untreated sewage, if required for operations, will not be located within 50 m of a waterway or drainage line.			
Manage weed species in consultation with landowners and implement weed hygiene procedures during maintenance activities	The Principal's systems for managing biosecurity risks will be implemented during maintenance works. The following weed management measures will be implemented to minimise impacts on MNES by weeds during maintenance works: • Work closely with landholders to develop effective and efficient biosecurity risk management strategies appropriate to the risk profile of the property and relevant landholder constraints.	During operation	Principal	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Only designated access tracks within the Stage 1 Project Area will be used. • Imported materials such as sand, gravel, and sediment control materials will be sourced from locations certified as weed free. • Any loads of plant material must be covered during transport. • Application of herbicides will avoid impacts to MNES habitats. If impacts cannot be avoided, impacts will be minimised to only what is required to carry out weed treatment. • Imported Project materials and supplies, such as sand, gravel, and sediment controls, will be sourced from locations certified as weed free. • For Project materials and supplies with a high risk of transporting biosecurity matters (due to the type of materials and supplies and/or source of the materials and supplies), these will be inspected by a certified person, and cleaned down as required, to ensure that they are free of biosecurity matters prior to arriving at a worksite. A certified person is an individual holding the national competency AHCBIO201 Inspect and clean machinery for plant, animal and soil material (or equivalent). Only a certified person can inspect and issue clean down certificates on the Project. • If Project materials and supplies arrive at a worksite and are not free of biosecurity matters, then they must be cleaned down at a designated washdown facility either offsite or at a Workforce Accommodation Facility washdown and a declaration will be completed by a certified person prior to the materials and supplies being transported to worksite. • Prior to arriving to a worksite, all new VPEM must be cleaned down in accordance with the *Come clean go clean* procedures (Department of Primary Industries, 2024) or similar. All VPEM must then be inspected with a declaration stipulating that the VPEM is clean by a certified person.			

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• If new VPEM arrive at a worksite without being washed down and/or without a declaration stipulating that the VPEM has been inspected and is clean by a certified person, then the VPEM must be cleaned down at a designated washdown facility and declaration completed by a certified person prior to undertaking work on a worksite. • All new personnel entering a worksite must ensure boots and clothing is free of biosecurity matters. If personnel arrive at a worksite with dirty boots or clothing, then these need to be cleaned (i.e. brushed down or washed) either offsite or at the Julia Creek WAF washdown. • All new personnel entering a worksite must ensure boots and clothing is free of biosecurity matters. If personnel arrive at a worksite with dirty boots or clothing, then these need to be cleaned (i.e. brushed down or washed) either offsite or at the Julia Creek WAF washdown. Where an increase in weeds attributable to Project Activities are identified by workers or the landholder, or weeds are identified that pose a risk of spread by Project Activities, the Project Environmental Representative will work landholders to manage weeds as outlined in Table 9.			
Manage pest fauna	The following pest fauna management measures will be implemented during operation: • Incidental pest species will be recorded during condition assessments (refer Section 6.3). • Food scraps and other putrescible waste will be appropriately stored to avoid attracting rodents (and therefore feral cats and foxes). This will include covering of these bins. • Waste containers will be regularly emptied. • Construction will avoid creating breeding habitat for cane toads (i.e. water ponding).	During operation	Principal	All

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
	• Project personnel will be informed that they must not feed any animals. • Domestic pets owned by Project staff will not be permitted in the Stage 1 Project Area. • All operational personnel will complete a site environmental induction which will include detailed Project biosecurity requirements. • Workers must report all biosecurity incidents/events to the Project Environmental Representative, and any action to exacerbate the risk must not be taken. • If tramp ants are identified within the Project Area, the Project Environmental Representative must be notified as soon as possible so that Biosecurity Queensland can be notified within 24 hrs. • For Project materials and supplies with a high risk of transporting biosecurity matters (due to the type of materials and supplies and/or source of the materials and supplies), these will be inspected by a certified person, and cleaned down as required, to ensure that they are free of biosecurity matters prior to arriving to a worksite. A certified person is an individual holding the national competency *AHCBIO201 Inspect and clean machinery for plant, animal and soil material* (or equivalent). Only a certified person can inspect and issue clean down certificates on the Project.			
Minimise light spill into MNES habitat	External lighting at the Julia Creek WAF and Flinders Substation will be designed, installed and maintained in accordance with the AS lighting standard for fauna (AS/NZS 4282:2023) which includes shielding to minimise light spill to the surrounding environment.	During operation	Principal	Australian painted snipe, painted honeyeater, Julia Creek dunnart

Management measures	Description of specific management techniques	Timing	Responsibility	MNES species
Prevent uncontrolled fire events caused by Project Activities	Burning of vegetation is prohibited on the Project. Designated smoking areas and appropriate cigarette disposal facilities will be provided during construction to minimise pollution and the risk of fire. Fire management will include: • Prior to maintenance activities identify all risks, hazards, and mitigation measures • Establish and maintain access tracks to aid firebreaks • Fire-fighting equipment will be installed on plant and machinery and inspected during daily prestart inspections • Maintaining fire-fighting equipment to the manufacturer's standards • Actively manage mulch piles, vegetation stacks, chemical, equipment, and machinery to prevent unplanned fires.	During operation	Principal	All
Prevent illegal access to the Project through trespassing.	Install and maintain locked gates where access is required to the transmission line easement.	During operation	Principal	All
Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities	As outlined in Section 9.0, prior to site entry, all relevant site personnel, including contractors, will undergo relevant inductions. All site personnel will be informed of Exclusion Zones in place and where they occur, and areas identified for vegetation clearing. These areas will be clearly defined and detailed in EWP's.	Prior to undertaking onsite work for the Project during operation	Principal	All

5.5 Project CEMP

The CEMP and associated subplans and procedures will be required to incorporate all relevant management objectives, management measures and monitoring measures, responsibilities and reporting requirements outlined in this MNES Management Plan as relevant to work packages under the CEMP.

This MNES Management Plan must be approved by the Minister prior to commencement of Stage 1. Following approval of this MNES Management Plan by the Minister, any existing relevant construction plans will be reviewed and updated to include the approved measures under this MNES Management Plan. The Principal will review the CEMP and subplans/procedures and provide approval for the Contractor to commence the action once satisfied that the measures in the CEMP incorporate the requirements of this MNES Management Plan.

5.6 Project OEMP

The OEMP prepared prior to the commencement of operations for Project Activities will include any relevant operation phase management objectives, management measures and monitoring outlined in this MNES Management Plan.

6.0 Monitoring and Measurement Mechanisms

A monitoring program has been developed to assess the effectiveness of the management measures outlined in Section 5.4 and to allow timely decisions to be made on the requirement for corrective actions if required as outlined Section 6.9. Monitoring, survey activities, and analysis of monitoring results will be conducted by personnel who are suitably qualified for the relevant activity, including but not limited to, Fauna Spotter Catchers, Ecologists, and qualified Project Environmental Representatives (refer to the Defined Terms on page 3).

Environmental monitoring will be undertaken to observe and report on the performance of proposed management measures and performance indicators, with a focus on demonstrating the following:

- 'Early-control' (that management actions are effective) and 'early warning' (corrective actions are required) functions, with respect to the performance targets.
- Early intervention and remediation of potential or actual Incidents or Non-compliances. The monitoring program will inform adaptive implementation and demonstrate whether the management objectives for Protected Matters have been met or are likely to be.

The monitoring methods are:

- Specific to the management objectives to enable detection of whether the objectives have been or are likely to be achieved or whether corrective actions are needed
- Developed to assess the effectiveness of management measures and detect triggers for further action
- In accordance with the recommended survey guidelines for MNES species where relevant.

Further to this, the monitoring undertaken will be:

- Sufficient to evaluate performance of the MNES Management Plan
- Sufficient to inform subsequent reviews and amendments to the MNES Management Plan
- Undertaken in accordance with the requirements of DCCEEW's Guidelines for biological survey and mapped data (DoEE, 2018).

6.1 Weather Constraints

As described in Section 3.0, Stage 1 is located in Mitchell grass tussock grasslands. The soils in this region are typically black cracking clay soils which upon receiving rainfall can take weeks and months to dry out. This poses a complex logistical challenge to access the transmission line following rainfall as access during these periods significantly increases the risk of erosion; and the potential to impact on access track assets and safety to individuals working in remote locations. As a result, General Environmental Inspections following Rainfall Events will be undertaken once the local environment is safe to access. To allow for this constraint, it is necessary to provide flexibility in the implementation of management measures where access is limited. When heavy rain is forecast during construction, controls will be checked that they are implemented prior to workers and machinery being evacuated so as to minimise risk of impacts when worksites become inaccessible due to wet weather.

6.2 Construction Phase Inspections

The Project Environmental Representative will conduct General Environmental Inspections of Project Activities throughout construction. General Environmental Inspections will be undertaken on a weekly basis or following Rainfall Events, when locations are accessible and safe.

General Environmental Inspections will include at a minimum:

- General requirements (Section 6.2.1)

  - Stockpile inspections
  - Waterway crossing inspections
  - Water quality visual observations
  - Identification of fire and/or spill hazards
  - Hazardous substance storage area inspections
  - Compliance checks against controls for noise, lighting and dust at the Julia Creek WAF, Flinders Substation, and during heli-stringing and night works.
- Compliance checks against Stage 1 Clearing Limits (Section 6.4)
- Compliance checks against the reporting requirements for MNES interactions (Section 6.5)Weed and pest visual observations (Section 6.6).
- Compliance checks against rehabilitation (Section 7.0)

Further detail on measures to monitor and minimise impacts to MNES to achieve management objectives are provided in Table 9.

6.2.1 General Environmental Inspection Requirements

The following will be inspected weekly or following Rainfall Events during construction when locations are accessible and safe:

- Checks to identify weed outbreaks for targeted weed species (refer further detail in Section 6.6).
- Julia Creek WAF and Flinders Substation for pest sightings (refer further detail in Section 6.6).
- Waterway crossings to monitor compliance with the relevant Development Application (DA) or ADR (DPI, 2025).
- Hazardous substances storage areas including status of bunds (visible staining/spills/leaks etc.), and spill kit stock levels.
- Checks for compliance with noise management techniques at the Julia Creek WAF and Flinders Substation during construction.
- Visual checks for dust emissions and impacts to vegetation from dust at the Julia Creek WAF and Flinders Substation during construction and during heli-stringing.
- Visual checks (by site supervisor) for appropriately installed artificial lighting during night works.
- Fire hazard management measures including the use of designated smoking areas and the availability and serviceability of fire-fighting equipment.

In addition to the General Environmental Inspections, ESC inspections will be undertaken by Contractor staff (e.g. the onsite engineer, Supervisor, construction labourer or Contractor Environmental Representative) to assess compliance with the relevant ESCMP for the works area, which will be developed prior to disturbance in the area. Erosion and sediment control inspections will assess to ensure:

- ESC are installed prior to land disturbance in accordance with the Permit to Disturb at each worksite
- ESC are functioning and being maintained as per the relevant ESCMP for the worksite.

For Temporary Disturbance Areas, erosion and sediment controls will be inspected weekly or within 24 hours prior to an expected Rainfall Event during construction. Any non-conformances with the relevant ESCMP will trigger further action, which may include installation of additional or alternative ESC to comply with the relevant ESCMP.

Where Incidents or Non-compliances are identified during inspections, corrective actions will be specified and prioritised for action at the completion of the inspection. See Section 8.3.1 for Incident and

Non-compliance reporting. Each inspection will be documented and logged and will include observations, potential or actual Incidents or Non-compliances, corrective actions and timeframes.

Photographs will be taken to document all aspects of the General Environmental Inspections and ESC inspections. Reference markers will be used where appropriate (e.g. long term stockpiles to monitor changes in weed extent over time, or waterway crossing condition inspections).

6.3 Operational Phase Inspections

Powerlink complies with regulatory requirements such as ISO55001 – Asset Management Standard and continues to have the social and transmission network service provider licence to operate. Operational management of the transmission line is undertaken through condition assessments which provide an indication of the level of compliance of the asset. Data for condition assessments is captured by various means, including land inspections, aerial inspections, spatial analysis and LiDAR surveys. The frequency and type of condition assessments is primarily driven by the type of asset and potential risk of incompatible vegetation growth posing a threat to network assets.

Condition assessments are undertaken at least every two to four years across the length of the transmission line easement and typically include descriptions of the following:

- Span vegetation risk
- Span bushfire risk
- Vegetation height
- Vegetation density
- Tower leg condition
- Herbicide application
- Access track condition
- Washdown condition.

Based on the results of condition assessments, condition-based maintenance will be undertaken for locations where high risk items are identified (e.g. incompatible vegetation present, severe defects on access tracks are identified as present, resulting in unsafe conditions).Where high risk items are identified and attributed or pose risk to the Project, the Principal will work in conjunction with landholders to manage these items.

Operational monitoring will also include:

- Compliance checks against Stage 1 Clearing Limits (Section 6.4)
- Compliance checks for rehabilitation (until completion criteria are met (Section 7.0)
- Compliance checks against the reporting requirements for MNES interactions (Section 6.5)
- Weed visual observations (Section 6.6).

Following each condition assessment, a status report will be prepared to outline maintenance issues, Non-compliances and rectifications/corrective actions taken. Each status report will include any weed outbreaks identified.

With the improvement of remote sensing data to sub-metre accuracy, annual remote condition assessments will be performed to better understand land asset conditions and supplement condition assessments.

6.4 Monitoring of Clearing Limits

Prior to any disturbance or vegetation clearing, a Permit to Disturb will be completed and approved by the Project Environmental Representative. The Environmental Representative will ensure clearing areas and limits are identified prior to clearing and this information is provided to workers involved in clearing as a component of the Permit to Disturb process. The quantum of habitat for each species marked for clearing will be measured spatially using GIS, then confirmed following clearing of each worksite. The actual area of habitat cleared will be recorded in the MNES Habitat Clearing Register.

6.4.1 MNES Habitat Clearing Register

A register of MNES habitat cleared as a result of the Project will be maintained to ensure compliance with Condition 2 and 2A of the EPBC Act Approval. As MNES habitat is progressively cleared, the area cleared will be calculated in hectares and recorded in the register. The register will be maintained during by the Contractor (during construction) and the Principal (during operation).

6.5 MNES Sighting Register

During construction, the Project Environmental Representative will maintain a MNES Sighting Register recording the date, location, approximate time, approximate GPS coordinates, species name and general notes on the nature of the sighting (i.e. number of individuals, alive or deceased, how it was sighted (e.g. crossing the road, unearthed during construction works, found by Fauna Spotter Catcher or Ecologist during surveys/clearing, etc.). The MNES Sightings Register will be maintained by the Principal Environmental Representative during operations. Injuries or deaths to any MNES during constriction or operations will be managed as an Incident in accordance with Section 8.3.1.

6.6 Weed and Pest Monitoring

6.6.1 Construction

During construction weeds will be managed through the following measures:

- A Pre-construction Biosecurity Survey will be conducted prior to the commencement of clearing works. This survey will assess the presence and abundance of WoNS and restricted invasive plants under the *Queensland Biosecurity Act 2014* within the Stage 1 Construction Zone and the presence and abundance of pest fauna within the Julia Creek WAF and Flinders Substation footprints.
- Targeted weed monitoring will be completed annually within Temporary Disturbance Areas throughout construction and during rehabilitation monitoring, as outlined in Section 7.6. Subject to site accessibility following wet weather, targeted weed monitoring will be conducted during the late-wet/early dry-season to ensure the highest detectability for flora species. GIS baseline data will be used to map any changes in weed extent during construction and operation.
- A Post-construction Biosecurity Survey will be undertaken following the first wet season. Weeds attributable to Project Activities (when compared to the Pre-construction Biosecurity Survey data) corrective actions will be implemented as outlined in Table 9..
- Visual observations of weeds will also be completed as part of General Environmental Inspections during construction as outlined in Section 6.2. All incidental weed observations by any staff during construction will be reported to the Project Environmental Representative and added to the Weed and Pest Register (refer Section 6.6.3). Where new weeds or an increase in weed abundance is identified as a result of Project Activities (when compared to the Pre-construction Biosecurity Survey data) corrective actions will be implemented as outlined in Table 9.

Prior to commencement of construction on the transmission line component of Stage 1, Powerlink will make a one-off contribution to an existing, landscape scale pest management program operating within the local government area.

During construction pests will be managed through the following measures:

- As part of the Pre-construction Biosecurity Surveys, camera traps will be installed at suitable locations at the Julia Creek WAF and Flinders Substation to collect baseline pest fauna data. Camera traps will remain at the pest monitoring sites during construction. The final location of the pest monitoring sites (including control sites) will be determined by an Ecologist.
- General Environmental Inspections during construction will include reviewing camera trap data to assess changes in pest fauna activity. If any new pest fauna or increases in pest fauna abundance are identified relative to the Pre-construction Biosecurity Survey data at the Julia Creek WAF or the Flinders Substation, corrective actions will be implemented as outlined in Table 9.
- Visual observations of pests will also be completed as part of General Environmental Inspections during construction as outlined in Section 6.2. All incidental pest observations by any staff during construction will be reported to the Project Environmental Representative and added to the Weed and Pest Register (refer Section 6.6.3). Where new pests or an increase in pest abundance is identified as a result of Project Activities, corrective actions will be implemented as outlined in Table 9.

6.6.2 Operations

During operations, if workers or landholders observe any incidental weeds or pests within operational areas, the Project Environmental Representative will be notified and the weed or pest location and extent will be added to the relevant EWP (refer Section 6.6.3). Monitoring for weeds and pests at the Flinders Substation will be undertaken annually, while monitoring along the transmission line will be undertaken during Condition Assessments, which occur every two to four years depending on the risk profile of the asset (urban / rural). Monitoring will be undertaken in accordance with Table 9. Weed monitoring during operations reflects Powerlink's strategy to integrate efforts with landholders to focus on weed prevention. Where an increase in weeds attributable to Project Activities are identified by workers or the landholder, or weeds are identified that pose a risk of spread by Project Activities, the Project Environmental Representative will work landholders to manage weeds as outlined in Table 9.

6.6.3 Weed and Pest Register

During construction, the Contractor will maintain a Weed and Pest Register to record the date, location, approximate GPS coordinates, species name, approximate size (ha or m^2) of weed infestation, approximate number of pests sighted and general notes on the nature of the pest sighting (i.e. number of individuals, alive or deceased, etc.).

During operation, the Principal will maintain EWPs to include the date, location, approximate GPS coordinates, species name, approximate size (ha or m^2) of weed infestations and pest sightings.

6.7 Water Quality Sampling

Prior to construction, the Project Environmental Representative will complete background water quality monitoring of flowing waterways within the Stage 1 Construction Zone.

During construction, the Project Environmental Representative will complete:

- Monthly water quality sampling (routine monitoring) upstream and downstream of flowing waterways within 100 m of disturbed worksites along the transmission line

- Water quality sampling within 24 hours following a Rainfall Event (event-based monitoring) upstream and downstream of flowing waterways within 100 m of disturbed worksites along the transmission line
- Water quality sampling during and following dewatering events (event-based monitoring) that will, or have the potential to, impact on waterways.

A comparison of upstream and downstream monitoring results, as well as comparison to background water quality where available, will provide an indication of potential change in water quality.

Water quality triggers for investigation include if any of the following occur during routine or event-based sampling:

- Downstream water quality parameter exceeds upstream water quality parameter by more than 20%
- A parameter exceeds the background criteria for two consecutive monthly monitoring events, or
- A parameter exceeds the background criteria for half of the sampling events in a twelve-month period.

Where pre-construction background data have not been collected due to lack of flowing water, upstream and downstream water quality samples will only be compared.

In the event that any of the above water quality triggers are observed, a review will be initiated within 24 hours to determine the significance of the exceedance(s) and possible causes. The review will assess recent rainfall records, current Project Activities and available information on other activities occurring within the catchment. If the exceedance is determined to be attributable to Project Activities, the Project Environmental Representative will develop a Corrective Actions Plan.

Where water quality monitoring determines Non-compliance to be a risk to MNES outside of the Stage 1 Project Area, an incident report and corrective actions will be raised in accordance with the requirements under Section 8.3.

6.8 Fauna Habitat Rehabilitation Monitoring

Baseline targeted surveys for MNES were conducted for the PCSR and resulted in two confirmed locations of Julia Creek dunnart within the Stage 1 Project Area. No other MNES were identified as occurring within the Stage 1 Project Area; however, habitat for Julia Creek dunnart, plains death adder, Australian painted snipe and painted honeyeater was identified. Therefore, monitoring will focus on rehabilitation of habitat for these species by reinstating vegetation communities to the pre-disturbance vegetation community for each location as identified in the PCSR and as per Condition 12 of the EPBC Act Approval.

Monitoring to assess the success of rehabilitating fauna habitat within Temporary Disturbance Areas will be undertaken for the first five years following the completion of rehabilitation works within each area or until all performance criteria are met. Monitoring to assess the success of rehabilitating fauna habitat within the Temporary Disturbance Areas is outlined in Section 7.0. Rehabilitation monitoring requirements, including performance criteria and corrective actions, are outlined in Section 7.0.

6.9 Summary of Monitoring and Measurement

A summary of monitoring programs relevant to achieving the management objectives outlined in Section 5.2 is outlined in Table 9. Monitoring, performance criteria and corrective actions for rehabilitation are outlined in Table 10 and Table 11.

Table 9: Measures to monitor and measure impacts to MNES to achieve management objectives

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
Limiting and/or avoiding loss of MNES habitat	Clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area and/or the Stage 1 Construction Zone. Impacts occur to newly discovered Protected Matters not included in this MNES Management Plan.	Clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area and/or the Stage 1 Construction Zone. Clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area and/or the Stage 1 Construction Zone. Newly discovered Protected Matters (as defined in the EPBC approval conditions) identified within the Stage 1 Project Area. Any Non-compliance with the specific clearing procedures identified in this plan.	Environmental Representative will monitor and record the total area of MNES habitat cleared and assess against the Stage 1 Clearing Limits and Stage 1 Project Area as outlined in this MNES Management Plan. Environmental Representative will confirm the Permit to Disturb requirements were met, including that a Fauna Spotter Catcher was present during clearing.	Clearing works will cease immediately if clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area or Stage 1 Construction Zone. DCCEEW will be notified of the Incident. Clearing will not recommence until further clearing is approved by the DCCEEW. If clearing of MNES habitat occurs outside of the Stage 1 Construction Zone, clearing will cease and the DCCEEW will be notified of the Incident. This Stage 1 MNES Management Plan will be required to be revised and re-approved by the DCCEEW. If clearing occurs outside the Stage 1 Clearing Footprint, clearing will cease and an assessment into the cause of the unauthorised clearing will be commenced by the Project Environmental Representative within one week of being notified or becoming aware of the unauthorised clearing. This assessment will include: • Reviewing clearing methods and Permit to Disturb process • Examining GPS mapping of the Stage 1 Clearing Limits and Exclusions Zones • Inspecting the presence and visibility of the onsite clearing limit boundary delineation • Examine staff training records. An investigation report will be completed within one week by the Project Environmental Representative and the

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
				findings of the report will be presented to the relevant site personnel to enable continual improvement and to minimise the risk of the Incident or Non-compliance occurring again. Clearing will only re-commence once corrective actions (e.g. re-establish clearing boundaries, increase staff training) have been implemented. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Successfully rehabilitating Temporary Disturbance Areas	Temporary Disturbance Areas are rehabilitated in accordance with the requirements in Section 7.0.	Rehabilitation of Temporary Disturbance Areas fails to meet the rehabilitation objectives outlined in Section 7.0.	Rehabilitation monitoring will be undertaken in accordance with Rehabilitation Monitoring outlined in Section 7.6.	If rehabilitation of Temporary Disturbance Areas fails to meet the interim performance targets or completion criteria as outlined in Section 7.5, the reasons for the failure will be investigated, and appropriate corrective actions identified in the Corrective Actions Plan consistent with Table 11. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Minimising injury or mortality to MNES fauna due to Project Activities	No mortality of, or injuries to, MNES as a result of management measures not being implemented during Project Activities. Pre-construction Fauna Surveys completed and clearing does not occur without a Fauna Spotter Catcher being present.	Any injury or mortality to a MNES species suspected to have resulted from Project Activities due to management measures not being implemented. Clearing occurs without a Pre-construction Fauna Survey being undertaken.	All interactions between MNES fauna and any Project staff, vehicles, and/or machinery within the Project Area during construction and operations will be reported to the Project Environmental Representative as soon as possible and within 24 hours of the interaction. The Project Environmental Representative will record interactions in the MNES Sightings Register. An Ecologist will complete a Pre-construction Fauna Survey within 10 days prior to vegetation being	If injury or mortality of MNES occurs within the Stage 1 Project Area, an assessment of the cause of the injury/death will commence within 24 hours by the Project Environmental Representative. If the injury or mortality is determined to be attributed to Project Activities and Non-compliance with this Stage 1 MNES Management Plan, a Corrective Actions Plan will be developed by the Project Environmental Representative and be implemented within one month of the Non-compliance being identified. Injuries or deaths to any MNES during constriction or operations will be managed as an Incident in accordance with Section 8.3.1. Examples of corrective actions may include:

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
		Clearing is undertaken without a Fauna Spotter Catcher present. Unqualified site personnel handle fauna resulting in injury or death of MNES species.	cleared to confirm the location and extent of MNES habitat. Fauna Spotter Catchers will inspect vegetation to be cleared within 72 hours before clearing occurs. All encounters with MNES will be recorded in Fauna Spotter Catcher reports. Records of surveys will be maintained by the Project Environmental Representative. The Project Environmental Representative will confirm the Permit to Disturb requirements were met, including that a Fauna Spotter Catcher was present during clearing.	• Review adherence to clearing procedures to ensure compliance. Take remedial action where compliance has not been adhered to. • Project Environmental Representative (in consultation with the Fauna Spotter Catcher) to assess whether clearing methods could be improved. • Installing additional speed limit signage and fauna 'hotspot' signage. • Implementing additional awareness training for site personnel on fauna strike locations. • Reinforcing Project-specific speed limits. • Reinforcing the requirement to use designated and approved access tracks. If clearing occurs without a Fauna Spotter Catcher present or without a Pre-construction Fauna Survey, all staff involved in the non-compliant clearing works will be re-trained on their obligations under this MNES Management Plan, and the Permit to Disturb procedure will be reviewed. If unqualified site personnel handle fauna, all staff involved in the Non-compliance will be re-trained on their obligations under this MNES Management Plan and EPBC Act Approval conditions. Investigations, reporting and corrective actions will be managed in accordance with Section 8.3.1.
Maintaining hydrology to Australian painted snipe habitat	All waterway crossings are constructed and maintained in accordance with a	Any waterway crossing is not constructed and maintained in accordance with a	Conformance with a DA or ADR (DPI, 2025) will be checked during weekly General Environmental Inspections during construction.	Where a waterway crossing does not comply with the DA or ADR (DPI, 2025), the non-conformance will be reported to the Site Supervisor for rectification. Rectifications to non-compliant waterway crossings will commence within six months of being identified.

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
Minimising erosion and sedimentation to MNES habitat Minimising contamination from hazardous substances to MNES habitat	DA or in accordance with the ADR (DPI, 2025). Water quality results in receiving waters downstream of disturbed worksites meet all water quality criteria outlined in Section 6.7. ESC installed prior to land disturbance and maintained and functioning in accordance with the relevant ESCMP (refer Section 6.2). Hazardous substances stored and managed as per the requirements in Table 7. Spill response requirements and procedures outlined in Table 7 implemented.	DA or the ADR (DPI, 2025) during construction and operation. Rehabilitation of Temporary Disturbance Areas fails to meet the rehabilitation objectives outlined in Section 7.0. During construction, water quality sampling does not comply with the requirements in Section 6.7. ESC not installed prior to land disturbance or not maintained and functioning in accordance with the relevant ESCMP (refer Section 6.2). Siltation of waterways in, or adjacent to the Stage 1 Project Area.	Conformance with a DA or ADR (DPI, 2025) will be checked as part of condition assessments during operation. General Environmental Inspections to check for impacts of Project Activities on waterways such as visible debris, sediment plumes or hydrocarbons. Routine and event-based water quality monitoring in accordance with Section 6.7. ESC inspections as part of General Environmental Inspections as per Section (refer Section 6.2). General Environmental Inspections to check hazardous substances storage areas and spill response procedures have been followed for any spills (including checking kit stock levels). Condition assessments during operations to identify track erosion as outlined in Section 6.3.	If rehabilitation of Temporary Disturbance Areas fails to meet the interim performance targets or completion criteria, the reasons for the failure will be investigated, and appropriate corrective actions identified in the Corrective Actions Plan consistent with Table 11.Investigations and corrective actions will be managed in accordance with Section 8.3.1. If the General Environmental Inspections observe debris, visible sediment plumes or hydrocarbons are present within waters downstream of Project Activities, then water quality testing will be conducted in accordance with the event-based sampling methods in Section 6.7. If any water quality criteria exceedances are observed, an investigation will be conducted within 24 hours to determine the significance of the exceedance(s) and possible causes. The investigation will assess recent rainfall records, other activities within the catchment, and recent activities or recorded ESC Non-compliances. If it is observed during General Environmental Inspections or other ESC inspections (refer Section 6.2) that ESC is not installed prior to land disturbance or not maintained and functioning in accordance with the relevant ESCMP for the area, then additional or alternative ESC will be installed to comply with the relevant ESCMP within one month or prior to a Rainfall Event. Corrective actions (such as increasing monitoring frequency, checking stockpiles are the required distance from waterways) will be implemented within one month of being identified in the Corrective Actions Plan.

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
		Visual inspections of water management infrastructure show signs of failure. Visual changes to water quality in watercourses and wetlands within the Stage 1 Project Area are observed. ESC not installed prior to land disturbance or not maintained and functioning in accordance with the relevant ESCMP for the area (refer Section 6.2). Hydrocarbons or construction related chemicals in waterways in, or adjacent to the Stage 1 Project Area. Hazardous substances not stored and managed as per the		If General Environmental Inspections identify hazardous substances storage and/or spill response procedures have not been implemented as per Table 7, appropriate corrective actions will be developed and implemented. Corrective actions such as increasing monitoring frequency, re-evaluating the location of refuelling areas, improving storage areas or re-stocking spill response equipment will be implemented within one month of being identified in the Corrective Actions Plan. If an incident occurs relating to the storage of hazardous substances and/or spill response that is identified as having the potential to, or does, impact on MNES or MNES habitat, the incident will be reported to DCCEEW. If any erosion of along access tracks is observed during operational condition assessments (refer Section 6.3), a risk assessment will be completed by Powerlink to determine if remedial action is required to maintain the track. If corrective actions (e.g. re-grading) are determined to be required, these will be included in a Corrective Actions Plan and implemented within 6 months of being identified. Investigations and corrective actions will be managed in accordance with Section 8.3.1.

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
		requirements in Table 7. Spill response requirements and procedures outlined in Table 7 not implemented.		
Minimising risk of weed introduction and/or spread as a result of Project Activities	No new or increase in weed species in comparison to the Pre-construction Biosecurity Surveys (during construction). Monitor rehabilitation of Temporary Disturbance Areas (during rehabilitation). No new or increase in weeds attributable to Project Activities (during operations) Manage weed species in consultation with land owners and implement weed hygiene procedures	Detection of weed species not previously recorded in the Stage 1 Project Area for the same location. 10% increase in weed cover compared to the Pre-construction Biosecurity Surveys for the same location during construction. Increase in weeds attributable to Project Activities during operations.	Weekly General Environmental Inspections by the Project Environmental Representative during construction. Prior to completing rehabilitation, any new weed species observed in an area being rehabilitated which was not identified in the Pre-construction Biosecurity Surveys in the same location. Prior to completing rehabilitation an increase of weed levels above baseline conditions (as determined in the Pre-construction Biosecurity Surveys) across two consecutive surveys. During operations, visual weed inspections will be undertaken by maintenance teams during condition assessments as outlined in Sections 6.3 and 6.6. As a co-use asset, weed spread may also be communicated by the landholder.	If during construction an increase in weed cover or the presence of new weed species is observed compared to Pre-construction Biosecurity Surveys, the following corrective actions will be undertaken: • Review adherence to current weed management measures listed in Table 7 and Section 6.5 to ensure compliance. • Increase training for all relevant staff within one week to ensure breaches do not re-occur. • Investigate alternative weed management control actions and implement within one month. • Implement the additional or alternative weed management measures to control any new weed species or reduce increased weed species. If the weed-related triggers prior to completing rehabilitation are met, the relevant corrective actions outlined in Table 11 will be undertaken. If during operation an increase in weed cover or the presence of new weed species is observed and found attributable to Project Activities, the following corrective actions will be undertaken: • Within one month, confirm current weed management practices being undertaken by the relevant land owner

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
	during maintenance activities (during operations).			to identify if additional measures need to be implemented (e.g. alternative control methods, timing and frequency of weed management measures). • In consultation with the land owner, undertake additional weed management measures until weed populations are reduced. Additional weed management measures will be commenced at the most appropriate time for successful management following the need being identified and within 6 months. • Review adherence to current weed management measures listed in Table 8 and Section 6.6 within one week to ensure compliance. • Increase training for all relevant staff within one week to increase weed awareness. Investigations and corrective actions will be managed in accordance with Section 8.3.1.

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
Minimise risk to MNES from increased pest animals as a result of Project Activities[1]	No new or increases in pest animal species in comparison Pre-construction Biosecurity Surveys observed at the Flinders Substation or Julia Creek WAF during construction. No introduction of tramp ants to the Stage 1 Project Area.	Any new or increases in pests observed around Flinders Substation or Julia Creek WAF during construction compared to Pre-construction Biosecurity Surveys and/or control sites. Any tramp ants identified within the Stage 1 Project Area.	General Environmental Inspections by the Project Environmental Representative for pests during construction. Opportunistic sightings added to the Weed and Pest Register during construction. If tramp ants are identified (by workers or landholders) within the Project Area, the Project Environmental Representative must be notified as soon as possible so that Biosecurity Queensland can be notified within 24 hrs.	If one of the triggers for further action is met, a review of the adherence to the pest management actions in Table 7 will be undertaken within one week. Project Environmental Representative to investigate potential sources or reasons for the presence or increase in pest animal numbers and identify additional corrective actions within one month. The Project Environmental Representative will review the pest management approach and if required, engage a specialist pest management contractor to implement additional pest animal controls (e.g. live targeted trapping or a feral cat/fox management program in conjunction with landowners) within one month of new/increased pest animals being identified as a result of Project Activities. If tramp ants are identified (by workers or landholders) within the Project Area, the Project Environmental Representative will investigate the Incident. If the Incident is, or likely to be, attributable to Project Activities, the Project Environmental Representative will liaise with Biosecurity Queensland to implement corrective actions. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Minimising impacts on MNES from construction noise, artificial lighting and dust deposition	All noise management techniques outlined in Table 7 are implemented during	Any noise management techniques outlined in Table 7 are not conformed to during	General Environmental Inspections undertaken weekly by the Project Environmental Representative to assess implementation of the management measures for noise	If during General Environmental Inspections any non-conformances with the management measures for noise in Table 7 are identified, then appropriate corrective actions will be determined and implemented by the Project Environmental Representative within one month of the non-

[1] Prior to commencement of construction on the transmission line component of Stage 1, Powerlink will make a one-off contribution to an existing, landscape scale pest management program operating within the local government area.

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
adjacent to the Julia Creek WAF and Flinders Substation, during heli-stringing and during night works	the construction of the Julia Creek WAF and Flinders Substation. All external lighting at the Julia Creek WAF and Flinders Substation is designed, installed and maintained in accordance with Australian standard (AS/NZS 4282:2023). All dust management techniques outlined in Table 7 are implemented during the construction of the Julia Creek WAF and Flinders Substation.	the construction of the Julia Creek WAF and Flinders Substation. External lighting at the Julia Creek WAF and Flinders Substation not designed, installed and maintained in accordance with Australian standard (AS/NZS 4282:2023). Visual inspections of vegetation adjacent to the Julia Creek WAF and Flinders Substation during construction show visible signs of dust deposition due to poor implementation of management measures	during the construction of the Julia Creek WAF and Flinders Substation. Inspection of external lighting at the Julia Creek WAF and Flinders Substation by a suitably qualified contractor to confirm compliance with the Australian standard AS/NZS 4282:2023. General Environmental Inspections will be undertaken weekly by the Project Environmental Representative and include visual inspections of vegetation adjacent to the Julia Creek WAF and Flinders Substation to look for visible signs of dust deposition due to poor implementation of management measures. Focus areas for dust inspections will be near dust sources (e.g. stockpiles, earthworks) to determine if controls are effective. Site Supervisors will also visually monitor for dust daily.	conformance being identified. Corrective actions may include, but not be limited to, replacing or repairing equipment or installing noise barriers. Where external lighting at the Julia Creek WAF and Flinders Substation is not designed, installed or maintained in accordance with Australian standard (AS/NZS 4282:2023), the suitably qualified contractor will advise on appropriate corrective actions. Corrective actions will be implemented within one month by the Contractor (during construction) or by Powerlink (during operation). If dust is observed on vegetation adjacent to the Julia Creek WAF and Flinders substation during General Environmental Inspections, then an investigation will be undertaken to determine if dust deposition is a result of Project Activities and corrective actions will be determined and implemented by the Project Environmental Representative within a week of a Non-compliance being identified. Corrective actions may include, but not be limited to, increased dust suppression measures such as watering or soil binders. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
	All noise and dust measures to manage dust impacts on MNES habitat during heli-stringing, as	Visual inspections of vegetation adjacent to heli-stringing activities show visible signs of dust deposition due to poor implementation	General Environmental Inspections will be undertaken weekly by the Project Environmental Representative and include visual inspections of vegetation adjacent to stringing activities to look for visible signs of dust deposition due	If dust is observed on vegetation adjacent to heli-stringing activities during General Environmental Inspections, then an investigation will be undertaken to determine if dust deposition is a result of Project Activities, and corrective actions will be determined and implemented by the Project Environmental Representative within a week of a Non-compliance being identified. Corrective actions may include,

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
	outlined in Table 7, are implemented.	of the management measures in Table 7.	to poor implementation of management measures. Focus areas for dust inspections will be near dust sources (e.g. stockpiles, earthworks) to determine if controls are effective. Site Supervisors will also visually monitor for dust daily.	but not be limited to, increased dust suppression measures such as watering or soil binders. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
	All measures to manage impacts from artificial lighting on MNES habitats during night works, as outlined in Table 7, are implemented.	Inspections of night works locations indicate poor implementation of the artificial light management measures in Table 7.	Site supervisors will inspect night works sites to assess if the correct management measures are in place as per the requirements in Table 7 to mitigate artificial light impacts during night works.	If, during night works, site supervisors identify that the relevant measures to mitigate artificial light impacts are not correctly implemented as per Table 7, then the Project Environmental Representative will be notified. The Project Environmental Representative will investigate to determine the cause of the Non-compliance and implement corrective actions within one week of the Non-compliance being identified. Corrective actions may include increased training or alternative lighting techniques. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
Minimising degradation of MNES habitat from an increased risk of fire resulting from Project Activities	No uncontrolled fires within the Stage 1 Project Area resulting from Project Activities.	An uncontrolled fire occurs within the Stage 1 Project Area that is due to Project Activities.	General Environmental Inspections by the Project Environmental Representative will monitor compliance with fire prevention measures, including the use of designated smoking areas and the availability and serviceability of fire-fighting equipment.	Following an uncontrolled fire event caused by Project Activities, the Project Environmental Representative will take part in an investigation and risk review. Corrective actions will be determined and implemented within a month of any Incident or Non-compliance being identified. Corrective actions may include, but not limited to, assessment of fuel loads, review of firefighting equipment and additional staff training. All investigations and corrective actions will be managed in accordance with Section 8.3.1

Management objectives	Performance criteria	Trigger for further action	Monitoring	Corrective actions
Illegal access to the Project through trespassing.	Access to the Stage 1 Project Area is limited to landowners and Project staff.	Evidence or notification of trespassing within the Construction Zone,	No activie monitoring is proposed, however, regular communication with landholders and site staff will be undertaken.	If trespassing or evidence of potential trespassing is identified, the Site Supervisor will investigate the event. Corrective actions may be determined following consultation with the landholder.

7.0 Rehabilitation

The Project will result in temporary and permanent impacts to MNES and MNES habitat. These impacts primarily relate to vegetation clearing, fauna habitat clearing and ground disturbance within the Stage 1 Construction Zone. Where impacts cannot be fully mitigated, offsets have been provided in an approved offset management plan (OMP).

During construction, clearing and disturbance within the Stage 1 Construction Zone will be required for temporary and permanent infrastructure. Following completion of construction, rehabilitation will be implemented for areas of the Project which have been cleared or disturbed as part of construction but are not required for the operational phase of the Project as outlined in the defined term for Temporary Disturbance Areas.

7.1 Objectives of Rehabilitation

Rehabilitation will be implemented to restore Temporary Disturbance Areas to the pre-construction vegetation community as soon as practicable. In relation to MNES habitat, the objective of rehabilitation will be to re-establish native vegetation cover and fauna habitat through the following:

- Ensuring stabilised landforms
- Restoring native vegetation cover
- Ensuring self-sustaining vegetation communities.

In accordance with Condition 12 of the EPBC Act Approval, the Principal commits to reinstating Temporary Disturbance Areas to the pre-disturbance vegetation community as identified in the Stage 1 PCSR for each location. Noting these areas do not include areas required for operations such as under the transmission line and a safety buffer that is required by the Principal's safety standards.

7.2 Areas to be Rehabilitated

All Temporary Disturbance Areas cleared areas for construction and not required for operations will be rehabilitated as soon as practicable. These areas will include:

- Julia Creek WAF location
- Transmission line construction areas including brake and winch sites, laydown areas or stockpile areas
- All other temporary ancillary construction infrastructure areas such as borrow pits, concrete batching facilities and temporary construction areas at the Flinders Substation
- Tracks and waterway crossings not required for operation.

7.3 Timing of Rehabilitation Works

Rehabilitation works will be undertaken as soon as practicable and progressively as construction is completed, that is, as soon as Temporary Disturbance Areas are no longer required for construction. Stabilisation methods will be implemented as part of progressive rehabilitation during construction to minimise the risk of erosion and sedimentation such as spreading topsoil or mulched vegetation on bare batters and stockpiles.

All Temporary Disturbance Areas will have rehabilitation works completed within 12 months of the area no longer being required for construction for Stage 1.

7.4 General Measures for Rehabilitation

The following general measures have been developed for rehabilitation:

- Natural regeneration will be the primary rehabilitation method. This will assist in ensuring the providence of the regenerating vegetation is accurate for the area and the Temporary Disturbance Areas are reinstated with local flora species.
- Strategic control of target weed species will be undertaken to prevent them from setting seed, thereby enhancing native regeneration.
- Where appropriate and if required, plantings and/or seeding with a mix of local native species for that location informed by the PCSR, with the primary objective of addressing erosion and sedimentation issues, but also to be consistent with the biodiversity values of the existing surrounding vegetation (e.g. species selections are to be consistent with the surrounding vegetation community composition).
- If required, seeding of an appropriate fast growing, sterile cover crop may be used for specific areas, such as on disturbance areas within or near a waterway, as an intermediate step to ensure fast stabilisation of disturbed land.
- Waterway crossings will be rehabilitated in accordance with the ADR to minimise flood erosion risks (DPI, 2025) to ensure:
  - stability and profiles of the bed and banks are re-instated to natural waterway profiles and stability
  - the waterway bed is retained or reconstructed with substrate comparable to the natural substrate size and consistency
  - site conditions are returned to a state that allows rapid re-establishment of native vegetation and cover; or native species are replanted to re-establish the natural plant community, as identified in the Stage 1 PCSR.

7.4.1 Stockpiling, Mulching, and Reuse of Organic Waste

- Topsoil will be stripped and stockpiled separately for use in rehabilitation within the same disturbance area. Following the completion of construction works, topsoil will be reinstated to create a soil bedding layer for the natural and assisted germination of vegetation.
- Cleared vegetation will be stockpiled or mulched separately for use in rehabilitation works.

7.5 Performance Outcomes and Completion Criteria

The interim performance outcomes and completion criteria for rehabilitation are provided in Table 10. Reference sites are described in detail in Section 7.6.

Table 10: Performance outcomes and completion criteria for rehabilitation

Item	Interim performance targets	Completion criteria
Landform	Rehabilitation of landforms commenced when the area is no longer required for construction.	Landforms reflect reference site conditions as part of rehabilitation works.
Topsoil	Topsoil volume and condition have been adequately preserved during construction for use during rehabilitation.	Topsoil spread over Temporary Disturbance Areas relative to reference sites within 12 months as part of rehabilitation works.

Item	Interim performance targets	Completion criteria
Erosion	Implementation of erosion or sedimentation measures following the completion of construction.	Temporary Disturbance Areas are stabilised to minimise erosion and sedimentation as part of rehabilitation works. Erosion (if present) is less than or equivalent to reference site conditions within 5 years of completion of rehabilitation works.
Weed presence and cover	Weed cover does not exceed by greater than 10% the weed cover observed within reference sites in years 1-3. For tree or shrub weeds, density of individual plants/seedlings does not exceed by greater than 10% the density of weeds determined within the reference sites in years 1-3.	Weed cover does not exceed by greater than 5% the weed cover observed within reference sites within 5 years of completion of rehabilitation works. For tree or shrub weeds, density of individual plants/seedlings does not exceed by greater than 5% the density of weeds determined within the reference sites within 5 years of commencement of rehabilitation.
Vegetation regeneration	Vegetation composition (species richness and cover) achieves the following annual values following rehabilitation: • Year 1 – 15% of conditions at reference sites. • Year 2 – 30% of conditions at reference sites. • Year 3 – 45% of conditions at reference sites. • Year 4 – 60% of conditions at reference sites.	Vegetation composition (species richness and cover) represents >75% of the conditions recorded within the reference sites within 5 years of completion of rehabilitation, or until completion criteria are met.

7.6 Rehabilitation Monitoring

Temporary Disturbance Areas that have been rehabilitated (rehabilitation sites) will be monitored for the first five years following the completion of rehabilitation works, or until completion criteria are met. Rehabilitation will focus on native vegetation regeneration and use reference sites (undisturbed areas) adjacent to rehabilitation sites to measure the progress and success of rehabilitation. During each monitoring event, all reference sites will be surveyed at the same time of year as the rehabilitation sites.

To obtain a reasonable representation of the natural variation inherent in the vegetation condition within the Stage 1 Construction Zone, three reference sites will be chosen for each vegetation community using the reference site selection process recommended in Eyre et al. (2017). However, the size and configuration of available reference sites may limit the number of sites available. As such, the final number of reference sites and their location will be chosen by an Ecologist or an environmental representative with experience in rehabilitation. When selecting suitable reference sites, the Stage 1 PCSR will be reviewed to ensure the reference site vegetation community is consistent with the area being rehabilitated.

Reference sites will be selected based on their proximity to the Temporary Disturbance Areas and their similar environmental conditions, including:

- Same vegetation community as defined by the Pre-clearance Survey Report
- Comparable landscape conditions (soil, slope, position in the landscape, geology etc.)
- Similar natural disturbance history (e.g. cyclone impacts or fire history)
- Similar grazing disturbance (if any).

Each rehabilitation site will include a 50 m transect to facilitate consistent and repeatable ground cover assessments. Similarly, each reference site will have a 50 m transect placed within an area representative of the site's species composition. Note, if the Temporary Disturbance Areas are unable to accommodate a 50 m transect, a truncated transect will be used with the reference site transect being a similar length and the number of 1 x 1 m quadrats adjusted accordingly.

These transects will serve as fixed monitoring lines along which ground cover data will be collected at regular intervals. The start and end coordinates of each transect will be recorded to ensure consistent monitoring across consecutive events. Annual photo point monitoring will be undertaken at the start point (0 m) of each transect during each survey event. Photos will be taken in each cardinal direction (north, east, south, west) in landscape orientation.

Ground cover will be measured along each transect using a 1 x 1 m quadrat. A total of five quadrats will be placed at predetermined intervals along each transect, starting on the left side and alternating sides at the following distances:

- 5 – 6 m
- 15 – 16 m
- 25 – 26 m
- 35 – 36 m
- 45 – 46 m.

The attributes to be measured in each quadrats are:

- Individual species richness and cover, both native plant and weed species
- Organic litter cover
- Notes on general plant health
- Bare ground not caused by natural ecological factors (i.e. human-induced or external factors such as compaction from machinery or livestock)
- Bare ground caused by natural ecological factors (i.e. presence of ant/termite mounds or holes and native rodent/marsupial diggings).

Ground cover measurements will be based on vertical projection of living and attached plant material.

Weed cover will be recorded during each survey at all rehabilitation and reference sites. If the observed weed species is a forb or grass, percentage cover will be determined using quadrats. If the observed weed species is a tree or shrub, individual plants/seedlings will be counted to determine density.

The following will also be recorded:

- Presence and extent of erosion
- Notes on site disturbances including grazing impacts, feral animal activity.

7.6.1 Monitoring Frequency and Corrective Actions

Rehabilitation monitoring to determine the success of rehabilitation completion criteria, as detailed in Table 10, will be undertaken at the following intervals:

- Initial monitoring event to be undertaken within 12 months following the completion of rehabilitation in each disturbance area, with preference of late or post-wet season (between March and May), avoiding the late dry season
- Annually post-wet season (conducted between March and May) from the initial monitoring event through to year five.

Rehabilitation monitoring will be undertaken annually for the first five years following completion of rehabilitation works, or until completion criteria are met. If completion criteria are not met within five years, monitoring must continue until completion criteria are met, as outlined in Table 11. Corrective actions are to be implemented when monitoring determines that rehabilitation is not meeting the interim performance targets or completion criteria, as outlined in Table 11.

Table 11: Rehabilitation monitoring schedule and corrective actions

Item	Monitoring	Monitoring Frequency	Trigger for further action	Corrective actions
Landform	Visual observations including photo evidence	Within first year of completion of rehabilitation works	Monitoring identifies that the landform does not conform with reference site conditions for the area.	Engagement of engineer or suitably qualified soil scientist with rehabilitation experience to determine revised landform design requirements, if required. Reinstating landform in accordance with the revised landform design within 6 months of identifying the non-conformance.
Topsoil	Visual observations including photo evidence	Within first year of completion of rehabilitation works	Monitoring identifies that spread of topsoil over the disturbance area does not conform with reference site for the area.	Engagement of suitably qualified soil scientist with rehabilitation experience to determine revised topsoil requirements, if required. Reinstating topsoil in accordance with the revised topsoil requirements within 6 months of identifying the non-conformance.
Erosion	Visual observations including photo evidence	Annually for the first five years or until performance criteria are met	Signs of erosion or sedimentation at levels greater than reference sites are observed in disturbance areas during monitoring events.	Engage a CPESC with rehabilitation experience to identify the causes of the non-conformance, if required. Implementation of corrective actions, which may include additional erosion controls, within 6 months of identifying the non-conformance.
Weed presence and cover	Monitoring transects for	Annually for the first five years or until	Interim performance targets are not met,	Review timing and frequency of weed management measures

Item	Monitoring	Monitoring Frequency	Trigger for further action	Corrective actions
	weed types and cover	performance criteria are met	or completion criterion is not met.	and implement updated measures as required. Investigate alternative weed management control actions and implement.
Vegetation regeneration	Monitoring transects for vegetation richness and cover	Annually for the first five years or until performance criteria are met	Interim performance targets are not met, or completion criterion is not met.	Investigate reasons for the failure (e.g. fire, unauthorised access, natural regeneration not occurring) and implement appropriate corrective actions. Examples of correction actions could include prevention of external disturbances, application of topsoil or seeding of native vegetation. Undertake active revegetation where species composition and cover of the revegetation is behind the interim performance targets at Year 1.

7.6.2 Reporting

Reporting on the success of rehabilitation will be undertaken annually following each rehabilitation monitoring event. Progress reports on rehabilitation will be included in the annual compliance reports submitted to DCCEEW (refer to Section 8.3.2). A final report will be prepared after five years of monitoring to demonstrate that the completion criteria for rehabilitation have been met.

8.0 Data Management, Auditing, Review and Reporting

8.1 Data Management

The responsible party for each management measure outlined in the MNES Management Plan will ensure any data associated with the management measure is collected, stored and managed appropriately, and where required under this plan, made available to the Principal for inclusion into compliance reporting.

The Principal, or their authorised representative, will be responsible for overseeing and managing all activities required under this MNES Management Plan. This will include maintaining data records to confirm all activities associated with the management and monitoring actions in this MNES Management Plan have been undertaken as outlined. These records will be made available to DCCEEW if they are requested.

8.2 Audit and Review

Internal audits and reviews of management and monitoring activities are to be undertaken by the Principal in response to a trigger for corrective action and/or other Incident or Non-compliance.

External auditing will be undertaken in accordance with Condition 49 of the EPBC Act Approval. The independent audit will also assess implementation of the management measures and monitoring requirements outlined in the MNES Management Plan.

The effectiveness of actions within this MNES Management Plan are to be reviewed annually during construction by the Principal and amended if/as required to incorporate changes identified from the monitoring activities. Any changes to this MNES Management Plan, including but not limited to monitoring and management measures that are likely to have new or increased impacts must be approved in the form of a revised MNES Management Plan by the Minister. Changes may include amendments to management actions, identification of additional monitoring activities and responses to adaptive management triggers. If the completion criteria have been attained prior to the end of the approval, the MNES Management Plan will continue to be implemented and reviewed to ensure the completion criteria are maintained until the approval expires.

8.3 Reporting

8.3.1 Incident and Non-compliance Protocol

The Contractor is to notify the Principal within 24 hours of becoming aware of any Incident or Non-compliance (potential or actual).

Condition 46 of the EPBC Act Approval requires that the approval holder (the Principal) must notify the department (DCCEEW) electronically, within 2 business days of becoming aware of any Incident and/or potential Non-compliance and/or actual Non-compliance with the conditions (i.e. of the EPBC Act Approval) or commitments made in a plan (i.e. this Stage 1 MNES Management Plan or any supporting plan).

Condition 47 of the EPBC Act Approval requires that the notification specifies:

- Any condition or commitment made in a plan which has been or may have been breached
- A short description of the Incident and/or potential Non-compliance and/or actual Non-compliance
- The location (including co-ordinates), date, and time of the Incident and/or potential Non-compliance and/or actual Non-compliance.

Note: If the exact information cannot be provided, the approval holder must provide the best information available.

Condition 48 of the EPBC Act Approval requires that he approval holder (the Principal) must provide to the department (DCCEEW) in writing, within 12 business days of becoming aware of any Incident and/or potential Non-compliance and/or actual Non-compliance, the details of that Incident and/or potential Non-compliance and/or actual Non-compliance with the conditions (of the EPBC Act Approval) or commitments made in a plan (i.e. this Stage 1 MNES Management Plan or any supporting plan). The approval holder must specify:

- Any corrective action or investigation which the approval holder (the Principal) has already taken
- The potential impacts of the Incident and/or Non-compliance
- The method and timing of any corrective action that will be undertaken by the approval holder (the Principal).

8.3.2 Annual Compliance Report

The results of all audits, reviews, inspection and monitoring will be documented in stand-alone progress reports and combined into an Annual Compliance Report that will be provided to DCCEEW as required by Conditions 42-45. The Annual Compliance Report will be consistent with the most recent revision of the DCCEEW's Annual Compliance Report Guidelines (DCCEEW, 2023).

The Annual Compliance Report will be developed as per the Condition 44 and will include the following information:

- EPBC approval number.
- Accurate and complete details of compliance and any Non-compliance with the conditions and the plans, and any Incident.
- One or more shapefile showing all clearing of any Protected Matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared.
- A schedule of all plans in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.

Reporting requirements of the MNES Management Plan are summarised in Table 12. The table sets out the reporting requirements applicable to the Project, timing of the reporting, who is responsible for managing preparation of the reports and the intended recipient(s).

Table 12: Requirements of the annual compliance report

Report	Requirement	Timing	Responsibility	Recipient
Annual Compliance Report	Reporting as per EPBC Conditions 42 - 45	Annual for each 12-month period from commencement of the action or as otherwise agreed to in writing by the Minister. The report will be published on the Project webpage within 60 business days of the 12-month period).	Principal	Project website with notification to DCCEEW by email

Report	Requirement	Timing	Responsibility	Recipient
		Notify the department electronically, within 5 business days of the date of publication that a compliance report has been published on the website.		

8.4 Roles and Responsibilities

The specific roles and responsibilities for complying with this MNES Management Plan are provided in Table 13.

Table 13: Roles and responsibilities

Role	Responsibility
Principal	The Principal shall: • Adhere to all approval conditions and actions outlined in this MNES Management Plan. • Obtain written approval from the DCCEEW for the implementation of this MNES Management Plan prior to commencement of the associated Project Stage. • Define the environmental performance and management requirements that shall be complied with. • Require formal adherence to the MNES Management Plan as a condition of contract/employment at the site. • Undertake regular inspections and audits of the Contractor's compliance with this MNES Management Plan. • Require the Contractor to report all Incidents and Non-compliances to the Principal and follow up to check that corrective actions have been implemented. • Report any Incidents or Non-compliances to the DCCEEW. • Undertake audits and reviews of this MNES Management Plan to demonstrate compliance with the commitments made, success of the objectives, and compliance with mitigation measures. • Liaise with the DCCEEW as required. • Update the MNES Management Plan as required during the project lifetime to capture changes to the scope of works and services, updated compliance obligations, and in response to Incident, complaint or audit. • Manage any reporting to be provided to DCCEEW. • Manage any pre and post construction monitoring required under this MNES Management Plan. • Manage environmental performance requirements in contracts, including penalties in the event of Incidents or Non-compliances.

Role	Responsibility
	• Develop and maintain an OEMP that is consistent with this MNES Management Plan prior to operation of the project. • Ensure all operational and maintenance work carried out by the Principal or its operational and maintenance Contractors is carried out consistently with this MNES Management Plan. • Ensure all operational and maintenance staff are trained, inducted and competent in their responsibilities under this MNES Management Plan. • Conduct operational phase monitoring, condition assessments and reporting on environmental performance as specified in this MNES Management Plan. • Record complaints, Incidents and Non-compliances and implement corrective and preventative actions to address these during operation and maintenance of the project. • Manage operational phase complaints, Incidents, Non-compliances, corrective and preventative actions and reporting related to this MNES Management Plan. • Update the CEMP and OEMP as required to capture any amendments to this MNES Management Plan. • Participate in inspections and audits by third party auditors and regulatory authorities.
Contractor	The Contractor shall: • Adhere to all approval conditions. • Develop and maintain environmental design criteria that is consistent with this MNES Management Plan for endorsement by the Principal prior to the commencement of onsite works. • Carry out all design work consistent with this MNES Management Plan. • Develop and maintain a and subplans that are consistent with this MNES Management Plan for endorsement by the Principal prior to the commencement of clearing or construction in Stage 1. • Carry out all work consistent with this MNES Management Plan and the approved CEMP. • Ensure all employees are trained, inducted and competent in their responsibilities under this MNES Management Plan prior to commencing work on site. • Conduct construction phase monitoring, site inspections and reporting on environmental performance as specified in this MNES Management Plan. • Record complaints, Incidents, Non-compliances and non-conformances and implement corrective and preventative actions to address these as they arise. • Provide the Principal with reports on complaints, Incidents, Non-compliances, corrective and preventative actions related to this MNES Management Plan. • Update the CEMP as required during the project to include any amendments to this MNES Management Plan.

Role	Responsibility
	• Submit updated CEMP revisions to the Principal for approval. • Participate in inspections and audits by the Principal, auditors (the Principal or third party) and regulatory authorities.

9.0 Environmental Training

During construction, all employees and Contractors other than short term visitors will receive environmental induction training upon commencement on the Project, and then annual environmental awareness training thereafter. During operations, maintenance staff and Contractors will undertake Powerlink's internal training modules. Environmental training will be tailored to the type of work being carried out, and will generally cover:

- MNES relevant to the Project
- Exclusion Zones, approved clearing areas and approved Clearing Limits
- Key environmental impacts and risks to MNES associated with construction/operation
- Role and responsibilities under this MNES Management Plan
- Erosion and sediment control and protection of waterways
- Fauna interactions
- Weed hygiene requirements
- Storage and handling of environmentally hazardous materials
- Spill prevention and response
- Fire prevention and response
- Emergency response procedures, Incident notification and reporting requirements
- Potential consequences of not meeting environmental responsibilities.

During construction, a visitor site induction will be given to visitors and short-term contractors not engaging in disturbance activities covering:

- General compliance obligations
- Key environmental risks and impacts
- Management and minimisation of waste
- Relevant site environmental controls
- Emergency response procedures, Incident reporting and response.
- Potential consequences of not meeting environmental responsibilities.

Records of all training conducted will be maintained and include:

- The persons receiving and conducting the training
- The date the training was received
- A summary of the training.

10.0 Summary Table of Commitments

This section includes a summary of commitments made in this MNES Management Plan that are associated with implementing management measures, monitoring programs and corrective actions to minimise and manage impacts from Project Activities. Commitments have been expressed as either the Principal or Contractor 'commit' to undertaking activities or the use of unambiguous terminology such as 'will' to outline commitments. There are numerous instances where unambiguous terminology such as 'will' has been used and in such cases, either the section heading or appendix title has been listed and referenced.

Table 14: Summary list of commitments included in this MNES Management Plan

Commitment	Section reference
Weed surveys to confirm the baseline distribution of weeds will be undertaken prior to construction.	Section 3.0
Any additional MNES species that are recorded during clearing will be added to this MNES Management Plan following notification to DCCEEW as per Condition 4 of the EPBC Act Approval.	Section 3.3
The management measures, monitoring and corrective actions outlined in this MNES Management Plan will be implemented during the construction and operation phases of the Project.	Section 5.0
Avoiding and/or Limiting loss of MNES habitat.	Section 5.2
Successfully rehabilitating Temporary Disturbance Areas within 12 months of construction being completed within each area as soon as practicable.	Sections 5.2 and 7.0
Minimising injury or mortality of MNES.	Section 5.2
Maintaining hydrology to Australian painted snipe habitat.	Section 5.2
Avoiding / minimising erosion and sedimentation to MNES habitat.	Section 5.2
Avoiding / minimising contamination from hazardous substances to MNES habitat.	Section 5.2
Minimising risk of weed introduction and/or the spread of existing weed species as a result of Project Activities.	Section 5.2
Minimise risk to MNES from increased pest animals as a result of Project Activities.	Section 5.2
Minimise impacts from construction noise on MNES habitats adjacent to the Julia Creek WAF and Flinders Substation and during helicopter stringing.	Section 5.2

Commitment	Section reference
Minimise impacts from artificial lighting on MNES habitats adjacent to the Julia Creek WAF and Flinders Substation and in locations where night works are required during construction.	Section 5.2
Minimise impacts of dust deposition on MNES habitats adjacent to the Julia Creek WAF and Flinders Substation during construction and during helicopter stringing.	Section 5.2
Minimising degradation of MNES habitat from an increased risk of bushfires resulting from Project Activities.	Section 5.2
Management measures will be implemented to address potential direct and indirect impacts on MNES.	Section 5.4
Where possible, retaining stumps during clearing in riparian areas to minimise erosion risk as much as possible.	Section 5.4
Various commitments for specific management measures to minimise and/or mitigate impacts during construction.	Table 7
Various commitments for specific management measures to minimise and/or mitigate impacts during operation.	Table 8
Various commitments in relation to implementing monitoring programs to assess the effectiveness of management measures.	Section 6.0 and Table 9
Weed monitoring annually during construction and for the first five years following rehabilitation (into operation).	Section 6.6
Monitoring of pests will be undertaken during construction as part of construction phase General Environmental Inspections.	Section 6.6
Operational monitoring in accordance with the asset management strategy	Sections 5.4.2 and 6.3
Various commitments have been made to undertaking rehabilitation of Temporary Disturbance Areas not required for operation.	Section 7.0
Commencing rehabilitation as soon as practicable and progressively as construction is completed.	Section 7.3, Table 7 and Table 8
Implementing corrective actions if management measures fail to achieve management objectives for construction and operations.	Section 11.0
For additional MNES, an Unexpected Finds Procedure has been developed and will be followed and implemented.	Appendix E

Commitment	Section reference
The term ‘will’ has been used throughout the Fauna Spotter Catcher Procedure as a commitment to undertaking a range of actions.	Appendix F
The term ‘will’ has been used throughout the Habitat Tree Felling Procedure as a commitment to undertaking a range of actions.	Appendix G

11.0 Risk Assessment

A risk assessment was undertaken to: 1) assess risks of each impact as per the requirements of risk assessment process outlined in the Environmental Management Plan Guidelines (DCCEEW, 2024b); and 2) assess the risk of each impact following mitigation measures as per condition 17e of the EPBC Act Approval.

For each potential impact/risk, the likelihood of that impact/risk occurring (Table 15) was assessed against the potential consequence of the impact/risk (Table 16) to determine an overall risk rating using the matrix in Table 17. The consequence classifications outlined in Table 16 have been adapted so they better align with the requirements of this management plan.

The consequence and likelihood of each impact occurring was assessed following the implementation of the management and mitigation measures (i.e. mitigation measures) to provide a residual risk rating.

The risk assessments are presented in Table 18 and Table 19, for the construction phase and the operation phase, respectively. The management measures listed in Table 18 and Table 19 are the high level management measures described in Table 7 and Table 8. The full suite of management techniques associated with each management measure are detailed in Table 7 and Table 8. The triggers for further action and corrective actions will be read in conjunction with those outlined in Table 9.

Table 15: Likelihood classification

Qualitative measure of likelihood	How likely is it that the event/issue will occur
Highly likely	Is expected to occur in most circumstances
Likely	Will probably occur during the life of the project
Possible	Might occur during the life of the project
Unlikely	Could occur but considered unlikely or doubtful
Rare	May occur in exceptional circumstances

Table 16: Consequence classification

Qualitative measure of consequences	What will be the consequence/result if this issue does occur
Minor	Minor instance of damage to MNES/MNES habitat that can be reversed
Moderate	Isolated but substantial instances of damage to MNES/MNES habitat that could be reversed with intensive efforts
High	Substantial instances of damage to MNES/MNES habitat that could be reversed with intensive efforts
Major	Major loss of MNES/MNES habitat and real danger of continuing

Qualitative measure of consequences	What will be the consequence/result if this issue does occur
Critical	Severe widespread loss of MNES/MNES habitat which is not recoverable

Table 17: Risk rating matrix

		Consequence				
		Minor	Moderate	High	Major	Critical
Likelihood	Highly likely	Medium (10)	High (14)	High (16)	Severe (24)	Severe (25)
	Likely	Low (4)	Medium (11)	High (15)	High (21)	Severe (23)
	Possible	Low (3)	Medium (8)	Medium (13)	High (19)	Severe (22)
	Unlikely	Low (2)	Low (6)	Medium (9)	High (17)	High (20)
	Rare	Low (1)	Low (5)	Low (7)	Medium (12)	High (18)

The risk ratings in Table 18 and Table 19 have been abbreviated as follows: L = Low; M = Medium; H = High; S = Severe

11.1 Risk assessment – Construction

Table 18: Assessment of risks relating to achieving the management objectives during construction

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[2]	Residual risk rating	Triggers for further action	Corrective actions
Impact: Clearing/loss of fauna habitat. **Management objectives:** Limiting and/or avoiding loss of habitat for MNES. Successfully rehabilitating Temporary Disturbance Areas.	Clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area and/or the Stage 1 Construction Zone. Impacts occur to newly discovered Protected Matters not included in this MNES Management Plan. Temporarily Disturbed Areas are not rehabilitated in accordance with the requirements in Section 7.0.	H (16)	Implement clearing protocols that identify vegetation to be cleared or retained to prevent inadvertent damage to MNES habitat. Implement specific clearing methods to minimise impacts to MNES and MNES habitat during vegetation clearing. Implement adaptive micro-siting of infrastructure and tracks to reduce unnecessary removal or damage of MNES habitat. Ensure any newly discovered Protected Matters encountered during the Project are reported to DCCEEW and managed as per condition 4 of the EPBC Approval. Implement heli-stringing methods to avoid and minimise impacts on MNES. Rehabilitate all Temporary Disturbance Areas in accordance with Section 7.0. Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.	L (5)	Clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area and/or the Stage 1 Construction Zone. Newly discovered Protected Matters (as defined in the EPBC approval conditions) identified within the Stage 1 Project Area. Any Non-compliance with the specific clearing procedures identified in this plan. Rehabilitation of Temporary Disturbance Areas fails to meet the rehabilitation objectives outlined in Section 7.0.	Clearing works will cease immediately if clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area. DCCEEW will be notified of the Incident. Clearing will not recommence until further clearing is approved by the DCCEEW. If clearing of MNES habitat occurs outside of the Stage 1 Construction Zone, clearing will cease and the DCCEEW will be notified of the Incident. This Stage 1 MNES Management Plan will be required to be revised and re-approved by the DCCEEW. If clearing occurs outside the Stage 1 Clearing Footprint, clearing will cease and an assessment into the cause of the unauthorised clearing will be commenced by the Project Environmental Representative within one week of being notified or becoming aware of the unauthorised clearing. This assessment will include: • Reviewing clearing methods and Permit to Disturb process. • Examining GPS mapping of the Stage 1 Clearing Limits and Exclusions Zones. • Inspecting the presence and visibility of the onsite clearing limit boundary delineation. • Examine staff training records. An investigation report will be completed within one week by the Project Environmental Representative and the findings of the report will be presented to the relevant site personnel to enable continual improvement and to minimise the risk of the Incident or Non-compliance occurring again. Clearing will only re-commence once corrective actions (e.g. re-establish clearing boundaries, increase staff training) have been implemented. If any newly discovered Protected Matters are identified, comply with condition 4 of the EPBC Approval and implement the Unexpected Finds Procedure. If stringing is not able to be undertaken primarily using a helicopter, then stringing will cease until an investigation is completed to determine the reasons for the change in methodology and suitable alternative methods that aim to avoid and minimise impacts on MNES have been agreed in between an Ecologist, Project Environmental Representative and the Contractor, If rehabilitation of Temporary Disturbance Areas fails to meet the interim performance targets or completion criteria, the reasons for the failure will be

[2] These are the higher-level management measures shown in Table 7. The specific management techniques in Table 7 are directly related to each management measure.

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[2]	Residual risk rating	Triggers for further action	Corrective actions
						investigated, and appropriate corrective actions will be identified in a Corrective Actions Plan consistent with Table 11. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Injury or mortality of fauna through vehicle/machinery strike or entrapment. **Management objectives:** Minimising injury or mortality of MNES from Project Activities.	MNES are injured or killed during vegetation clearing, or as a result of vehicle strike or entrapment during construction.	H (21)	Implement measures to avoid or mitigate injuries or mortality to MNES during clearing and disturbance works. Manage open excavations (tower foundations) to reduce MNES fauna mortality. Avoid and minimise injuries or mortality to MNES from vehicle or machinery strikes through implementation of staff training and project-specific road rules. Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.	M (12)	Any injury or mortality to a MNES species suspected to have resulted from Project Activities due to management measures not being implemented. Clearing occurs without a Pre-construction Fauna Survey being undertaken. Clearing is undertaken without a Fauna Spotter Catcher present. Unqualified site personnel handle fauna resulting in injury or death of MNES species.	If injury or mortality of MNES occurs within the Stage 1 Project Area, an assessment of the cause of the injury/death will commence within 24 hours by the Project Environmental Representative. If the injury or mortality is determined to be attributed to Project Activities and Non-compliance with this Stage 1 MNES Management Plan, a Corrective Actions Plan will be developed by the Project Environmental Representative and be implemented within one month of the Non-compliance being identified. Injuries or deaths to any MNES during constriction or operations will be managed as an Incident in accordance with Section 8.3.1. Examples of corrective actions may include: • Review adherence to clearing procedures to ensure compliance. Take remedial action where compliance has not been adhered to. • Project Environmental Representative (in consultation with the Fauna Spotter Catcher) to assess whether clearing methods could be improved. • Installing additional speed limit signage and fauna 'hotspot' signage. • Implementing additional awareness training for site personnel on fauna strike locations. • Reinforcing Project-specific speed limit. • Reinforcing the requirement to use designated and approved access tracks. If clearing occurs without a Fauna Spotter Catcher present or without a Pre-construction Fauna Survey, all staff involved in the non-compliant clearing works will be re-trained on their obligations under this MNES Management Plan, and the Permit to Disturb procedure will be reviewed. If unqualified site personnel handle fauna, all staff involved in the Non-compliance will be re-trained on their obligations under this MNES Management Plan and EPBC Act Approval conditions. Investigations, reporting and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Altered hydrology. **Management objectives:**	Australian painted snipe habitat within and downstream to the Stage 1 Construction Zone degraded due to alterations to hydrology as	M (11)	Minimise changes to hydrology and erosion and sedimentation to wetlands and waterways. Implement adaptive micro-siting of infrastructure and tracks to reduce	L (5)	Waterway crossings are not constructed and maintained in accordance with a DA or the ADR (DPI, 2025). Rehabilitation of Temporary Disturbance Areas fails to meet	Where a waterway crossing does not comply with a DA or the ADR (DPI, 2025), the non-conformance will be investigated by the Project Environmental Representative in consultation with the Site Supervisor. Rectification of non-compliant waterway crossings will commence within six months of being identified.

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[2]	Residual risk rating	Triggers for further action	Corrective actions
Maintaining hydrology to Australian painted snipe habitat.	a result of Project Activities.		unnecessary removal or damage of MNES habitat. Rehabilitate all Temporary Disturbance Areas. Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.		the rehabilitation objectives outlined in Section 7.0.	If rehabilitation of Temporary Disturbance Areas fails to meet the interim performance targets or completion criteria, the reasons for the failure will be investigated, and appropriate corrective actions identified in the Corrective Actions Plan consistent with Table 11. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Erosion and sedimentation. **Management objectives:** Minimising erosion and sedimentation to MNES habitat.	MNES habitat degraded due to management measures not being properly implemented during construction.	H (16)	Minimise changes to hydrology and erosion and sedimentation to wetlands and waterways. Implement adaptive micro-siting of infrastructure and tracks to reduce unnecessary removal or damage of MNES habitat. Minimise dust generation to reduce impacts on MNES. Rehabilitation of Temporary Disturbance Areas. Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.	L (3)	During construction, water quality sampling does not comply with the requirements in Section 6.7. ESC not installed prior to land disturbance or not maintained and functioning in accordance with the relevant ESCMP (refer Section 6.2). Siltation of waterways in, or adjacent to the Stage 1 Project Area. Visual inspections of water management infrastructure show signs of failure. Visual changes to water quality in watercourses and wetlands within the Stage 1 Project Area are observed. ESC not installed prior to land disturbance or not maintained and functioning in accordance with the relevant ESCMP for the area (refer Section 6.2). Rehabilitation of Temporary Disturbance Areas fails to meet the rehabilitation objectives outlined in Section 7.0.	If it is observed during General Environmental Inspections or other ESC inspections (refer Section 6.2) that ESC is not installed prior to land disturbance or not maintained and functioning in accordance with the relevant ESCMP for the area, then additional or alternative ESC will be installed to comply with the relevant ESCMP within one month or prior to a Rainfall Event. Review adherence to control procedures to ensure compliance. Take remedial action where compliance has not been adhered to. Increase training to ensure breaches do not re-occur. If it observed during General Environmental Inspections that debris, visible sediment plumes or hydrocarbons are present within waters downstream of Project Activities, then water quality testing will be conducted in accordance with the event-based sampling methods in Section 6.7. If any water quality criteria exceedances are observed, an investigation will be conducted within 24 hours to determine the significance of the exceedance(s) and possible causes. The investigation will assess recent rainfall records, other activities within the catchment, and recent activities or recorded ESC Non-compliances. Corrective actions (such as increasing monitoring frequency, checking stockpiles are the required distance from waterways) will be implemented within one month of being identified in the Corrective Actions Plan. If rehabilitation of Temporary Disturbance Areas fails to meet the interim performance targets or completion criteria, the reasons for the failure will be investigated, and appropriate corrective actions identified in the Corrective Actions Plan consistent with Table 11. Investigations and corrective actions will be managed in accordance with Section 8.3.1. Corrective actions will be captured in a Corrective Actions Plan.
Impact: Contamination from hazardous substances. **Management objectives:**	Spills of hazardous substances leading to contamination and degradation of MNES habitat.	M (13)	Implementation of hazardous substance and spill management procedures. Facilitate staff training to communicate MNES to be aware of,	L (2)	Hydrocarbons or construction related chemicals in waterways in, or adjacent to the Stage 1 Project Area.	All hazardous substance spills will be reported, controlled/contained, cleaned up, and affected areas remediated. Spill kits will be replenished, and corrective actions and improvements investigated. If General Environmental Inspections identify hazardous substances storage and/or spill response procedures have not been implemented as per Table 7,

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[2]	Residual risk rating	Triggers for further action	Corrective actions
Minimising contamination from hazardous substances to MNES habitat.			measures to be implemented and their responsibilities.		Visual changes to water quality in watercourses and wetlands within the Stage 1 Project Area are observed. Storage of hazardous substances not in accordance with this plan. Spill response procedures not followed correctly following a spill.	appropriate corrective actions will be developed and implemented. Corrective actions such as increasing monitoring frequency, re-evaluating the location of refueling areas, improving storage areas or re-stocking spill response equipment will be implemented within one month of being identified in the Corrective Actions Plan. If an incident occurs relating to the storage of hazardous substances and/or spill response that is identified as having the potential to, or does, impact on MNES or MNES habitat, the incident will be reported to DCCEEW. Review adherence to control procedures to ensure compliance. Take remedial action where compliance has not been adhered to. Increase training to ensure breaches do not re-occur. Corrective actions (such as increasing monitoring frequency, checking refueling areas are the required distance from waterways) will be implemented within one month of being identified in the Corrective Actions Plan. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Increased weeds. **Management objectives:** Minimising risk of weed introduction and/or spread as a result of Project Activities.	Weed seeds introduced through mulch, topsoil or other material brought to site; or Weeds are introduced or spread by Project plant or equipment.	H (14)	Manage weed species. Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.	L (3)	Detection of any new weed species not previously recorded in the Stage 1 Project Area for the same location. 10% increase in weed cover compared to the Pre-construction Biosecurity Surveys for the same location.	If an increase in weed cover or the presence of new weed species is identified when compared to the Pre-construction Biosecurity Survey, the following corrective actions will be triggered and undertaken: • Review adherence to current weed management measures listed in Table 7 and Section 6.5 within one week to ensure compliance. • Increase training for all relevant staff within one week to ensure breaches do not re-occur. • Investigate alternative weed management control actions and implement within one month. • Implement the additional or alternative weed management measures to control any new weed species or reduce increased weed species. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: New and / or increased pests. **Management objectives:** Minimise risk to MNES from new or increased pest animals as a result of Project Activities.	Pest animals attracted to the Stage 1 Project Area, i.e. by increased resources.	L (3)	Powerlink will make a one-off contribution to an existing, landscape scale pest management program operating within the local government area. Manage pest fauna	L (2)	Any new pests or increases in pests observed around Flinders Substation or Julia Creek WAF during construction compared to Pre-construction Biosecurity Surveys and/or control sites.	If one of the triggers for further action is triggered, a review of the adherence to the pest management actions in Table 7 will be undertaken within one week. Project Environmental Representative to investigate potential sources or reasons for the presence or increase in pest animal numbers and identify additional corrective actions within one month. The Project Environmental Representative will review the pest management approach and if required, engage a specialist pest management contractor to implement additional pest animal controls (e.g. live targeted trapping or a feral cat/fox management program in conjunction with landowners) within one month of new/increased pest animals being identified as a result of Project Activities.

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[2]	Residual risk rating	Triggers for further action	Corrective actions
						Investigations and corrective actions will be managed in accordance with Section 8.3.1.
	Tramp ants are introduced to the Stage 1 Project Area	H (19)	Manage pest fauna. Staff training to communicate environmental features to be protected, MNES to be aware of, and measures to be implemented.	L (7)	Any tramp ants are identified in the Project Area	If tramp ants are identified (by workers or landholders) within the Project Area, the Project Environmental Representative will investigate the Incident. If the Incident is, or is likely to be, attributable to Project Activities, the Project Environmental Representative will liaise with Biosecurity Queensland to implement corrective actions. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Indirect impacts on MNES from construction noise, artificial lighting and dust deposition at the Julia Creek WAF and Flinders Substation, during heli-stringing and during night works. **Management objectives:** Minimising impacts from noise, artificial lighting and dust deposition on MNES habitats during the construction of the Julia Creek WAF, Flinders Substation, and during heli-stringing and night works.	Project Activities at the Julia Creek WAF and Flinders Substation indirectly result in altered behavioural patterns by MNES due to increased construction noise, light and dust.	L (4)	Limit excessive construction noise during construction of the Julia Creek WAF and Substation. Minimise light spill into MNES habitat at the Julia Creek WAF, Flinders Substation and during night works Minimise dust generation to reduce impacts on MNES during the construction of the Julia Creek WAF and Flinders Substation and during heli-stringing.	L (3)	Any noise management techniques outlined in Table 7 are not conformed to during the construction of the Julia Creek WAF and Flinders Substation External lighting at the Julia Creek WAF or Flinders Substation is not designed, installed or maintained in accordance with Australian standard (AS/NZS 4282:2023). Visual inspections of vegetation adjacent to the Julia Creek WAF and Flinders Substation show visible signs of dust deposition due to poor implementation of management measures.	If during General Environmental Inspections any non-conformances with the management measures for noise in Table 7 are identified, then appropriate corrective actions will be determined and implemented by the Project Environmental Representative within one month of the non-conformance being identified. Corrective actions may include, but not be limited to, replacing or repairing equipment or installing noise barriers. Where external lighting at the Julia Creek WAF and/or Flinders Substation is not designed, installed or maintained in accordance with Australian standard (AS/NZS 4282:2023), the suitably qualified contractor will advise on appropriate corrective actions. Corrective actions will be implemented within one month by the Contractor. If dust is observed on vegetation adjacent to the Julia Creek WAF and/or Flinders substation during General Environmental Inspections then an investigation will be undertaken, and corrective actions will be determined and implemented by the Project Environmental Representative within a week of a Non-compliance being identified. Corrective actions may include, but not be limited to, increased dust suppression measures such as watering or soil binders. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
	Use of helicopters during stringing indirectly results in altered behavioural patterns by MNES due to increased dust.	L (6)	Minimise dust generation to reduce impacts on MNES during the construction of the Julia Creek WAF and Flinders Substation and during heli-stringing.	L (4)	Visual inspections of vegetation adjacent to stringing works show visible signs of dust deposition due to poor implementation of management measures.	If dust is observed on vegetation adjacent to stringing works during General Environmental Inspections, then an investigation will be undertaken, and corrective actions will be determined and implemented by the Project Environmental Representative within a week of a Non-compliance being identified. Corrective actions may include, but not be limited to, increased dust suppression measures such as watering or soil binders.
	Night works indirectly result in altered behavioural patterns by MNES due to artificial lighting.	L (4)P	Minimise light spill into MNES habitat at the Julia Creek WAF, Flinders Substation and during night works.	L (3)	Inspections of night works locations indicate poor implementation of the artificial light management measures in Table 7.	If, during night works, site supervisors identify that the relevant measures to mitigate artificial light impacts are not correctly implemented as per Table 7, then the Project Environmental Representative will be notified. The Project Environmental Representative will investigate to determine the cause of the Non-compliance and implement corrective actions within one week of the Non-compliance being identified. Corrective actions may include increased training or alternative lighting techniques.
Impact:	Fire caused by Project Activities.	H (19)	Prevent uncontrolled fire events caused by Project Activities.	L (6)	An uncontrolled fire occurs within the Stage 1 Project Area that is due to Project Activities.	Following an uncontrolled fire event caused by Project Activities, the Project Environmental Representative will take part in an investigation and risk review. Corrective actions will be determined and implemented within a month of any non-conformance being identified. Corrective actions may include, but not

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[2]	Residual risk rating	Triggers for further action	Corrective actions
Uncontrolled bushfire caused by the Project. **Management objectives:** Minimising degradation of habitat for MNES from an increased risk of fire resulting from Project Activities.			Staff training to communicate environmental features to be protected, MNES to be aware of, and measures to be implemented.			limited to, assessment of fuel loads, review of firefighting equipment and additional staff training. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Illegal access to the Project through trespassing. **Management objectives:** Minimising degradation of habitat from trespassing	Trespassing along the transmission line easement,	L (3)	Install locked gates where access is required to the transmission line easement.	L (3)	Evidence or notification of trespassing within the Construction Zone.	If trespassing or evidence of potential trespassing is identified, the Site Supervisor will investigate the event. Corrective actions may be determined following consultation with the landholder.

11.2 Risk assessment – Operation

Table 19: Assessment of risks relating to achieving the management objectives during operation

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[3]	Residual risk rating	Triggers for further action	Corrective actions
Impact: Clearing/loss of fauna habitat. **Management Objectives:** Limiting and/or avoiding loss of habitat for MNES. Successfully rehabilitating Temporary Disturbance Areas.	Maintenance clearing leads to Stage 1 Clearing Limits being exceeded or is undertaken outside the Stage 1 Project Area. Maintenance clearing impacts on newly discovered Protected Matters not included in this MNES Management Plan. Temporarily Disturbed Areas were not rehabilitated in accordance with the requirements in Section 7.0.	L (2)	Implement clearing protocols for maintenance clearing to prevent inadvertent damage to MNES habitat. Implement specific clearing methods to minimise impacts to MNES and MNES habitat during maintenance clearing. Ensure any newly discovered Protected Matters encountered during the Project are reported to DCCEEW and managed. Monitor rehabilitation of Temporary Disturbance Areas. Staff training to communicate environmental features to be protected, MNES to be aware of, and measures to be implemented.	L (1)	Maintenance clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside of the Stage 1 Clearing Footprint or Stage 1 Project Area. Newly discovered Protected Matters (as defined in the EPBC approval conditions) identified within the Stage 1 Project Area. Any non-conformance with the EWP or specific clearing procedures identified in this plan. Rehabilitation of Temporary Disturbance Areas fails to meet the rehabilitation objectives outlined in Section 7.0.	Clearing works will cease immediately if clearing of MNES habitat exceeds the Stage 1 Clearing Limits and/or occurs outside the Stage 1 Project Area. DCCEEW will be notified of the Incident. Clearing will not recommence until further clearing is approved by the DCCEEW. If the injury or mortality is determined to be attributed to Project Activities and Non-compliance with this Stage 1 MNES Management Plan, a Corrective Actions Plan will be developed by the Project Environmental Representative and be implemented within one month of the Non-compliance being identified. If clearing occurs outside the Stage 1 Clearing Footprint, clearing will cease and an assessment into the cause of the unauthorised clearing will be commenced by the Project Environmental Representative within one week of being notified or becoming aware of the unauthorised clearing. This assessment will include: • Reviewing clearing methods and EWP process. • Examining GPS mapping of the Stage 1 Clearing Limits and Exclusions Zones • Examine staff training records. An investigation report will be completed within one week by the Project Environmental Representative and the findings of the report will be presented to the relevant site personnel to enable continual improvement and to minimise the risk of the Incident or Non-compliance occurring again If any newly discovered Protected Matters are identified, comply with condition 4 of the EPBC approval and implement the Unexpected Finds Procedure. If rehabilitation of Temporary Disturbance Areas fails to meet the interim performance targets or completion criteria, the reasons for the failure will be investigated, and appropriate corrective actions identified in the Corrective Actions Plan consistent with Table 11. Increase training for site personnel to ensure breaches do not re-occur. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Injury or mortality of fauna through	MNES are injured or killed during maintenance clearing, or as a result of vehicle strike.	M (8)	Implement measures to avoid or mitigate injuries or mortality to MNES during maintenance clearing.	M (6)	Any injury or mortality to a MNES species suspected to have resulted from Project Activities due to	If injury or mortality of MNES occurs within the Stage 1 Project Area during maintenance clearing, an assessment of the cause of the

[3] These are the higher-level management measures shown in Table 8. The specific management techniques in Table 8 are directly related to each management measure.

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[3]	Residual risk rating	Triggers for further action	Corrective actions
vehicle/machinery strike. **Management Objectives:** Minimising injury or mortality of MNES from Project Activities.			Avoid and minimise injuries or mortality to MNES from vehicle strikes through implementation of staff training and project-specific road rules.		management measures not being implemented. Maintenance clearing occurs without a Fauna Spotter Catcher present. Unqualified site personnel handle fauna resulting in injury or death of MNES species.	injury/death will commence within one week by the Project Environmental Representative. If the injury or mortality is determined to be attributed to Project Activities, a Corrective Actions Plan will be developed by the Project Environmental Representative and be implemented within one month of the Incident or Non-compliant interaction. Examples of corrective actions may include: • Review adherence to clearing procedures to ensure compliance. Take remedial action where compliance has not been adhered to. • Project Environmental Representative (in consultation with the Fauna Spotter Catcher) to assess whether clearing methods could be improved. • Installing additional speed limit signage and fauna 'hotspot' signage. • Implementing additional awareness training for site personnel on fauna strike locations. • Reinforcing Project-specific speed limit. • Reinforcing the requirement to use designated and approved access tracks. If clearing occurs without a Fauna Spotter Catcher present, all staff involved in the non-compliant clearing works will be re-trained on their obligations under this MNES Management Plan, and the Permit to Disturb procedure will be reviewed. If unqualified site personnel handle fauna, all staff involved in the Non-compliance will be re-trained on their obligations under this MNES Management Plan and EPBC Act Approval conditions. Investigations, reporting and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Erosion and sedimentation. **Management objectives:** Minimising erosion and sedimentation to MNES habitat.	MNES habitat degraded due to erosion and sedimentation during operation.	L (4)	Minimise changes to hydrology and erosion and sedimentation to wetlands and waterways. Monitor rehabilitation of Temporary Disturbance Areas.	L (3)	Any waterway crossing is not maintained in accordance with a DA or the ADR (DPI, 2025). Rehabilitation of Temporary Disturbance Areas fails to meet the rehabilitation objectives outlined in Section 7.0. Any erosion of access tracks observed during condition assessments.	Where rehabilitation of a waterway crossing did not comply with a DA or the ADR (DPI, 2025), the non-conformance will be reported to the Project Environmental Representative. Rectification of the non-compliant waterway crossing will commence within 6 months of being identified. If rehabilitation of Temporary Disturbance Areas fails to meet the interim performance targets or completion criteria, the reasons for the failure will be investigated, and appropriate corrective actions identified in the Corrective Actions Plan consistent with Table 11. If any erosion of along access tracks is observed during operational condition assessments (refer Section 6.3), a risk assessment will be completed by Powerlink to determine if remedial action is required to maintain the track. If corrective actions (e.g. re-grading) are determined to

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[3]	Residual risk rating	Triggers for further action	Corrective actions
						be required, these will be included in a Corrective Actions Plan and implemented within 6 months of being identified. Investigations and corrective actions will be managed in accordance with Section 8.3.1. Corrective actions will be captured in a Corrective Actions Plan.
Impact: Contamination from hazardous substances; **Management Objectives:** Minimising contamination from hazardous substances to MNES habitat.	Spill management procedures not followed leading to contamination and degradation of MNES habitat.	L (3)	Implementation of spill management procedures. Staff training to communicate environmental features to be protected, MNES to be aware of, and measures to be implemented.	L (2)	Spill response procedures not followed correctly following a spill.	All fuel and chemical spills will be reported, controlled/contained, clean-up, and affected areas remediated. Spill kits will be replenished, and corrective actions and improvements investigated. Review adherence to control procedures to ensure compliance. Take remedial action where compliance has not been adhered to. Increase training to ensure breaches do not re-occur. Corrective actions (such as increased training, alternative spill response equipment) will be implemented within one month of being identified in the Corrective Actions Plan. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Increased weeds. **Management Objectives:** Minimising risk of weed introduction and/or spread as a result of Project Activities.	Weeds are introduced or spread by Project VEPM during maintenance works.	M (8)	Monitor rehabilitation of Temporary Disturbance Areas. Manage weed species in consultation with land owners and implement weed hygiene procedures during maintenance activities. Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.	L (3)	Prior to completing rehabilitation, any new weed species observed in an area being rehabilitated which was not identified in the Pre-construction Biosecurity Surveys in the same location. Prior to completing rehabilitation an increase of weed levels above baseline conditions (as determined in the Pre-construction Biosecurity Surveys) across two consecutive surveys. Visual observations during condition inspections (6.3) identify any new weeds or an increase in weeds that is attributable to Project Activities. As a co-use asset, weed spread may also be communicated by the landholder.	If the weed-related triggers prior to completing rehabilitation are met, the relevant corrective actions outlined in Table 11 will be undertaken. If visual observations during operations identify any new weeds or an increase in weeds attributable to Project Activities, the following corrective actions will be undertaken: • Within one month, confirm current weed management practices being undertaken by the relevant land owner to identify if additional measures need to be implemented (e.g. alternative control methods, timing and frequency of weed management measures). • In consultation with the land owner, undertake additional weed management measures until weed populations are reduced. Additional weed management measures will be commenced at the most appropriate time for successful management following the need being identified and within 6 months. • Review adherence to current weed management measures listed in Table 8 and Section 6.6 within one week to ensure compliance. • Increase training for all relevant staff within one week to increase weed awareness. Investigations and corrective actions will be managed in accordance with Section 8.3.1.

Potential impact; and management objectives	Description of risk	Initial risk rating	Relevant management measures[3]	Residual risk rating	Triggers for further action	Corrective actions
Impact: New and / or increased pests. **Management objectives:** Minimise risk to MNES from new or increased pest animals as a result of Project Activities.	Pest animals are attracted to the Stage 1 Project Area, i.e. by increased resources.	L (3)	Manage pest fauna Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.	L (2)	Any new pests or increases in pests observed around Flinders Substation.	Project Environmental Representative to investigate potential sources or reasons for the presence or increase in pest animal numbers and identify additional corrective actions within one month. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
	Tramp ants are introduced to the Stage 1 Project Area	M (9)	Manage pest fauna. Facilitate staff training to communicate MNES to be aware of, measures to be implemented and their responsibilities.	L (5)	Any tramp ants identified by workers or landholders within the Stage 1 Project Area.	If tramp ants are identified (by workers or landholders) within the Project Area, the Project Environmental Representative will investigate the Incident. If the Incident is, or is likely to be, attributable to Project Activities, the Project Environmental Representative will liaise with Biosecurity Queensland to implement corrective actions. Investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Uncontrolled bushfire caused by the Project **Management Objectives:** Minimising degradation of habitat for MNES from an increased risk of fire resulting from Project Activities.	Fire caused by Project Activities (e.g. during maintenance, or damage to transmission line or substation). Project unprepared for unplanned bushfires caused by Project Activities.	H (19)	Prevent uncontrolled fire events caused by Project Activities. Staff training to communicate environmental features to be protected, MNES to be aware of, and measures to be implemented.	L (6)	Uncontrolled fire event or near miss from Project Activities.	Following an uncontrolled fire event caused by Project Activities, the Project Environmental Representative will take part in an investigation and risk review. Corrective actions will be determined and implemented within a month of any non-conformance being identified. Corrective actions may include, but not limited to, assessment of fuel loads, review of firefighting equipment and additional staff training. All investigations and corrective actions will be managed in accordance with Section 8.3.1.
Impact: Illegal access to the Project through trespassing. **Management objectives:** Minimising degradation of habitat from trespassing	Trespassing along the transmission line easement,	L (3)	Install locked gates where access is required to the transmission line easement.	L (3)	Evidence or notification of trespassing within the Construction Zone.	If trespassing is identified, the Site Supervisor will investigate the event. Corrective actions may be determined following consultation with the landholder.

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