



Plan

Iron Bridge Vegetation Health Monitoring Plan

Environment

23 April 2025

662NS-0000-PL-EN-0004

Rev: 3



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EXECUTIVE SUMMARY

State legislation	
Proponent name	FMG Iron Bridge (Aust) Pty Ltd
Proposal name	North Star Magnetite Project North Star Magnetite Project Extension
Ministerial number	MS 993
Purpose of EMP	Provide monitoring measures for conservation significant vegetation and flora within, and adjacent to, the North Star Magnetite Project.
Key environmental factor/s	Flora and Vegetation “ <i>To protect flora and vegetation so that biological diversity and ecological integrity are maintained.</i> ”
Outcomes	<p>FV-1: Directly disturb no more than 4,099.9 ha of native vegetation within the mine development envelope.</p> <p>FV-2: The implementation of the Revised Proposal will not change the conservation status of recorded conservation significant flora species.</p> <p>FV-5: Direct and indirect disturbance to riparian vegetation does not exceed more than 30% areal extent.</p> <p>FV-6: Indirect impacts to riparian vegetation as a result of changes to surface water flows does not extend:</p> <ul style="list-style-type: none"> • 11 km downstream of the Proposed Amendment area in the Shaw River catchment. • 9 km downstream of the Proposed Amendment in the Turner River catchment. <p>FV-7: No indirect impacts as a result of groundwater drawdown on potential groundwater dependent vegetation located at Mundagoora Pool.</p> <p>FV-8: No impacts to flora and vegetation resulting from the introduction or spread of environmental weeds within the development envelope compared with pre-construction condition.</p>
Operation / construction date	The North Star Magnetite Project (MS 993) became operational in 2023. Construction of the North Star Magnetite Project Extension is expected 2026.
Commonwealth legislation	
Proponent name	FMG Iron Bridge (Aust) Pty Ltd
ACN	78 150 848 025
Project name	North Star Magnetite Project North Star Magnetite Project Extension
Instrument number	EPBC 2012/6689 EPBC 2023/09466 (under assessment)
Proposed action	<p>To develop a magnetite iron ore mine approximately 110 km south of Port Hedland in the Pilbara region, and associated borefield in the Canning Basin, Western Australia.</p> <p>The proposed action is an extension of the approved proposal North Star Magnetite Project (EPBC 2012/6689). The proposed action consists of an extension of the Mine Development Envelope to develop new mine pits, an extension of the waste rock dump and development of additional ancillary infrastructure. The total disturbance for the proposed action is 606.9 ha.</p>
Location of the action	Iron Bridge Mine, Pilbara, Western Australia



EMP preparation date	April 2025
Declaration of accuracy	<p>In making this declaration, I am aware that section 491 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.</p> <p>Signature/date:</p> <p>Name: Jarrod Pittson Role: Group Manager Environment and Closure Organisation: Fortescue Ltd</p>



1 INTRODUCTION

1.1 Purpose

The purpose of this *Iron Bridge Vegetation Health Monitoring Plan* (the Plan) is to provide monitoring measures to achieve the outcomes (Table 2) for conservation significant vegetation and flora within, and adjacent to, the North Star Magnetite Mine.

1.2 Proposal

Fortescue Ltd (Fortescue) is an integrated green technology, energy, and metals company. The mining assets in the Pilbara region of Western Australia comprises of mine, rail, and port operations. An unincorporated joint venture between subsidiary group FMG Iron Bridge (Aust) Pty Ltd and Formosa Steel IB Pty Ltd (Formosa) operates the North Star Magnetite Project (the Project).

The Project is located approximately 110 km southeast of Port Hedland in the Pilbara region of Western Australia. The Project comprises of:

- Approved Proposal under Ministerial Statement 993 (MS 993) of an open cut magnetite iron ore mine and associated infrastructure, including roads, administrative buildings, accommodation camp, aerodrome, borefield, slurry and raw water pipelines and an auxiliary power station. The approved works include clearing of 5,371 hectares of vegetation. Construction for the Project was initiated in August 2019 and operations commenced in May 2023. The mine life is expected to be 50 years.
- Proposed Amendment of MS 993: Referral of the significant amendment for the Project in 2022 included extension of the Mine Development Envelope for additional pits, extension of the waste rock dump and ancillary infrastructure, an additional 606.9 hectares of clearing.

1.3 Legislative context and definitions

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

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

1.4 Key environmental factor

This Plan addresses the key environmental factors relevant to the Project, including:



- Environmental Protection Authority's (EPA's) objective for the key environmental factor Flora and Vegetation “to protect flora and vegetation so that biological diversity and ecological integrity are maintained”.
- Matters of National Environmental Significant under the *Environmental Protection and Biodiversity Conservation Act 1999*, specifically national threatened species and ecological communities.

1.5 Condition requirements

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

1.6 Exclusions

This Plan does not include management and reporting requirements for *Quoya zonalis* as this is covered by the *Quoya zonalis Infrastructure Plan* (662NS-5530-PL-EN-0001).

1.7 Rationale

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

Outcomes-based provisions have been selected as the data (i.e. amount of disturbance, number of significant flora species, introduced weeds) is easily measurable and reportable. The trigger criteria has been set for each of the outcomes at a conservative level to warn the approach towards the threshold criteria. This allows for actions to be implemented in advance to reduce the risk of exceeding the threshold criteria and compromising the environmental outcome.

1.8 Approach

For the purposes of this Plan, conservation significant flora and vegetation is considered as significant vegetation and flora (refer to definition in Appendix B) that has been recorded within the project area (refer to Section 3.2), including:

- Groundwater Dependent Vegetation (including GDV and potential GDV).
- Riparian vegetation (including that surrounding significant pools).



- Threatened and Priority 1 flora – *Quoya zonalis* (Endangered) and *Themeda* sp. Panorama (P1).

No Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) were identified within the Project area.

Key assumptions and uncertainties of this Plan include:

- Baseline surveys have accurately recorded the presence of conservation significant vegetation and flora within the development envelope.
- Protection of known individuals of conservation significant flora species outside of proposed disturbance will allow for the species to persist in the mine development envelope.
- Hydrological modelling and historical monitoring has been used to provide an indicative extent of surface water flow for the Shaw River and Turner River Catchments. The hydrological model will be reviewed as additional data becomes available.
- Hydrological modelling and historical monitoring has been used to provide an indicative groundwater drawdown.
- Response of vegetation and flora to hydrological changes and climate variability is unknown due to limited understanding and insufficient scientific evidence.
- Environmental weed species are given greater emphasis on prior recognised invasiveness, high ecological impacts, and/or designation as a high threat to the environment via national, state and regional approaches.



2 PLAN COMPONENTS

A series of outcomes (refer to Table 2) have been developed to mitigate environmental impacts on conservation significant vegetation and flora that could potentially be caused by Fortescue's activities.

Management actions have been included in this Plan for operational purposes (refer to Table 3, with key elements within the objectives-based table described in Table 1). Outcome-based condition Plans do not require management actions and demonstration of compliance is not required under MS 993.

Table 1: Descriptions of key elements of environmental management process to achieve identified objectives

Element	Definition/ description
Management Action	Tasks undertaken to enable the objective to be met
Evidence	Demonstrates that the Management Action has been applied and the outcome evaluated.
Timing	Period during which the Management Action should be undertaken.
Responsibility	Accountability for ensuring management action is completed. The responsible role is dependent on project timing. Refer to Appendix C.



Table 2: Environmental outcomes provision table

EPA Factor and objective: Flora and Vegetation “ <i>To protect flora and vegetation so that biological diversity and ecological integrity are maintained.</i> ” Proposal: North Star Magnetite Project (Assessment number APP-0012119) Outcomes: <ul style="list-style-type: none"> FV-1: Directly disturb no more than 4,099.9 ha of native vegetation within the mine development envelope. FV-2: The implementation of the Revised Proposal will not change the conservation status of recorded conservation significant flora species. FV-5: Direct and indirect disturbance to riparian vegetation does not exceed more than 30% areal extent. FV-6: Indirect impacts to riparian vegetation as a result of changes to surface water flows does not extend: 11 km downstream of the Proposed Amendment area in the Shaw river catchment; 9 km downstream of the Proposed Amendment in the Turner river catchment. FV-7: No indirect impacts as a result of groundwater drawdown on potential groundwater dependent vegetation located at Mundagoora Pool. FV-8: No impacts to flora and vegetation resulting from the introduction or spread of environmental weeds within the development envelope compared with pre-construction condition. Key Environmental Values: Conservation significant fauna and their critical habitats; Groundwater and groundwater dependent systems; Surface water and surface water dependent systems Key Impacts and Risks: Clearing of native vegetation; clearing of conservation significant flora; introduction and spread of weeds; alterations to surface water flows, groundwater abstraction.		Monitoring	Reporting
Environmental criteria Outcome FV-1: Directly disturb no more than 4,099.9 ha of native vegetation within the mine development envelope.	Response actions Trigger criteria Review future proposed clearing areas to ensure threshold criteria is not exceeded. Review existing LUCs in system and do not approve any future LUCs to ensure threshold criteria is not exceeded. Threshold criteria Ground truth the direct clearing to validate extent of clearing and cause. Once the direct clearing has been validated: <ul style="list-style-type: none"> Where the direct clearing was caused by construction, operation, or decommissioning activities: <ul style="list-style-type: none"> Review the LUC process and implement any further measures including changes to the process to reduce the potential for clearing outside approved areas. Implement actions to remediate/rehabilitate the clearing where possible. Where the direct clearing was not caused by construction, operation, or decommissioning activities: <ul style="list-style-type: none"> No further action required. 	Reconciliation of disturbance data with the respective year's aerial imagery. Timing: March Frequency: Annually	Annual reporting Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with Condition 4-6 of MS 993 and EPA's <i>Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR)</i> , Post Assessment Guideline No. 2. In the event that a trigger/threshold criteria was exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions implemented to manage the impact and any adaptive management measures applied as a result of the exceedance. Potential non-compliance reporting When an exceedance of a Threshold criteria has occurred, Fortescue will, in accordance with Condition 4-5 of MS 993: <ul style="list-style-type: none"> Report the potential non-compliance to the DWER within 7 days of the exceedance being identified.



Environmental criteria	Response actions	Monitoring	Reporting
Outcome FV-2: The implementation of the Revised Proposal will not change the conservation status of recorded conservation significant flora species.			
<p>Trigger criteria – direct disturbance Loss of Priority 1 species <i>Themeda</i> sp. <i>Panorama</i> within the mine development envelope exceeds 20% of total known individuals</p> <p>Loss of threatened species <i>Quoya zonalis</i> within the mine development envelope exceeds 6% of total known individuals</p> <p>Threshold criteria – direct disturbance Loss of Priority 1 species <i>Themeda</i> sp. <i>Panorama</i> within the mine development envelope exceeds 25% of total known individuals</p> <p>Loss of threatened species <i>Quoya zonalis</i> within the mine development envelope exceeds 8% of total known individuals</p> <p>Trigger criteria – indirect disturbance Statistically significant decline¹ in primary monitoring parameter within impact monitoring sites compared with baseline measurements and reference sites over two consecutive monitoring events AND where subsequent investigation determines that the decline is likely a result of the implementation of the Amended Proposal</p> <p>Threshold criteria – indirect disturbance Statistically significant decline¹ in primary monitoring parameter within impact monitoring sites compared with baseline measurements and reference sites over three consecutive monitoring events AND where subsequent investigation determines that the decline is likely a result of the implementation of the Amended Proposal</p>	<p>Trigger criteria– direct disturbance Review future proposed clearing areas to ensure threshold criteria is not exceeded. Review existing LUCs in system and do not approve any future LUCs to ensure threshold criteria is not exceeded.</p> <p>Threshold criteria – direct disturbance Ground truth the direct clearing to validate extent of clearing and cause. Once the direct clearing has been validated:</p> <ul style="list-style-type: none"> Where the direct clearing was caused by construction, operation, or decommissioning activities: <ul style="list-style-type: none"> Review the LUC process and implement any further measures including changes to the process to reduce the potential for clearing outside approved areas. Implement actions to remediate/rehabilitate the clearing where possible. Where the direct clearing was not caused by construction, operation, or decommissioning activities: No further action required. <p>Trigger criteria– indirect disturbance Validate the impact through:</p> <ul style="list-style-type: none"> Re-examine applied monitoring parameters to validate they are operating within management levels. Cross reference vegetation health monitoring results with the most recent environmental monitoring data (i.e., surface water/ weeds/ meteorological etc.) to determine whether the cause can be identified. Undertake a desktop assessment to determine whether the cause can be identified. Ground truth where required to validate findings. Where the cause is identified during ground truthing and can be rectified, undertake action. For actions which require alternative resources, schedule works to be undertaken as soon as possible. <p>Threshold criteria – indirect disturbance Validate the impact through:</p> <ul style="list-style-type: none"> Re-examine applied monitoring parameters to validate they are operating within management levels. Cross reference vegetation health monitoring results with the most recent environmental monitoring data (i.e., surface water/ weeds/ meteorological etc.) to determine whether the cause can be identified. Undertake a desktop assessment to determine whether the cause can be identified. Ground truth where required to validate findings. Assess the extent of indirect impacts compared to direct clearing of areas as far as practicable to determine total cumulative impact. Where the cause is identified during ground truthing and can be rectified, undertake action. For actions which require alternative resources, schedule works to be undertaken as soon as possible. <p>Once the impact has been validated:</p> <ul style="list-style-type: none"> If caused by construction, operation or decommissioning activities: <ul style="list-style-type: none"> Increase vegetation monitoring frequency to a six-month cycle at vegetation monitoring units where criteria was exceeded in impact sites with no comparable observation in the reference sites. If cause was determined to be hydrological change (surface water): <ul style="list-style-type: none"> Verify water management infrastructure are operating as per design. Where physical blockages or structural integrity issues are identified seek immediate rectification to ensure management response can be met. For actions which require alternate resources, schedule works to be undertaken as soon as possible. Where the exceedance is in an area where excess water is being discharged, cease discharge until the source of the exceedance is identified. If cause was determined to be contamination (e.g., hydrocarbon or saline spill) of water quality: <ul style="list-style-type: none"> Remediate area. If cause was determined to be weeds: <ul style="list-style-type: none"> Schedule weed control activities. If cause was determined to be dust: <ul style="list-style-type: none"> Determine if additional dust management controls or mine planning alterations are required. 	<p>Monitoring (direct disturbance): Reconciliation of disturbance data with the respective year's aerial imagery and flora records.</p> <p>Timing: March</p> <p>Frequency: Annually</p> <p>Monitoring (indirect disturbance): <i>T. sp. Panorama</i></p> <ul style="list-style-type: none"> Primary parameters Vegetation Condition, Plant Health and Plant Cover Refer to Table 5 Item 1 <p><i>Q. zonalis</i></p> <ul style="list-style-type: none"> Primary parameters: Vegetation Condition and Plant Health Refer to Table 5 Item 2 <p>Timing: 6-8 weeks post wet season (approximate timing)</p> <p>Frequency: Annually</p> <p>Statistical analysis methods: Section 3.4.4</p>	<p>Annual reporting Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with Condition 4-6 of MS 993 and EPA's <i>Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR)</i>, Post Assessment Guideline No. 2.</p> <p>In the event that a trigger/threshold criteria was exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.</p> <p>Potential non-compliance reporting When an exceedance of a Threshold criteria has occurred, Fortescue will, in accordance with Condition 4-5 of MS 993: Report the potential non-compliance to the DWER within 7 days of the exceedance being identified.</p>

¹ A statistically significant difference is determined objectively using accepted statistical techniques with significance (P) set at P<0.05. Refer to Section 3.4.4.



Environmental criteria	Response actions	Monitoring	Reporting
	<ul style="list-style-type: none"> ▪ Continue to implement actions to remediate the exceedance • Where the direct clearing was not caused by construction, operation, or decommissioning activities: No further action required. 		
Outcome FV-5: Direct and indirect disturbance to riparian vegetation does not exceed more than 30% areal extent.			
<p>Trigger criteria – direct disturbance More than 25% disturbance of and/or indirect impact of areal extent of riparian vegetation within the mine development envelope</p> <p>Threshold criteria – direct disturbance More than 30% disturbance of and/or indirect impact of areal extent of riparian vegetation within the mine development envelope</p> <p>Trigger criteria – indirect disturbance Statistically significant decline² in primary monitoring parameter within impact monitoring sites compared with baseline measurements and reference sites over two consecutive monitoring events AND where subsequent investigation determines that the decline is likely a result of the implementation of the Amended Proposal</p> <p>Threshold criteria – indirect disturbance Statistically significant decline² in primary monitoring parameter within impact monitoring sites compared with baseline measurements and reference sites over three consecutive monitoring events AND where subsequent investigation determines that the decline is likely a result of the implementation of the Amended Proposal</p>	<p>Trigger criteria – direct disturbance Review future proposed clearing areas to ensure threshold criteria is not exceeded. Review existing LUCs in system and do not approve any future LUCs to ensure threshold criteria is not exceeded.</p> <p>Threshold criteria – direct disturbance Ground truth the direct clearing to validate extent of clearing and cause. Once the direct clearing has been validated:</p> <ul style="list-style-type: none"> • Where the direct clearing was caused by construction, operation, or decommissioning activities: <ul style="list-style-type: none"> ○ Review the LUC process and implement any further measures including changes to the process to reduce the potential for clearing outside approved areas. ○ Implement actions to remediate/rehabilitate the clearing where possible. • Where the direct clearing was not caused by construction, operation, or decommissioning activities: No further action required. <p>Trigger criteria – indirect disturbance Validate the impact through:</p> <ul style="list-style-type: none"> • Re-examine applied monitoring parameters to validate they are operating within management levels. • Cross reference vegetation health monitoring results with the most recent environmental monitoring data (i.e., surface water/ weeds/ meteorological etc.) to determine whether the cause can be identified. • Undertake a desktop assessment to determine whether the cause can be identified. • Ground truth where required to validate findings. Where the cause is identified during ground truthing and can be rectified, undertake action. For actions which require alternative resources, schedule works to be undertaken as soon as possible. <p>Threshold criteria – indirect disturbance Validate the impact through:</p> <ul style="list-style-type: none"> • Re-examine applied monitoring parameters to validate they are operating within management levels. • Cross reference vegetation health monitoring results with the most recent environmental monitoring data (i.e., surface water/ weeds/ meteorological etc.) to determine whether the cause can be identified. • Undertake a desktop assessment to determine whether the cause can be identified. • Ground truth where required to validate findings. Assess the extent of indirect impacts compared to direct clearing of areas as far as practicable to determine total cumulative impact. Where the cause is identified during ground truthing and can be rectified, undertake action. For actions which require alternative resources, schedule works to be undertaken as soon as possible. <p>Once the impact has been validated:</p> <ul style="list-style-type: none"> • If caused by construction, operation or decommissioning activities: <ul style="list-style-type: none"> ○ Increase vegetation monitoring frequency to a six-month cycle at vegetation monitoring units where criteria was exceeded in impact sites with no comparable observation in the reference sites. ○ If cause was determined to be hydrological change (surface water): <ul style="list-style-type: none"> ▪ Verify water management infrastructure are operating as per design. Where physical blockages or structural integrity issues are identified seek immediate rectification to ensure management response can be met. For actions which require alternate resources, schedule works to be undertaken as soon as possible. ▪ Where the exceedance is in an area where excess water is being discharged, cease discharge until the source of the exceedance is identified. ○ If cause was determined to be hydrological change (groundwater): <ul style="list-style-type: none"> ▪ Implement adaptive management response (modified abstraction) management guidance within the Groundwater Operating Strategy(s). This includes as required either a reduction or cessation in abstraction volumes in impact areas. 	<p>Monitoring (direct disturbance): Reconciliation of disturbance data with the respective year's aerial imagery and vegetation type mapping.</p> <p>Timing: March</p> <p>Frequency: Annually</p> <p>Monitoring (indirect disturbance):</p> <ul style="list-style-type: none"> • Primary parameters: Vegetation Condition, Tree health, and remotely sensed Vegetation Index (e.g. NDVI). • Refer to Table 5 Item 4 <p>Timing: On ground monitoring - Dry season (approximate timing September to November)</p> <p>Remote sensing analysis/review - on completion of calendar year (nominally January of subsequent year)</p> <p>Frequency: Annually</p> <p>Statistical analysis methods: Section 3.4.4</p>	<p>Annual reporting Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with Condition 4-6 of MS 993 and EPA's <i>Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR)</i>, Post Assessment Guideline No. 2.</p> <p>In the event that a trigger/threshold criteria was exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.</p> <p>Potential non-compliance reporting When an exceedance of a Threshold criteria has occurred, Fortescue will, in accordance with Condition 4-5 of MS 993:</p> <ul style="list-style-type: none"> • Report the potential non-compliance to the DWER within 7 days of the exceedance being identified.

² A statistically significant difference is determined objectively using accepted statistical techniques with significance (P) set at P<0.05. Refer to Section 3.4.4.



Environmental criteria	Response actions	Monitoring	Reporting
	<ul style="list-style-type: none"> ○ If cause was determined to be contamination (e.g., hydrocarbon or saline spill) of water quality: <ul style="list-style-type: none"> ▪ Remediate area. ○ If cause was determined to be weeds: <ul style="list-style-type: none"> ▪ Schedule weed control activities. ○ If cause was determined to be dust: <ul style="list-style-type: none"> ▪ Determine if additional dust management controls or mine planning alterations are required. ▪ Continue to implement actions to remediate the exceedance ● Where the direct clearing was not caused by construction, operation, or decommissioning activities: No further action required. 		
Outcome FV-6: Indirect impacts to riparian vegetation as a result of changes to surface water flows does not extend: 11 km downstream of the Proposed Amendment area in the Shaw River catchment; 9 km downstream of the Proposed Amendment in the Turner River catchment.			
<p>Trigger criteria Indirect impacts³ to riparian vegetation extends:</p> <ul style="list-style-type: none"> ● 8.8 km downstream of the Proposed Amendment area in the Shaw River catchment ● 7.2 km downstream of the Proposed Amendment area in the Turner River catchment <p>Threshold criteria Indirect impacts to riparian vegetation extends:</p> <ul style="list-style-type: none"> ● 11 km downstream of the Proposed Amendment area in the Shaw River catchment ● 9 km downstream of the Proposed Amendment area in the Turner River catchment 	<p>Trigger criteria Validate the impact through:</p> <ul style="list-style-type: none"> ● Re-examine applied monitoring parameters to validate they are operating within management levels. ● Cross reference vegetation health monitoring results with the most recent environmental monitoring data (i.e., surface water/ weeds/ meteorological etc.) to determine whether the cause can be identified. ● Undertake a desktop assessment to determine whether the cause can be identified. ● Ground truth where required to validate findings. Where the cause is identified during ground truthing and can be rectified, undertake action. For actions which require alternative resources, schedule works to be undertaken as soon as possible. <p>Threshold criteria Validate the impact through:</p> <ul style="list-style-type: none"> ● Re-examine applied monitoring parameters to validate they are operating within management levels. ● Cross reference vegetation health monitoring results with the most recent environmental monitoring data (i.e., surface water/ weeds/ meteorological etc.) to determine whether the cause can be identified. ● Undertake a desktop assessment to determine whether the cause can be identified. ● Ground truth where required to validate findings. Where the cause is identified during ground truthing and can be rectified, undertake action. For actions which require alternative resources, schedule works to be undertaken as soon as possible. <p>Once the impact has been validated:</p> <ul style="list-style-type: none"> ● If caused by construction, operation or decommissioning activities: <ul style="list-style-type: none"> ○ Increase vegetation monitoring frequency to a six-month cycle at vegetation monitoring units where criteria was exceeded in impact sites with no comparable observation in the reference sites. ○ If cause was determined to be hydrological change (surface water): <ul style="list-style-type: none"> ▪ Verify water management infrastructure are operating as per design. Where physical blockages or structural integrity issues are identified seek immediate rectification to ensure management response can be met. For actions which require alternate resources, schedule works to be undertaken as soon as possible. ▪ Where the exceedance is in an area where excess water is being discharged, cease discharge until the source of the exceedance is identified. ● Where the direct clearing was not caused by construction, operation, or decommissioning activities: No further action required. 	<p>Monitoring</p> <ul style="list-style-type: none"> ● Primary parameter Condition and health ● Refer to Table 5 Item 4 ● Surface water flow <p>Timing: On ground monitoring - Dry season (approximate timing September to November)</p> <p>Remote sensing analysis/review - on completion of calendar year (nominally January of subsequent year)</p> <p>Frequency: Annually</p> <p>Statistical analysis methods: Section 3.4.4</p>	<p>Annual reporting Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with Condition 4-6 of MS 993 and EPA's <i>Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR)</i>, Post Assessment Guideline No. 2.</p> <p>In the event that a trigger/threshold criteria was exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.</p> <p>Potential non-compliance reporting When an exceedance of a Threshold criteria has occurred, Fortescue will, in accordance with Condition 4-5 of MS 993:</p> <ul style="list-style-type: none"> ● Report the potential non-compliance to the DWER within 7 days of the exceedance being identified.

³ Indirect impact detected via a statistically significant decline in primary monitoring parameter within impact monitoring sites compared with baseline measurements and reference sites over three consecutive monitoring events AND where subsequent investigation determines that the decline is likely a result of the implementation of the Amended Proposal



Environmental criteria	Response actions	Monitoring	Reporting
Outcome FV-7: No indirect impacts as a result of groundwater drawdown on potential groundwater dependent vegetation located at Mundagoora Pool.			
<p>Trigger criteria – indirect disturbance Statistically significant⁴ decline in primary monitoring parameter within impact monitoring site/s located at Mundagoora Pool compared with baseline measurements and reference sites over two consecutive monitoring events AND where subsequent investigation determines that the decline is likely a result of the groundwater drawdown by the Amended Proposal.</p> <p>Threshold criteria – indirect disturbance Statistically significant⁴ decline in primary monitoring parameter within impact monitoring site/s located at Mundagoora Pool compared with baseline measurements and reference sites over three consecutive monitoring events AND where subsequent investigation determines that the decline is likely a result of the implementation of the Amended Proposal</p>	<p>Trigger criteria/Threshold criteria Validate the impact through:</p> <ul style="list-style-type: none"> • Re-examine applied monitoring parameters to validate they are operating within management levels. • Cross reference vegetation health monitoring results with the most recent environmental monitoring data (i.e., surface water/ weeds/ meteorological etc.) to determine whether the cause can be identified. • Undertake a desktop assessment to determine whether the cause can be identified. • Ground truth where required to validate findings. Where the cause is identified during ground truthing and can be rectified, undertake action. For actions which require alternative resources, schedule works to be undertaken as soon as possible. <p>Once the impact has been validated:</p> <ul style="list-style-type: none"> • If caused by construction, operation or decommissioning activities: <ul style="list-style-type: none"> ○ Increase vegetation monitoring frequency to a six-month cycle at vegetation monitoring units where criteria was exceeded in impact sites with no comparable observation in the reference sites. ○ If cause was determined to be hydrological change (groundwater): Implement adaptive management response (modified abstraction) management guidance within the Groundwater Operating Strategy(s). This includes as required either a reduction or cessation in abstraction volumes in impact areas. • Where the direct clearing was not caused by construction, operation, or decommissioning activities: No further action required. 	<p>Monitoring</p> <ul style="list-style-type: none"> • Primary Parameter Condition and health • Groundwater levels • Refer to Table 5 Item 3 <p>Timing: On ground monitoring - Dry season (approximate timing September to November)</p> <p>Remote sensing analysis/review - on completion of calendar year (nominally January of subsequent year)</p> <p>Frequency: Annually</p> <p>Statistical analysis methods: Section 3.4.4</p>	<p>Annual reporting Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with Condition 4-6 of MS 993 and EPA's <i>Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR)</i>, Post Assessment Guideline No. 2.</p> <p>In the event that a trigger/threshold criteria was exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.</p> <p>Potential non-compliance reporting When an exceedance of a Threshold criteria has occurred, Fortescue will, in accordance with Condition 4-5 of MS 993:</p> <ul style="list-style-type: none"> • Report the potential non-compliance to the DWER within 7 days of the exceedance being identified.
Outcome FV-8: No impacts to flora and vegetation resulting from the introduction or spread of environmental weeds within the development envelope compared with pre-construction condition.			
<p>Trigger/Threshold criteria Introduction of environmental weed/s⁵ that have not been previously recorded in baseline flora and vegetation surveys within the mine development envelope attributable to the Amended Proposal</p> <p>Trigger criteria Statistically significant increase in weed species diversity or total weed cover within impact weed monitoring sites over two</p>	<p>Trigger/Threshold criteria</p> <ul style="list-style-type: none"> • Undertake weed control activities, in accordance with <i>Weed Control Guidelines (45-GU-EN-0011)</i> to remove or chemically treat introduced weed/s. • Undertake a desktop assessment and ground truth to determine whether the cause can be identified. • If the cause was result of Projects construction, operation or decommissioning activities: <ul style="list-style-type: none"> ○ Undertake further communication and training to raise awareness with staff of the impact of weeds and the management measures required. ○ Include location of introduced weed in weed control program ○ If cause was determined to be from vehicle/equipment, increase weed hygiene requirements for vehicles 	<p>Monitoring: In accordance with Iron Bridge Weed Management Plan (IB-0000-PL-EN-0002) requirements, primary parameters</p> <ul style="list-style-type: none"> • Weed species diversity • Total weed cover 	<p>Annual reporting Annual Compliance Assessment Reports (CAR) are required to be submitted in accordance with Condition 4-6 of MS 993 and EPA's <i>Post Assessment Guideline for Preparing a Compliance Assessment Report (CAR)</i>, Post</p>

⁴ A statistically significant difference is determined objectively using accepted statistical techniques with significance (P) set at P<0.05. Refer to Section 3.4.4.

⁵ Refer to Appendix B for definition. Weed species are detailed in *Iron Bridge Weed Management Plan (IB-0000-PL-EN-0002)*



Environmental criteria	Response actions	Monitoring	Reporting
<p>consecutive monitoring events compared to the increase in weed species diversity within the reference weed monitoring sites AND where subsequent investigation determines that the impacts are likely a result of the implementation of the Amended Proposal</p> <p>Threshold criteria Statistically significant increase in total weed cover within impact weed monitoring sites over three consecutive monitoring events compared to the increase in total weed cover within the reference weed monitoring sites AND where subsequent investigation determines that the impacts are likely a result of the implementation of the Amended Proposal .</p>		<ul style="list-style-type: none"> Refer to Table 5 Item 5 <p>Timing: 6-8 weeks post wet season (approximate timing)</p> <p>Frequency: Biennially</p> <p>Statistical analysis methods: Section 3.4.4</p>	<p>Assessment Guideline No. 2.</p> <p>In the event that a trigger/threshold criteria was exceeded during the reporting period, the CAR will include a description of the effectiveness of the contingency actions implemented to manage the impact and any adaptive management measures applied as a result of the exceedance.</p> <p>Potential non-compliance reporting When an exceedance of a Threshold criteria has occurred, Fortescue will, in accordance with Condition 4-5 of MS 993:</p> <ul style="list-style-type: none"> Report the potential non-compliance to the DWER within 7 days of the exceedance being identified.



Table 3: Management actions

Management actions	Evidence	Timing	Responsibility ⁶
Ensure staff and contractors are provided with the appropriate training to ensure significant flora and vegetation are protected.	Induction – includes conservation significant flora and vegetation. Site communication materials delivered to targeted work groups.	Prior to new employee commencement Annually during operations	Project Manager / Manager Environment Operations
Ensure drainage infrastructure location and design aligns with the risk assessment outcomes where possible to minimise disruption of surface water flow that support conservation significant flora and vegetation.	Audit and inspection reports show location and design of drainage infrastructure aligns with risk assessment outcomes where possible.	Prior to relevant approval submission ³	Project Manager / Group Manager Operations Planning
Where possible, align linear infrastructure with existing transport corridors or approved disturbance corridors so that impact to surface water flow is minimised.	Designs indicate utilisation where possible of existing disturbed linear infrastructure.	Prior to relevant approval submission ³	Project Manager / Group Manager Operations Planning
Manage abstraction activities and water discharge/reinjection to minimise impacts on groundwater dependent ecosystems.	LUCs: <ul style="list-style-type: none"> Relevant management measures are identified in the LUC. Monitoring data/Annual reports: <ul style="list-style-type: none"> Changes to groundwater levels are managed in accordance with the GWOS. Changes to groundwater level is minimised. Changes to groundwater quality are minimised. Monitoring Reports: <ul style="list-style-type: none"> Vegetation and Flora Health Monitoring program implemented and impacts from risks minimised. 	Prior to LUC approval	Project Manager / Manager Water Planning
Prior to conducting disturbance activities, ensure known locations of conservation significant flora and vegetation and their associated buffers are identified and management measures to minimise any impacts to those areas are implemented.	LUCs: <ul style="list-style-type: none"> Disturbance is undertaken with a LUC. Conservation significant flora and vegetation and associated buffers are identified. Relevant management measures are identified in the LUC. Monitoring Reports: <ul style="list-style-type: none"> Vegetation and Flora Health Monitoring program implemented and impacts from risks minimised. 	Prior to LUC approval	Project Manager / Manager Environment Operations
Prior to conducting ground disturbance activities, ensure known locations of weed populations are identified and management measures to minimise the potential for weed spread are included in the LUC.	LUCs: <ul style="list-style-type: none"> Disturbance is undertaken with a LUC. Conservation significant flora and vegetation and associated buffers are identified. Weed populations and management measures are identified in the LUC. Monitoring Reports: <ul style="list-style-type: none"> Vegetation and Flora Health Monitoring program implemented and impacts from risks minimised. Comply with the <i>Iron Bridge Weed Management Plan</i> (IB-0000-PL-EN-0002)	Prior to LUC approval	Project Manager / Manager Environment Operations
To minimise the potential for dust deposition on significant flora and vegetation, ensure relevant dust suppressions measures are included in the LUC for areas identified as high-risk.	LUCs: <ul style="list-style-type: none"> Disturbance is undertaken with a LUC. Conservation significant flora and vegetation and associated buffers are identified. Dust management measures are identified in the LUC. Monitoring Reports: <ul style="list-style-type: none"> Vegetation and Flora Health Monitoring program implemented and impacts from risks minimised. 	Prior to LUC approval	Project Manager / Manager Environment Operations
Conduct rehabilitation of disturbed areas, particularly those areas with known conservation significant flora and vegetation, no longer required for operations.	GIS dataset updated with rehabilitation data. Disturbed areas rehabilitated in accordance with the closure plan.	In accordance with the mine closure plan	Project Manager / Group Manager Operations Planning

⁶ Refer to Appendix C for details on roles and responsibilities.



2.1 Environmental impact

Potential direct and indirect impacts for conservation significant flora and vegetation includes:

- Loss or reduced health of conservation significant vegetation due to vegetation clearing and introduction/spread of environmental weeds.
- Alterations to hydrology (e.g. surface water flow from infrastructure design) increasing inundation on vegetation.
- Loss or reduced health of conservation significant vegetation due to groundwater abstraction and changes to groundwater quality.

2.2 Environmental risk

2.2.1 Risk reviews

Fortescue actively manages risk by undertaking a risk assessment prior to relevant approval submissions to identify high risk areas where conservation significant flora and vegetation have been identified and potential impacts are likely. Annual Environmental Risk Reviews are undertaken during construction and operations phase where all environmental risks are considered with a focus on high-risk impacts. The review considers the effectiveness of management actions that are currently in place for these impacts. The review also considers any relevant incidents that have occurred, if the actions from incident investigations have translated into new management actions and generally considers the need for any new management actions to ensure lower risk targets can be achieved.

2.2.2 Compliance

Fortescue ensures compliance with its legal obligations through first party quality assurance by site and corporate environment teams with a focus on effective environmental management through the implementation of the Fortescue wide Environmental Management System.

Fortescue has adopted a risk-based approach to monitor compliance with its legal obligations. Site environment teams will monitor their compliance with this Plan.

Where non-conformances occur the incident will be reported in accordance with the *Incident Event Management Procedure* (45-PR-SA-0080) and implement contingency actions and any reporting requirements defined in Table 2.

Non-conformance issues and/or opportunities for improvement identified will be documented and tracked via Fortescue's business management system.



3 MONITORING GUIDELINES

3.1 Objectives

The overall objective of the vegetation health monitoring program is to monitor and measure performance against environmental outcomes in Table 2.

The guiding objectives of the vegetation health monitoring program are:

1. Measure adverse impacts of Fortescue's activities on conservation significant vegetation and flora health within the Project.
2. Identify if changes in vegetation or flora health are impacting, or threatening to impact, related values.
3. Determine if changes in vegetation or plant health within the Project are a direct or indirect result of Fortescue's activities or broader regional changes.

Operational monitoring will be informed by the findings of the monitoring itself as data becomes available. These findings may similarly lead to ongoing refinements to this Plan and its management strategies to ensure an adaptive management approach is undertaken during Fortescue's activities.

3.2 Baseline surveys

3.2.1 Dependent, potentially groundwater dependent and riparian vegetation

One vegetation community recorded in the MDE by ecologia Environment (2012) was described as:

- EvCC: *Eucalyptus victrix* (Coolibah), *Eucalyptus camaldulensis* (River Red Gum) open mid woodland over *Cenchrus ciliaris* tussock grassland.

Eucalyptus camaldulensis, and potentially *Eucalyptus victrix*, are facultative phreatophytes and, as such, the vegetation unit including these species is considered to have the potential to be a GDE (ecologia Environment, 2012). The EvCC vegetation unit occurs along a minor, ephemeral water course located on the west side of the MDE, which is intersected by linear infrastructure features.

Aerodrome study area:

- Major river/ creek bed: Ap EcMgCc- *Eucalyptus camaldulensis* open low to mid woodland, over +/- *Melaleuca glomerata*, *Acacia ampliceps* and *Melaleuca linophylla* sparse tallshrubland, over *Cenchrus ciliaris* open tussock grassland



- Minor drainage and creeklines: ApImTe- *Acacia pyrifolia* subsp. *pyrifolia*, *Acacia tumida* subsp. *pilbarensis* and *Acacia acradenia* open tall shrubland, over *Indigofera monophylla*,

Eucalyptus camaldulensis was restricted to the major waterways at the North Star Aerodrome study area and dominated by the known phreatophytic species; *Eucalyptus camaldulensis* subsp. *obtusata* and often associated with *Melaleuca argentea*.

North Star Extension Survey area:

One vegetation community recorded in the NSE area by Ecoscape (2023) was described as:

- EvApTI: *Eucalyptus victrix* and *Corymbia hamersleyana* low open woodland over *Acacia pyrifolia* var. *pyrifolia*, *A. tumida* var. *pilbarensis* and *Petalostylis labicheoides* mid sparse shrubland over *Triodia longiceps*, *Cymbopogon ambiguus* and *Stemodia grossa* low open hummock/tussock grassland/forbland Landform: Drainage lines.

Eucalyptus victrix is representative of potential to be a GDE and has the potential to support riparian vegetation.

3.2.2 Significant flora

A total of four significant flora taxa have been recorded in the Mine Development Envelope, of which *Quoya zonalis* (previously *Pityrodia* sp. Marble Bar) is listed as Threatened (Schedule 1, Division 2 – Endangered) under the BC Act and Endangered under the EPBC Act and the remaining taxa are listed as Priority flora by DBCA (Table 4).

Table 4: Significant flora

Species	Conservation status
<i>Quoya zonalis</i>	Threatened (EN - BC Act), Endangered (EPBC Act)
<i>Themeda</i> sp. Panorama	Priority 1
<i>Triodia basitricha</i>	Priority 3
<i>Ptilotus mollis</i>	Priority 4

Most of the records of *Themeda* sp. Panorama are associated with minor to moderate-sized drainage lines and may be potentially impacted by changes to surface water flows.

3.3 Program summary

The vegetation health monitoring program is adaptive. Innovations in monitoring techniques and methods will be incorporated into the program design over time. However, this will be dependent on, and driven by, the quality and quantity of data collected over time. Further, program design should be based on replicable sampling at impact and reference sites.

For on ground (plot) based monitoring, each vegetation unit will consist of a minimum of six monitoring sites per location (minimum of three impact and three reference) across all



locations in accordance with this Plan. The monitoring sites are summarised in Table 5 and shown in Figure 1. However, given the nature of the operational activities covered by this Plan there are some variations:

- Where possible, initial baseline survey(s) will be conducted during the pre-construction phase to assess the health and cover of vegetation prior to the first monitoring event (Section 3.2).
- Where baseline survey results are available, monitoring sites should be established in suitable locations within potential impact areas (impact sites) to allow for replication of results.
- The number and approach to the selection of monitoring sites varies dependent upon the vegetation type being monitored.



Table 5: Conservation significant vegetation and flora monitoring

Ref.	Flora / vegetation type	Significant environmental risk	Design	Parameter type	Monitoring parameters	Method	Monitoring effort	Timing / frequency	Monitoring sites
1	Priority flora <i>Themeda</i> sp. Panorama	Changes to surface water flows	400m ² (nominally 20 x 20m quadrats) Minimum of ten sample plants	Primary	Vegetation Condition	Visual assessment (Table 6)	Assessment of the site	Timing: 6-8 weeks post wet season (approximate timing) Frequency: Annually	Figure 1 (indicative monitoring site locations) Impact: 3 Reference: 3 Total: 6
					Plant health	Visual assessment (Table 8)	Assessment per plant		
					Plant cover	Measured in cm	Two line intercepts per site		
				Secondary	Number of plants	Count	Assessment per site		
					Plant height	Measured in cm	Assessment per plant		
					Plant width	Measured in cm (largest perpendicular)	Assessment per plant		
					Insect/pathogen attack	Visual assessment (Table 10)	Assessment per plant		
					Reproductive material	Visual assessment of abundance of buds, flowers and fruit	Assessment per plant		
					Weeds	Species diversity and abundance (number of plants and percentage cover)	Assessment per quadrat		
					Surface water flow	Surface water flows measured using peak level indicator or pressure transducer	Assessments per quadrat, where available		
					Meteorological data	Local weather stations, near monitoring sites. Tipping bucket rain gauge	One per operating site		
					Environmental threats	Visual assessment (observation, mapping, photographs etc)	Visual assessment of the quadrat		
					Photo point monitoring	Fixed photo points	At least one per site		
2	Threatened Flora <i>Quoya zonalis</i> (T)	Clearing Weeds Dust	400 m ² (nominally 20 x 20 m) quadrats Minimum of ten sample plants	Primary	Vegetation Condition	Visual assessment (Table 6)	Assessments per quadrat	Timing: 6-8 weeks post wet season (approximate timing) Frequency: Annually	Figure 1 Impact: 5 Reference: 5 Total: 10
					Plant health	Visual assessment (Table 8)	Assessment per plant		
				Secondary	Number of plants	Count	Assessments per quadrat		
					Plant height	Measured in cm	Assessment per plant		
					Canopy width	Measured in cm (largest perpendicular)	Assessment per plant		
					Insect/pathogen Attack	Visual assessment (Table 10)	Assessment per plant		
					Reproductive material	Visual assessment of abundance of buds, flowers and fruit (Table 9)	Assessment per plant		
					Dust	Visual assessment (Table 11)	Assessment per plant		
					Weeds	Species diversity and abundance (number of plants and percentage cover)	Assessments per quadrat		
					Meteorological data	Local weather stations, near monitoring sites. Tipping bucket rain gauge	One per operating site		
					Environmental threats	Visual assessment (observation, mapping, photographs etc)	Visual assessment of the quadrat		
					Photo point monitoring	Fixed photo points	At least one per site		



Ref.	Flora / vegetation type	Significant environmental risk	Design	Parameter type	Monitoring parameters	Method	Monitoring effort	Timing / frequency	Monitoring sites
3	Riparian vegetation (inclusive of GDV/PGDV) surrounding significant pools (inclusive of Mundagoora Pool)	Groundwater abstraction Changes to surface water flows	2,500 m ² quadrats containing ten mature sample trees per keystone species present	Primary	Vegetation Condition	Visual assessment of condition and health (Table 6)	Per quadrat	Timing: Dry season (approximate timing September to November) Frequency: Annually	Figure 1 Impact: 5 Reference: 3 Total: 8
					Leaf water potential	Leaf shoots are collected pre-dawn and midday from mid-canopy to be tested for water potential using a pressure chamber)	3 samples per tree, 10 trees per quadrat		
					Tree health	Visual assessment of tree health (Table 7)	Per tree		
					Remote sensing (NDVI or equivalent)	Control chats of monthly average measurements over monitoring zones using Landsat and/or Sentinel-2 multispectral imagery (or similar dataset), on ground validation undertaken concurrent with field monitoring	Assessment per monitored pool		
				Secondary	Pool level ⁷	Water level loggers – pressure transducer	Automatic logging 3 hour for pool		
					Groundwater levels	Monitoring bores	Bores in close proximity to quadrat, where available		
					Meteorological data	Local weather stations, near monitoring sites. Tipping bucket rain gauge	One per operating site		
					Environmental threats	Visual assessment (observation, mapping, photographs etc)	Visual assessment of the quadrat		
Photo point monitoring	Fixed photo points	At least one per site							
4	Riparian vegetation (inclusive of GDV/PGDV) downstream of the mine (inclusive of North Star Extension)	Changes to surface water flows	2,500 m ² quadrats containing ten mature sample trees per keystone species present	Primary	Vegetation Condition	Visual assessment of condition and health (Table 6)	Per quadrat	Timing: Dry season (approximate timing September to November) Frequency: Annually	Figure 1 Impact: 4 Reference: 3 Total: 7
					Chlorophyll Fluorescence	Measurements relating to maximum quantum yield (Fv/Fm) via a chlorophyll fluorometer after dark adaption of leaf shoots	3 samples per tree, 10 trees per quadrat		
					Tree health	Visual assessment of tree health (Table 7)	Per tree		
					Remote sensing (NDVI or equivalent)	Control chats of monthly average measurements over monitoring zones using Landsat and/or Sentinel-2 multispectral imagery (or similar dataset), on ground validation undertaken concurrent with field monitoring	Assessment per monitored creek		
				Secondary	Surface water flow	Surface water flows measured using peak level indicator or pressure transducer	Assessments per quadrat, where available		
					Meteorological data	Local weather stations, near monitoring sites. Tipping bucket rain gauge	One per operating site		
					Environmental threats	Visual assessment (observation, mapping, photographs etc)	Visual assessment of the quadrat		
					Photo point monitoring	Fixed photo site	At least one per site		
5	Environmental weeds	Introduction and or spread of environmental weeds from project area into adjacent native vegetation	Three 10m x 10m quadrats per monitoring site (assessment per quadrat)	Primary	Species diversity	Count of the number of different weed species present	Assessment per quadrat	Timing: 6-8 weeks post wet season (approximate timing) Frequency: Biennially	Figure 1 Impact: 11 Reference: 8 Total: 19
					Total weed cover	Calculate total weed cover within each monitoring site			
				Secondary	Density	An estimate of density of each weed species within each monitoring site			
					Species cover class	Estimate of cover class per weed species present within each monitoring site			
					Environmental threats	Observation, mapping, photographs etc			
					Meteorological data	Data from Weather Stations installed near monitoring site locations			
Photo point monitoring	Fixed photo points	At least one per quadrat							

⁷ Reference sites may not be able to collect data for parameter due to accessibility of land.



3.4 Monitoring parameters and methods

A set of monitoring parameters and methods have been selected to provide broad coverage of potential changes in vegetation health that can be expected under a range of different mining-related impacts. The number of monitoring parameters has been selected based on the site-specific conditions and vegetation units. The advent of new technology may result in changes to sampling methods employed.

3.4.1 Vegetation condition and tree/plant health

Vegetation condition and health for all vegetation is assessed using a condition rating scale for the Eremaean and Northern Botanical Provinces (Table 6) as per the EPA (2016) *Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment*. Tree health for keystone species associated with GDVs and potential GDVs is assessed using a scale adapted from the Souter *et al.* (2010) condition rating scale (Table 7). Plant health of conservation significant species is assessed using the health rating scale in Table 8. Reproductive material present on conservation significant species is assessed using the health rating scale in Table 9, and the degree of insect or pathogen attack is scored according to the rating scale in Table 10. Dust deposition is scored as per the ordinal scale presented in Table 11 that has been taken from that presented in Matsuki *et al.* (2016).

Table 6: Vegetation condition scale for all vegetation communities (adapted from Keighery 1994 and Trudgen 1991)

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



Table 7: Health assessment for trees and shrubs (adapted from Souter *et. al* 2010)

Condition assessment	Score	Health ranking	Health rating/ description
Crown extent and density	0	0%	None
	1	1-10%	Minimal
	2	11-25%	Sparse
	3	26-75%	Medium
	4	76-90%	Major
Epicormic growth	1	Absent	Effect is not visible
	2	Scarce	Effect is present within the assessable crown but not readily visible
	3	Common	Effect is clearly visible through the assessable crown
New tip growth scores	1	Absent	Effect is not visible
	2	Scarce	Effect is present within the assessable crown but not readily visible
	3	Common	Effect is clearly visible through the assessable crown
Reproduction scores	1	Absent	Effect is not visible
	2	Scarce	Effect is present within the assessable crown but not readily visible
	3	Common	Effect is clearly visible through the assessable crown
Leaf die off	1	Absent	Effect is not visible
	2	Scarce	Effect is present within the assessable crown but not readily visible
	3	Common	Effect is clearly visible through the assessable crown
Presence of Mistletoe	1	Absent	Effect is not visible
	2	Scarce	Effect is present within the assessable crown but not readily visible
	3	Common	Effect is clearly visible through the assessable crown
Bark Condition	0	Intact	Intact bark
	1	Minor	Minor cracks
	2	Moderate	Moderate bark cracks
	3	Extensive	Extensive bark cracks
	4	Absent	Long term dead tree

Table 8: Plant health assessment for flora

Health score	Health category	Description
4	Healthy Plant	No obvious signs of stress, no chlorosis or wilting
3	Slightly Stressed	Some signs of stress but not readily visible, reduced vigour, browning of lead tips
2	Moderately Stressed	Stress is clearly visible, reduced vigour, wilting, chlorosis or necrosis of up to one third of leaf area
1	Highly Stressed	Severe wilting or necrosis
0	Dead	All leaves dry, shrivelled and necrotic



Table 9: Plant reproductive material abundance

Reproduction scores	Reproduction scores	Description
3	Prolific	Reproductive material is dominant through the assessable crown
2	Common	Reproductive material is clearly visible through the assessable crown
1	Scarce	Reproductive material is present within the assessable crown but not readily visible
0	Absent	Reproductive material is not visible

Table 10: Insect/ pathogen damage abundance

Damage score	Damage category	Description
3	Prolific	Effect is dominant through the assessable crown
2	Common	Effect is clearly visible through the assessable crown
1	Scarce	Effect is present within the assessable crown but not readily visible
0	Absent	Not visible

Table 11: Dust score (taken from Matsuki *et. al* 2016, Appendix S1)

Dust score	Dust category	Description
5	Extreme	Dust is caking the plant thickly, leaf/stems take on colour of dust Dust falls off in a thick cloud when plant is shaken Dust can be rubbed off leaves or stems Dust feels powdery/gritty between fingers, smear clayey when wet
4	High	Plant covered in dust, but leaf colour is faintly visible through dust layer Dust falls off in a cloud when plant is shaken Dust can be rubbed off plant Grit/powder noticeable between fingers, smear opaque when wet
3	Moderate	Plant obviously covered in dust but leaf colour plainly visible Dust falls off in a thin cloud when plant is shaken Dust can be rubbed off plant Grit/powder noticeable between fingers, smear thin when wet
2	Low	Thin layer of dust apparent on leaves / stems Dust may or may not come off when plant is shaken Only very small amount of dust can be rubbed off Amount of dust too little to be noticeable between fingers
1	Negligible	No dust obviously visible on plant Virtually no cloud of dust when plant is shaken No trace of dust when rubbing plant

3.4.2 Remote sensing of vegetation health

Remote sensing analysis is used as a complementary monitoring approach to provide whole of system context that may be missed by the primary fixed site and plant/tree-based methods. Fortescue typically uses comparative analyses of Nominalised Difference Vegetation Index (NDVI) derived from multispectral imagery acquired from several sources according to the intended use scenarios. In cases where NDVI may not provide a reliable indicator of vegetation health (e.g. were a high proportion of the area visible from above may be covered



by senescent material, or have inherently sparse photosynthetically active biomass) alternative remotely sensed vegetation indices/parameters will be used in accordance with published literature (e.g. fractional cover as a potential indicator of grassland health change (Scarth 2012)).

For long-term time series analyses publicly available medium-resolution satellite imagery (Landsat and Sentinel) are utilised due to high temporal resolution (1988 to present, captured every 5 to 16 days) and comparability (true surface reflectance products available). This satellite data is supplemented with imagery captured from aerial survey in approximately June/July of each year to a spatial resolution of 0.5 m for more detailed interrogation (change detection) of areas of interest.

3.4.2.1 Extent of analysis and zonation

For remotely sensing the outer extent of the analysis area is defined by the vegetation type boundaries mapped during baseline studies for each monitoring receptor. These analysis areas are then divided in areas of direct impact, indirect (proximity) and reference zones based on the understood nature of threatening processes identified during the environmental impact assessment (temporal and spatial extents, and relative degree of impacts) to allow comparative analysis.

3.4.2.2 Satellite based comparisons

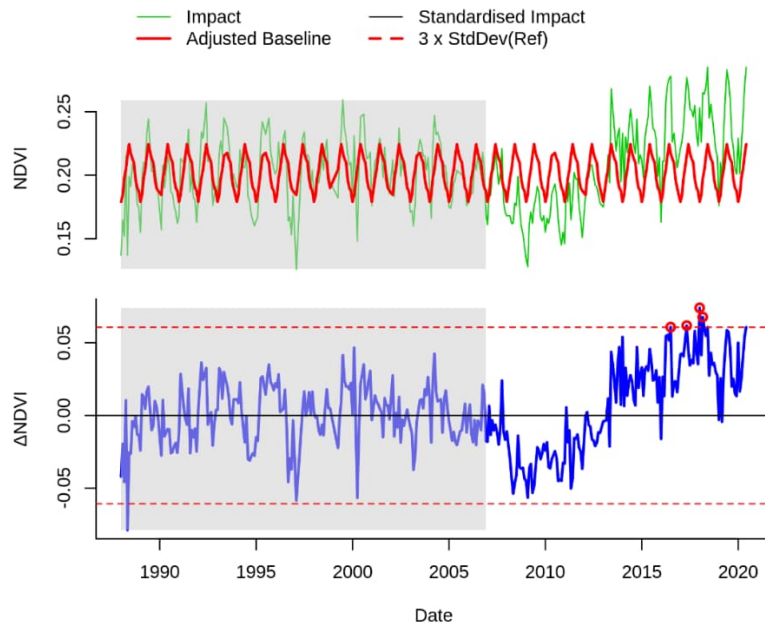
NDVI values can be seen to fluctuate as a function of seasons, rainfall or surface flow variation, changing events, trends and random effects that influence the spectral reflectance characteristics. In the absence of events, the NDVI values can be seen to follow an average periodic function of season and time, with residual differences (between the actual values and the prediction) that approximate a normal distribution. Remote sensing of vegetation health will analyse a deep time series of NDVI values to determine when and where changes to vegetation health occur.

Establishment of Pre-Impact Baseline Model

Each individual pixel in the monitoring area has an NDVI value history through the baseline period that can be extracted as a series of models. In order to create a stable baseline function, NDVI values will be aggregated within polygons delineating mapped vegetation type boundaries. A function describing the seasonally adjusted baseline mean and corresponding residual statistics will be determined for each vegetation type polygon and will remain static for ongoing analysis against the baseline conditions (see Graph 1). Instances where a NDVI value exceeds three times the baseline RSME (note that RMSE and standard deviation are numerically equivalent in this method) away from the adjusted baseline mean on 4 consecutive occasions (months) are flagged as a deviation from the long-term baseline model that may signify a vegetation health change event.



Where an alternative metric is utilised instead of NDVI (e.g., fractional cover), it will also be calculated and modelled in the same way on a per-community, per-monitoring area basis.



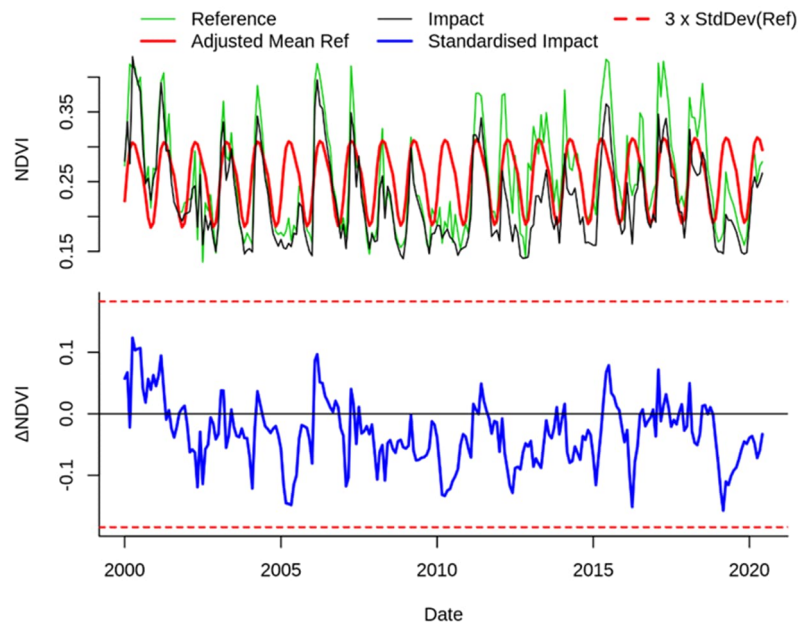
Graph 1: Baseline comparison of monthly NDVI means for a vegetation community/monitoring zone

Control-Impact Comparisons

The control-impact approach is similar to the baseline approach, except that the comparison model is taken from pixel values that have been spatially aggregated over a, or series of, reference (control) polygons, geographically located in a representative local area outside of potential impact. This comparison model is then adjusted based on inherent differences between the potential impact and control polygons as measured during the temporal analysis prior to project commencement. For each reporting period, vegetation index values within the monitoring areas will be compared with those with those of an appropriate local reference areas. Spatial means and standard deviations of each vegetation type in the reference areas will be calculated, and used to standardise values within the monitoring areas, such that the standardised value:

$$Z_i = \frac{V_i - \mu_c}{\sigma_c}$$

where V_i is the value within the monitoring area, and μ_c and σ_c are the mean and standard deviation of values from the reference area. As per the baseline comparison instances where a NDVI value exceeds three times the RSME away from the adjusted control comparison on 4 consecutive occasions flag a deviation that may signify a vegetation health change event (see Graph 2).



Graph 2: Impact and reference comparison of monthly NDVI means for a vegetation community/monitoring zone

3.4.2.3 On ground validation

All potential vegetation health change events as flagged as part of remote sensing analyses will be subject to on ground validation. Those areas that will be included for ground truthing will be those monitoring zones that have had four consecutive events (months) with measurements below three standard deviations of its established baseline mean, and the difference between the impact and reference monitoring zones also exceeds three standard deviations below the adjusted reference mean.

The verifications will consist of a surveyor traversing the area of detected vegetation health decline to assess if it outside the range of natural variability, likely to continue/extend or recover (unassisted) over time, record representative rapid assessment points/relevés to document (including representative photographs) any evidence of casual factors, other relevant observations and accurately delineate boundaries where feasible.

3.4.3 Monitoring timing

Monitoring timing is based upon a review of each target vegetation type and the associated significant environmental risks, to ensure that timing is appropriate to maximise detection of impacts (Table 5).

There are two monitoring seasons: Dry and Post Wet. Timing of the monitoring seasons may be approximate to allow for access constraints (i.e., due to inclement weather) and resource availability (i.e., specialist consultants).



3.4.3.1 Dry season

In the Pilbara, the best time of year to detect change in vegetation health associated with mounding, drawdown, and interruption of sheetflow is in the dry season, typically between September to November. This is the time of peak drought stress based on antecedent rainfall, high temperature and evaporation. At this time of year, the vegetation is reliant on stored soil water in deeper layers (from rainfall earlier in the year) or groundwater. The vegetation will respond to the availability of these sources.

In the period April to June, vegetation utilises shallow soil water stores replenished by recent rainfall. Under these conditions it is difficult to detect any difference in the plant water status of vegetation across the landscape. In addition, hydrological conditions in April to June can vary significantly between years, which further confounds time series data interpretation. In contrast, the weather in September to November is much more reliable.

3.4.3.2 Post wet season

The post wet season, typically between April to June, is considered the best time to determine the health of vegetation communities that can only be determined by community condition, species composition and or plant health. For example, monitoring for Priority Flora is conducted during the post wet season as they are likely to be exhibiting peak health in response to seasonal rainfall.

3.4.4 Data handling and statistical analysis

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

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

Statistical (univariate and multivariate) analysis methods for vegetation health monitoring will be undertaken using the most appropriate method for the relevant parameters. Analysis will comprise:

- Parametric tests (i.e., T-test, ANOVA) where data meets assumptions of parametric tests.
- Non-parametric tests (i.e., Mann-Whitney U Test, Kruskal-Wallis) where data does not meet assumptions of parametric tests.



- Scatterplots where statistical inference is not feasible.

A statistically significant difference will be determined using the above statistical techniques with significance (P) set at $P < 0.05$.



4 ADAPTIVE MANAGEMENT AND REVIEW

Fortescue will implement adaptive management practices to learn from the implementation of mitigation measures and monitoring. Adaptive management practices that will be implemented will include:

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

The overarching monitoring program will be technically assessed and reviewed every five years. The assessment and review will be undertaken by an independent Pilbara ecology expert with a relevant tertiary qualification and a minimum 10 years terrestrial Pilbara ecology experience. The main objective of the assessment and review will be to ensure that the methods, parameters and frequency used are considerate and appropriate to the findings of the monitoring program. If no measure/targets are exceeded (detailed in Table 2) after five years, the frequency of monitoring will be reduced to a frequency supported by the review.

Review of the Plan will be undertaken every five years or in response to adaptive management.



5 STAKEHOLDER CONSULTATION

Fortescue has undertaken stakeholder consultation program whereby landowners, regulators and other relevant parties have been consulted with regard to investigation and design through the environmental approvals process.

Fortescue is committed to continue this stakeholder consultation process throughout the life of the project, increasing engagement closer towards closure and decommissioning. Stakeholder communication will be effectively managed through a targeted stakeholder communication strategy which reflects stakeholder needs and manages stakeholder expectations.

Table 12 will be updated following receipt of stakeholder comment as a result of the review and approval process.

Table 12: Stakeholder consultation

Stakeholder	Correspondence	Changes
DEMIRS	Fortescue: Submission of <i>Iron Bridge Vegetation Health Monitoring and Management Plan</i> (662NS-0000-PL-EN-0004 rev 1) in support of <i>North Star Stage 2 (Amendment 2) Mining Proposal</i> (NS-AP-EN-0012; Reg ID 93044).	
DWER	Fortescue: Submission of <i>Iron Bridge Vegetation Health Monitoring and Management Plan</i> (662NS-0000-PL-EN-0004 rev 2) in support of the submission for the North Star Extension Part IV Section 38 Referral. Monitoring amended to include North Star Extension area.	<i>Iron Bridge Vegetation Health Monitoring and Management Plan</i> (662NS-0000-PL-EN-0004 rev 2)
DWER	Fortescue: Submission of <i>Iron Bridge Vegetation Health Monitoring and Management Plan</i> (662NS-0000-PL-EN-0004 rev 3) in support of the submission for the North Star Extension	<i>Iron Bridge Vegetation Health Monitoring and Management Plan</i> (662NS-0000-PL-EN-0004 rev 3)



6 REFERENCES

This report and all internal supporting documents will be managed as per Fortescue Document Governance Standards. These may be read in conjunction with this report.

- [1] ecologia Environment (2012) Fortescue Metals Group Ltd Northstar vegetation and flora assessment. Unpublished report prepared for Fortescue Metals Group Ltd.
- [2] ecologia Environment (2023) North Star Extension Targeted Flora Assessment. Unpublished report prepared for Fortescue Metals Group Ltd.
- [3] Ecoscape (2020) North Star Extension Flora and Vegetation Survey. Unpublished report prepared for Fortescue Metals Group Ltd.
- [4] Environmental Protection Authority. (2016). Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. Perth, Western Australia.
- [5] Keighery, B. J. (1994). Bushland Plant Survey: A guide to Plant Community Survey for the Community. *Wildflower Society of WA (Inc)*.
- [6] Matsuki, M. and Gardener, M. and Smith, A. and Howard, R. and Gove, A. 2016. Impacts of dust on plant health, survivorship and plant communities in semi-arid environments. *Austral Ecology*. 41 (4): pp. 423-433.
- [7] Souter et.al (2010) Souter N.J., Cunningham S., Little S., Wallace T, McCarthy B and Mark Henderson (2010), 'Evaluation of a visual assessment method for tree condition of eucalypt floodplain forests', *Ecological Management & Restoration*, Vol 11 No 3 December 2010.
- [8] Stantec (2023) North Star Proposed Extension: Significant Flora and Riparian Vegetation Risk Assessment.
- [9] Trudgen, M.E. (1991). 'Vegetation condition scale', in National Trust (WA) 1993 Urban
- [10] Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (inc.), and the Tree Society (Inc.), Perth.

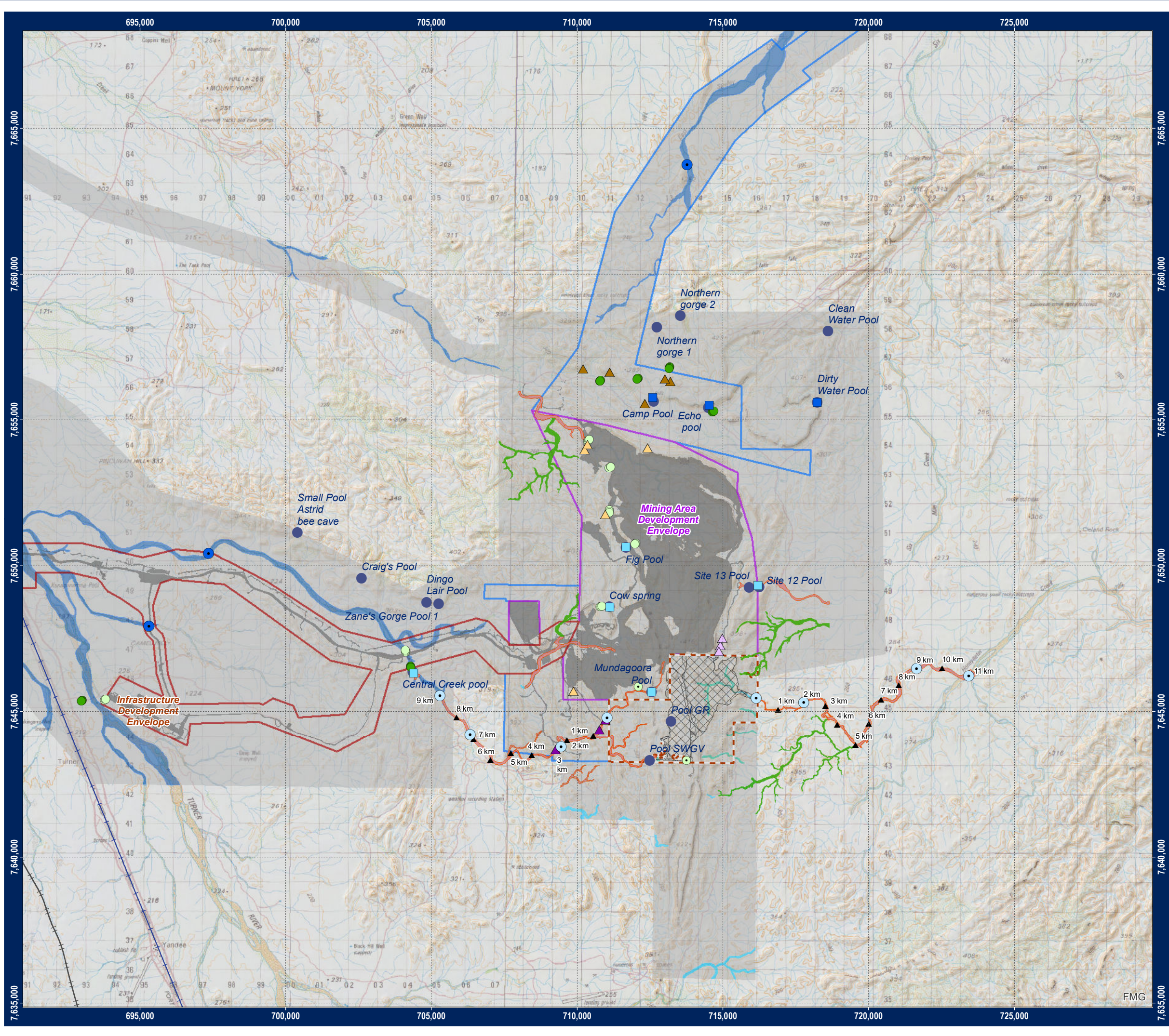


DOCUMENT CONTROL

Iron Bridge Vegetation Health Monitoring Plan		
Status	DRAFT	23-Apr-24
Summary of Changes	Updated to include addition of North Star Extension	
Author	Jane Humphrey & Jared Nelson	_____ Signature
Checked or Squad Review# (if applicable)	Squad review	_____ Signature
Approved	Todd Edwards	_____ Signature
Next Review Date (if applicable)	23-Apr-29	



FIGURE 1 VEGETATION HEALTH MONITORING SITES: IRON BRIDGE (NORTH STAR)



LEGEND

● FMG Pools	■ Mining Proposal Disturbance Footprint
North Star Proposed VHM Monitoring Locations	▨ Proposed Amendment
<i>Themeda sp. Panorama</i>	⊠ Disturbance Footprint
▲ Potential Impact Monitoring Site	Iron Bridge EP Act Part IV Development Envelopes
▲ Reference Monitoring Site	▭ Infrastructure Development Envelope
Quoya zonalis	▭ Mining Area Development Envelope
▲ Potential Impact Monitoring Site	▭ Slurry Corridor Development Envelope
▲ Reference Monitoring Site	▭ Water Corridor Development Envelope
Riparian Vegetation (inc. GDV) - Significant Pools	North Star Vegetation Mapping
■ Potential Impact Monitoring Site	■ GDV
■ Reference Monitoring Site	■ Potential GDV
Riparian Vegetation (inc. GDV) - Creeklines - Indicative	■ Riparian
● Potential Impact Monitoring Site	■ Mapping Boundary
● Reference Monitoring Site	
North Star Weed Monitoring Sites	
● Potential Impact	
● Reference	
○ Indicative replacement Potential Impact sites for those removed within NSE Development Footprint	
Riparian/GDV NDVI Analysis Zones	
■ Potential Impact	
■ Reference	

Data Source(s):
Topo, GA

0 2 4 6 8
Kilometres

Iron Bridge Mine Vegetation Monitoring Sites

Requested By: Jared Nelson	Date: 24/04/2025
Drawn By: Jared Nelson	Size: A3L
Revised By: jarnelson	Revision: 2
Approved By:	Confidentiality: 0
Scale: 1:125,000	
Coordinate System: GDA 1994 MGA Zone 50	
Document Name: 662NS_0000_MP_EN_0245.020_r3	

FMG accepts no liability and gives no representation or warranty, express or implied, as to the information provided including its accuracy, completeness, merchantability or fitness for purpose.



APPENDIX A COMMONWEALTH AND STATE LEGISLATION RELATING TO VEGETATION AND FLORA

Legislation	Application
<i>Biosecurity and Agriculture Management Act 2007 (WA)</i>	Prevention of new animal and plant pests and diseases from entering the State and the management of, and limitation to the spread of, those pests and diseases already present.
<i>Biodiversity Conservation Act 2016 (WA)</i>	Conservation and protection of biodiversity and biodiversity components.
<i>Conservation and Land Management Act 1984 (WA)</i>	Provides for the vesting or reservation of land for conservation purposes, and the ability to enter into agreements with private landholders and pastoral lessees. It establishes a number of statutory bodies including the Conservation Commission of Western Australia.
<i>Environmental Protection Act 1986 (WA)</i>	State environmental impact assessment and Ministerial approval process.
<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>	Assesses the significance of fauna species and forms the framework for significant species protection at the Commonwealth level.
<i>Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (WA)</i>	Regulates the clearing of native vegetation
<i>Rights in Water and Irrigation Act 1914 (WA)</i>	Relates to rights in water resources, to make provisions for the regulation, management, use and protection of water resources, to provide for irrigation schemes and for related purposes.



APPENDIX B ACRONYMS AND DEFINITIONS

Acronym / Term	Definition
ANOVA	Analysis of Variance
Conservation Significant Flora and Vegetation	<p>Flora and vegetation may be considered significant for a range of reasons, including, but not limited to the following:</p> <p>Flora</p> <ul style="list-style-type: none"> • being identified as threatened or priority species. • locally endemic or associated with a restricted habitat type (e.g., surface water or groundwater dependent ecosystems). • new species or anomalous features that indicate a potential new species. • representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range). • unusual species, including restricted subspecies, varieties or naturally occurring hybrids. • relictual status, being representative of taxonomic groups that no longer occur widely in the broader landscape. <p>Vegetation</p> <ul style="list-style-type: none"> • being identified as threatened or priority ecological communities. • restricted distribution. • degree of historical impact from threatening processes. • a role as a refuge. • providing an important function required to maintain ecological integrity of a significant ecosystem. <p>(Environmental Factor Guideline for Flora and Vegetation, EPA 2016)</p>
DWER	Department of Water and Environmental Regulation
Environmental exclusion zone	Geospatial locations of features that have legislative or other assigned protection (e.g., areas that are not permitted by Ministerial Statement to be disturbed).
Environmental weeds	<ul style="list-style-type: none"> • Weeds of National Significance (WoNS). • Declared Pests that require management within the Local Government Area(s) where the Fortescue controlled site is located. • Environmental Weeds rated by PaWS with an ecological rating of High or Unknown and invasiveness rating of Rapid or Moderate within the Pilbara Ranking Summary. Environmental weeds rated as High or Unknown and Rapid or Moderate considered important for pastoralists purposes (e.g. Buffel grass and Birdwood grass) are only Priority Weeds within pastoral exclusion areas. • Weeds that have not been recorded in the Pilbara as Declared Pests or Environmental Weeds within the Pilbara Ranking Summary and have been determined to be introduced into the project area as a result of the implementation of the proposal. • Weeds that have not been recorded in the Pilbara as WoNS, Declared Pests, or Environmental Weeds within the Pilbara Ranking Summary and have been determined to be introduced into the project area because of the implementation of the proposal. • New weed species that were not identified during the baseline surveys or within the surrounding area (up to 50 km beyond the project boundary).
<i>EP Act</i>	<i>Environmental Protection Act 1986</i>
GDE	Groundwater-dependent Ecosystem
GDV	Groundwater-dependent Vegetation
GIS	Geographical Information Systems



LUC	Land Use Certificate. A certificate issued through a web-based system to confirm that proposed land use activities adhere to the correct approvals granted by Government departments. A LUC is required whenever any work (e.g., access, ground disturbance, maintenance, rehabilitation) is undertaken. The LUC has sensitivity checks against GIS spatial data to determine if the area proposed for works intersects with any mapped constraints, including conservation significant flora/vegetation, weeds, and environmental exclusion zones datasets. Depending on the type of constraint, proposed works will be referred for assessment or blocked. The LUC is then assessed by key Fortescue stakeholders (e.g., Tenure, Environment, Heritage, Water Infrastructure) to determine if the activities can be approved. Approval may be unconditional, or subject to conditions (i.e., implement weed hygiene measures).
MDE	Mine Disturbance Envelope
MS	Ministerial Statement
NDVI	Normalised Difference Vegetation Index
RASCI	Responsible-Accountable-Supportive-Consulted-Informed
TSF	Tailings Storage Facility
WA	Western Australia
WRD	Waste Rock Dump



APPENDIX C ROLES AND RESPONSIBILITIES

All Fortescue employees and contractors are required to comply with the requirements of this Plan.

During construction stages, the Project Director will be accountable for ensuring the requirements of this Plan are met.

During operational, decommissioning and closure stages the General Manager is accountable for fulfilling the requirements of this Plan.

Where responsibilities are delegated, this must be clearly recorded and communicated.

The RASCI framework should be utilised to delegate roles, responsibilities, and review and approval levels. RASCI is used to denote:

R-Responsible	Those who do the work to achieve the task.
A-Accountable	Those who are ultimately accountable for the completion of the deliverable or task and the one to whom the Responsible person is accountable.
S-Supportive	Resources allocated to the Responsible person and who will also assist in completing the task.
C-Consulted	Those whose opinions are sought, two-way communication.
I-Informed	Those whom are kept informed, one-way communication.