

## Disclaimer

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Statement No. 1237

## STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (*Environmental Protection Act 1986*)

### WORSLEY MINE EXPANSION – REVISED PROPOSAL

**Proposal:** Worsley Mine Expansion – Revised Proposal

**Proponent:** South32 Worsley Alumina Pty Ltd  
Australian Company Number 58 008 905 155

**Proponent address:** 108 St Georges Terrace, PERTH WA 6000

**Assessment number:** 2216

**Report of the Environmental Protection Authority:** 1768

**Introduction:** The proposal is a significant amendment to the existing Worsley Alumina - Production to Maximum Capacity of 4.7 Mtpa Alumina and Associated Mining proposal which was agreed to be implemented under Ministerial Statement 719. The EPA's Report for the existing proposal is Bulletin 1209, EPA Assessment Number 1526.

Pursuant to section 45 of the *Environmental Protection Act 1986*, it is now agreed that:

1. the significant amendment proposal described in condition A1-1, may be implemented;
2. Ministerial Statement 719 for the existing Worsley Alumina - Production to Maximum Capacity of 4.7 Mtpa Alumina and Associated Mining proposal is superseded under section 40AA (6) (b) of the *Environmental Protection Act 1986*; and
3. the implementation of the existing approved proposal as amended by the significant amendment proposal is subject to the following implementation conditions and procedures.

### Conditions and procedures

#### Part A: Proposal extent

#### Part B: Environmental outcomes, prescriptions and objectives

#### Part C: Environmental management plans and monitoring

Published on: 20 December 2024

**Part D: Compliance and other conditions**

**PART A: PROPOSAL EXTENT**

**A1 Limitations and Extent of Proposal**

A1-1 The proponent must ensure that the proposal is implemented in such a manner that the following limitations or maximum extents / capacities / ranges are not exceeded:

<b>Proposal element</b>	<b>Location</b>	<b>Maximum extent/capacity</b>
<b><i>Bauxite Alumina Project</i></b>		
Alumina Production	N/A	<b>4.7 Mtpa</b>
<b><i>Bauxite Mining</i></b>		
<b><i>Physical elements</i></b>		
Mining Development Envelope	Worsley Mine Development Envelope (WMDE) – Figure 1	<b>27,629 ha</b>
	Extended Mining Areas – Figure 3	<b>74,918 ha</b>
Existing Overland Bauxite Conveyor	Figure 3	Mine to refinery
Bauxite Transport Corridor (BTC) connecting existing conveyor to Hotham North mining region in the WMDE	Bauxite Transport Corridor (BTC) Development Envelope – Figure 1	<b>4,146 ha</b> of which <b>3,332 ha</b> overlaps the WMDE
Bauxite transport to service Extended Mining Areas	Figure 3	<b>34 km</b> extension from Hotham North to Central, <b>16 km</b> spur within Central and <b>28 km</b> extension from Central to Brookton
Clearing of Native Vegetation	Within WMDE	<b>8,823 ha</b>
	Within BTC	<b>160 ha</b>
	Within Extended Mining Areas and for transport to service these areas	<b>8,400 ha</b>
<b><i>Operational elements</i></b>		
<b>Mining rate</b>	WMDE and Extended Mining Areas	<b>Up to 18.8 Mtpa (dry)</b>

<b>Bauxite transport</b>	Existing Overland Conveyor	Cable belt conveyor and conventional idler type conveyor
	BTC and Extended Mining Areas	Conventional idler type conveyors and/or truck transport
<b>Crushing facilities</b>	WMDE and Extended Mining Areas	4 primary crushing facilities 2 secondary crushing facilities
<b>Water source and use for mining operations</b>	Groundwater and surface water in the vicinity of mining areas	900 <b>ML/a</b>
<b>Refinery</b>		
<i>Physical elements</i>		
Refinery Lease Area (RLA)	Figure 2	2,500 <b>ha</b>
Contingency Bauxite Mining Envelope (CBME) – for Contingency Mining and Residue Storage	Figure 2	747 <b>ha</b> within the RLA
Bauxite Residue Disposal Area	Figure 2	Existing footprint plus expansion into CBME to a height of <b>RL 345 m AHD</b>
Wellington Dam Pipeline	Figure 3	Wellington Dam to Refinery
Clearing of Native Vegetation	Within Refinery Lease Area (RLA) for maintenance activities	66.6 <b>ha</b>
	Within Contingency Bauxite Mining Envelope (CBME) for maintenance activities and contingency mining and residue storage	135 <b>ha</b>
	Within Wellington National Park for the Wellington Dam Pipeline	8 <b>ha</b>
<i>Operational elements</i>		
Water source and use	Surface water allocation for the RLA	Freshwater Lake 2.6 <b>GL</b> (Augustus River) and offsite purchase from water providers as required.

Bauxite stockpiles	Within the RLA	1.92 <b>Mt</b> approximately
Bauxite residue deposition rate	Within the RLA	18.5 <b>Mtpa</b> (dry)
Digestion process area emissions control	Within the RLA	Regenerative thermal oxidiser
Calciners – fuel Particulate emissions control	Within the RLA	Natural gas Electrostatic precipitators on five calciners, baghouse system on one calciner
Liquor burner emission control	Within the RLA	Baghouse, regenerative thermal oxidiser and wet scrubber
Gas fired cogeneration – capacity	Within the RLA	120 <b>MW</b>
Gas fired cogeneration (alternative) – capacity	Within the RLA	120 <b>MW</b>
Coal fired facility or gas fired facility (conversion) capacity Particulate emission control	Within the RLA	110 <b>MW</b> (electrical) Electrostatic precipitators on coal fired facilities only
Coal fired boiler – normal capacity Emission control	Within the RLA	Two circulating fluidised bed multifuel co-generation boilers 100 <b>MW</b> (electrical) 400 <b>MW</b> (thermal) Limestone injection and baghouse filters
<b>Construction and Support Facilities</b>		
<i>Physical elements</i>		
Temporary construction facilities including mobile offices and ablutions, laydown areas and field maintenance facilities, after the date of this Statement	Within the WMDE	Clearing of up to 20 <b>ha</b> of native vegetation (included within the WMDE clearing) for temporary construction and support facilities. Facilities will be located on pre-disturbed areas where possible
<i>Operational elements</i>		
Water use	Local groundwater sources within and adjacent to the WMDE	Temporary water supply of approximately 580 <b>ML/a</b> for the duration of the construction of WMDE and BTC haul roads and the conveyor system (up to three years)
<b>Other elements which affect extents of effects on the environment</b>		
Proposal time	Maximum project life	Up to 2075

	Maximum project life in the WMDE	15 years
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**Units and abbreviations**

GL – gigalitres

MW – megawatts

ha – hectares

Mt – million tonnes

km – kilometres

Mtpa – million tonnes per annum

ML/a – megalitres per annum

Mtpa CO<sub>2</sub>-e – million tonnes per annum of carbon dioxide equivalents

m AHD – metres Australian Height Datum

RL – reduced level

The following Part B comprises three parts. Part B(A) includes conditions relating to the combined proposal, Part B(B) includes conditions relating to the **extended mining areas** assessed in EPA Bulletin 1209 and Part B(C) includes conditions relating to the primary assessment area (**PAA**) assessed in EPA Report 1768.

## **PART B(A) – ENVIRONMENTAL OUTCOMES, PRESCRIPTIONS AND OBJECTIVES**

The following conditions relate to the implementation of the combined proposal.

### **B1 Greenhouse gas emissions**

- B1-1 The proponent must notify the **CEO** in writing within one month of it becoming aware that implementation of the proposal will not be or is not expected to be regulated under the **Safeguard Legislation** as a designated large facility (the **notifiable event**) and such notice must briefly describe the reasons for and expected duration of the notifiable event.
- B1-2 The proponent must, if requested in writing by the **CEO**, provide the **CEO** with a report on the implications for the proposal of any amendment or proposed amendment to the **Safeguard Legislation** or a decision or proposed decision made under the **Safeguard Legislation** that is specified in the **CEO's** request.
- B1-3 The report required by condition B1-2 must:
- (1) be submitted to the **CEO** within three months of the date of the **CEO's** request or such longer period as the **CEO** agrees to in writing; and
  - (2) explain the implications that the specified amendment or decision has had or is expected to have on:
    - (i) the obligation to reduce net Scope 1 **GHG emissions** from implementation of the proposal under the **Safeguard Legislation**; and
    - (ii) the quantity of actual and net Scope 1 **GHG emissions** likely to result from the future implementation of the proposal.
- B1-4 Within six months of the conclusion of five years of the date of this Statement, and every five years thereafter, the proponent shall provide a report to the **CEO** that describes for the five-year period to which the report applies:
- (1) the quantity of **Non-Safeguard GHG emissions**;
  - (2) the quantity of **Non-Safeguard Net GHG emissions**;
  - (3) the areas of land established with vegetation by rehabilitation of mining areas and restoration of previously cleared land as required by or under conditions B9, B10, B14 and B15 and the quantity of **GHG emissions** that have been sequestered by the vegetation established on that land;
  - (4) the trajectory and progress towards zero **Non-Safeguard Net GHG emissions** by 2050; and
  - (5) whether the proponent is compliant with condition B1-5 for any period or part of a period that occurs after 1 July 2050.
- B1-5 The proponent shall ensure that **Non-Safeguard Net GHG emissions** shall be zero (0) for every five (5) year period, or part of a five (5) year period, occurring after 1 July 2050.

## **B2 Rehabilitation, Protected Areas and Ecological Linkages**

B2-1 The proponent must ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) ensure that in any three (3) financial year period commencing after the date of this Statement that the hectares of **rehabilitation of areas mined** is equal to or greater than the hectares of clearing of **native vegetation** for mining;
- (2) ensure the commencement of **rehabilitation** of areas cleared for infrastructure, roads or access within 18 months of that infrastructure, road or access no longer being required;
- (3) from 1 July 2033, ensure that the rehabilitation deficit associated with the Revised Proposal within the **PAA** is a maximum of 35% unless the proponent receives approval from the **CEO** to increase the rehabilitation deficit for a temporary period of no more than two (2) years.
- (4) ensure no **disturbance** or **adverse impacts** to the protected areas shown in Figure 4 except where approved by the CEO or where it occurs in the course of:
  - (a) ecological restoration or rehabilitation activities;
  - (b) maintenance and decommissioning of infrastructure within the protected areas;
  - (c) environmental monitoring activities (including installation and decommissioning of monitoring equipment and sites); or
  - (d) activities carried out to ensure compliance with legislation or approvals (including the conditions of this Statement).
- (5) ensure no **disturbance** or **adverse impacts** to more than 146.5 ha of **native vegetation** within the ecological linkages shown in Figure 5 where **disturbance** shall only be for infrastructure, roads or access and not mining;
- (6) ensure no **activities** occur in additional protected areas shown in Figure 6, and where **activities** have already occurred in these areas under MS 719, those areas must be rehabilitated in accordance with condition B14-3 to reduce the effects of habitat loss, fragmentation, modification of surface hydrology and groundwater mounding;
- (7) ensure rehabilitation is prioritised in areas adjacent to protected areas shown in Figure 4, ecological linkages shown in Figure 5 and additional protected areas shown in Figure 6; and
- (8) complete revegetation (seeding and fertilising) of areas cleared within the early rehabilitation areas identified in Figure 6 within four (4) years after clearing

activities commenced in those areas, excluding areas that are used for infrastructure.

### **B3 Decommissioning**

B3-1 The proponent shall prepare and submit a Mine Closure Plan(s) in accordance with the **DEMIRS** Statutory Guidelines for Mine Closure Plans March 2020 (or any subsequent revisions of the guidelines), to the requirements of the **CEO**, on advice of **DEMIRS** and **DBCA**.

B3-2 The proponent shall implement the proposal to achieve the following environmental objective:

- (1) to ensure that the site is left in a safe and **environmentally acceptable condition**.

B3-3 The Mine Closure Plan(s) required in condition B3-1 shall include the following:

- (1) the removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders;
- (2) the long-term management of ground and surface water systems affected by the refinery, coal stockpiles, waste disposal areas, and associated infrastructure;
- (3) rehabilitation of all disturbed areas to a standard suitable for the **proposed new land use(s)**; and
- (4) identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.

B3-4 The proponent shall review and revise the Mine Closure Plan(s) required by condition B3-1 at intervals not exceeding three (3) years, or as otherwise specified by the **CEO**, and submit the Mine Closure Plan(s) to the **CEO** at the agreed intervals.

## **PART B(B) – ENVIRONMENTAL OUTCOMES, PRESCRIPTIONS AND OBJECTIVES**

The following conditions relate solely to the implementation of the **extended mining areas** portion of the approved proposal as considered by the EPA in Bulletin 1209 and previously authorised by MS 719.

### **B4 Biodiversity-related Investigations – extended mining areas**

- B4-1 The proponent shall conduct biodiversity-related investigations for the **extended mining areas** in accordance with the endorsed **Scope of Biodiversity-related Investigations** document.
- B4-2 The proponent may revise and amend the endorsed **Scope of Biodiversity-related Investigations** document subject to the amended document being submitted to the Minister for Environment for endorsement on the advice of the Environmental Protection Authority, the **DBCA** and the **Conservation and Parks Commission**.
- B4-3 The Minister for Environment may initiate a review and/or amendment of the endorsed **Scope of Biodiversity-related Investigations** document.
- B4-4 The proponent shall implement and comply with the endorsed amended **Scope of Biodiversity-related Investigations** document referred to in condition B4-2 and B4-3.
- B4-5 The proponent shall make the endorsed **Scope of Biodiversity-related Investigations** document referred to in conditions B4-1, B4-2 and B4-3 publicly available on the proponent's website.
- B4-6 Prior to the lodgement of the Bauxite Mining Plan required by condition B8, the proponent shall prepare and submit a Biodiversity-related Investigations Report to the Minister for Environment for endorsement on advice of the Environmental Protection Authority, the **DBCA** and the **Conservation and Parks Commission** which details the results of the biodiversity-related investigations conducted as required by condition B4-1 and B4-4. The report shall include the following:
- (1) written certification that the endorsed **Scope of Biodiversity-related Investigations** document is complete;
  - (2) key biodiversity values to be protected;
  - (3) indicators, parameters or criteria to be used in measuring maintenance of the key biodiversity values identified, and ongoing monitoring requirements;
  - (4) outcomes and findings for each of the matters investigated, including:
    - (a) the occurrence, spatial extent and condition of floristic and vegetation communities at local and regional scale including **threatened ecological communities** and **priority ecological communities**;
    - (b) the occurrence, abundance and spatial extent of **threatened flora**, **priority flora** and **other significant flora**;

- (c) the role and significance of ecological linkages;
  - (d) the occurrence, severity and spatial extent of forest disease, weeds and pests and the potential for the spread of forest disease, weeds and pests;
  - (e) characterisation of landforms;
  - (f) the identification and spatial extent of fauna habitat, including specifically, habitat for **threatened fauna, priority fauna, other significant fauna** and **significant short-range endemic fauna**;
  - (g) the occurrence, abundance and distribution of terrestrial fauna, including specifically, **threatened fauna, priority fauna, other significant fauna**, and **significant short-range endemic fauna**;
  - (h) groundwater systems and the occurrence and distribution of **groundwater dependent ecosystems**;
  - (i) stream flow and quality, and stream dependent ecosystems; and
  - (j) impacts of climate change;
- (5) a description and surveyed plans of ecological linkages and the proposed areas of zero **disturbance**; and
- (6) defined buffer areas around ecological linkages and areas of zero **disturbance**.

B4-7 The proponent shall make the endorsed Biodiversity-related Investigations Report required by condition B4-6 publicly available on the proponent's website.

B4-8 The proponent shall not commence **ground disturbing activities** within the **extended mining areas** (including mining and transport corridor **construction activities**) prior to endorsement and publication of the Biodiversity-related Investigations Report required by condition B4-6.

## **B5 Flora and vegetation – extended mining areas**

B5-1 The proponent must ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) **disturb** no more than 8,400 ha of **native vegetation**;
- (2) ensure the proposal does not cause or contribute to the direct or indirect **disturbance of threatened flora** unless the **disturbance** is approved under the *Biodiversity Conservation Act 2016*;
- (3) unless otherwise approved by the Minister for Environment, on advice of the Environmental Protection Authority and the **DBCA**, ensure the proposal does not cause or contribute to the direct or indirect **disturbance** of:

- (a) vegetation complexes (as mapped for the Regional Forest Agreement) which have less than 30% of their pre-European extent remaining;
  - (b) **threatened ecological communities** as identified in the Biodiversity-related Investigations Report required by condition B4-6;
  - (c) heathland as identified in the Biodiversity-related Investigations Report required by condition B4-6;
  - (d) granite outcrops as identified in the Biodiversity-related Investigations Report required by condition B4-6;
  - (e) other naturally rare or restricted floristic communities, vegetation or ecological communities and key ecological linkages identified in the Biodiversity-related Investigations Report required by condition B4-6;
  - (f) significant populations of **priority flora** identified in the Biodiversity-related Investigations Report required by condition B4-6;
  - (g) stream zones in accordance with **DWER** guidance for protection of sensitive water bodies, except for the construction and operation of stream crossings for haul roads, service roads, transport corridors, mine water supply and other infrastructure; and
  - (h) other important conservation values and habitats identified in the Biodiversity-related Investigations Report required by condition B4-6.
- (4) without limiting condition B5-1(2) and B5-1(3), ensure that mining, transport corridor construction or operational activities do not cause or contribute to the following:
- (a) any significant **adverse impact** on any **groundwater dependent ecosystems** identified by the Biodiversity-related Investigations Report required by condition B4-6 or lead to waterlogging of significant areas of dry land vegetation;
  - (b) any increase in severity status of weeds or pests, as identified in the Biodiversity-related Investigations Report required by condition B4-6, in State Forest;
  - (c) increased spread of forest disease outside areas identified as infected by the Biodiversity-related Investigations Report required by condition B4-6;
  - (d) placing any flora species or ecological community into a higher **category of threat**; and
  - (e) causing **disturbance** in defined buffer areas around ecological linkage and areas of zero **disturbance** identified in the Biodiversity-related Investigations Report required by condition B4-6.

## **B6 Terrestrial fauna – extended mining areas**

B6-1 The proponent must ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) ensure the proposal does not cause or contribute to the direct or indirect **disturbance** of significant areas of habitat for **threatened fauna, priority fauna, other significant fauna** and **significant short-range endemic fauna** identified in the Biodiversity-related Investigations Report required by condition B4-6, unless otherwise approved by the Minister for Environment on advice of the Environmental Protection Authority and the **DBCA**; and
- (2) without limiting condition B6-1(1), ensure that mining, transport corridor construction or operational activities do not cause or contribute to placing any terrestrial fauna species into a higher **category of threat**.

## **B7 Transport Corridor Route Plans – extended mining areas**

B7-1 Prior to the commencement of **ground disturbing activities** within the **extended mining areas** (including mining and transport corridor **construction activities**), the proponent shall prepare and submit a Transport Corridor Route Plan to the Minister for Environment for endorsement on the advice of the Environmental Protection Authority and the **DBCA**.

B7-2 The Transport Corridor Route Plan shall:

- (1) describe the route, area of **disturbance** and evaluation of alternative routes considered for each proposed transport corridor; and
- (2) describe how the selected transport corridor route complies with the requirements of the endorsed Biodiversity-related Investigations Report required by condition B4-6 and is in accordance with conditions B5 and B6.

B7-3 The proponent shall implement and comply with the endorsed Transport Corridor Route Plan required by condition B7-1.

B7-4 The proponent shall make the endorsed Transport Corridor Route Plan required by condition B7-1 publicly available on the proponent's website.

B7-5 The Minister for Environment may initiate a review and/or amendment of the endorsed Transport Corridor Route Plan referred to in condition B7-1.

B7-6 The proponent shall implement and comply with the amended endorsed Transport Corridor Route Plan referred to in condition B7-5.

B7-7 The proponent shall make the endorsed Transport Corridor Route Plan referred to in conditions B7-1 and B7-6 publicly available on the proponent's website.

## **B8 Bauxite Mining Plans – extended mining areas**

- B8-1 At least twelve (12) months prior to the commencement of **ground disturbing activities** within the **extended mining areas**, the proponent shall prepare and submit a draft Bauxite Mining Plan to the **CEO, DBCA, the Conservation and Parks Commission, the Worsley Environmental Management Liaison Group** and the **Stakeholder Consultation Group** for review. The draft Bauxite Mining Plan shall:
- (1) incorporate the findings contained in the Biodiversity-related Investigations Report required by condition B4-6;
  - (2) ensure that the areas for mining are consistent with the areas of zero **disturbance**, ecological linkages, and buffers identified in the Biodiversity-related Investigations Report required by condition B4-6, and take into account the location of indicative fauna habitat zones as identified and in accordance with the requirements of the **Forest Management Plan 2024 - 2033**;
  - (3) set out the management and mitigation measures which will be undertaken to ensure that mining activities comply with conditions B5 and B6;
  - (4) set out monitoring and auditing to be conducted prior to, during and following mining activities;
  - (5) demonstrate how the proponent's implementation of the proposal protects the key biodiversity values identified in the Biodiversity-related Investigations Report required by condition B4-6 and is in accordance with conditions B5 and B6; and
  - (6) address the objectives of the **Forest Management Plan 2024 - 2033**.
- B8-2 The proponent shall revise and submit the draft Bauxite Mining Plan, taking into account all comments and recommendations (if any) received under condition B8-1, to an independent Environmental Auditor chosen by the proponent for review who will:
- (1) be an individual currently certified/accredited by RABQSA as a Lead Environmental Auditor or an individual currently certified as a Lead Environmental Auditor by an organisation accredited to ISI/IEC 17924 (by JAS-ANZ or a body recognised by JAS-ANZ); and
  - (2) within one (1) month of receiving a revised draft Bauxite Mining Plan prepare a report on whether, in its opinion, the Plan will comply with conditions B5 and B6.
- B8-3 The proponent shall submit its response to review comments received under B8-1 together with the revised draft Bauxite Mining Plan and the report prepared by the independent Environmental Auditor to **DBCA** and the **CEO** for review.
- B8-4 The proponent shall prepare a Final Bauxite Mining Plan, taking into account all comments and recommendations (if any) received from the independent Environmental Auditor referred in condition B8-2 and additional comments received under condition B8-3.

- B8-5 Prior to the commencement of **ground disturbing activities** within the **extended mining areas**, the proponent shall submit the Final Bauxite Mining Plan and the report prepared by the independent Environmental Auditor to the **DBCA** and the **CEO** who may advise the Minister for Environment of any remaining deficiencies within the Bauxite Mine Plan in which case **ground disturbing activities** within the **extended mining areas** shall not commence until the Minister has made a determination.
- B8-6 The proponent shall implement and comply with the Final Bauxite Mining Plan.
- B8-7 The proponent shall make the Final Bauxite Mining Plan publicly available on the proponent's website.
- B8-8 The proponent may revise and amend the Final Bauxite Mining Plan referred to in condition B8-6 subject to the amended Final Bauxite Mining Plan undergoing review and revision as specified in conditions B8-1, B8-2, B8-3, B8-4 and B8-5.
- B8-9 The Minister for Environment may initiate a review and/or amendment of the Final Bauxite Mining Plan referred to in condition B8-6.
- B8-10 The proponent shall implement and comply with the amended Final Bauxite Mining Plan referred to in condition B8-8 and B8-9.
- B8-11 The proponent shall make the amended Final Bauxite Mining Plan referred to in condition B8-10 publicly available on the proponent's website.

## **B9 Rehabilitation – extended mining areas**

- B9-1 On completion of the Biodiversity-related Investigations referred to in condition B4, the proponent shall use the findings of the investigations to prepare and submit a draft Rehabilitation Plan for review to the **DBCA, Conservation and Parks Commission**, the **Worsley Environmental Management Liaison Group** and the **Stakeholder Consultation Group**. The objectives of the draft Rehabilitation Plan are to ensure that:
- (1) rehabilitation research and trials are targeted to the key issues facing the rehabilitation of the proposed bauxite mine areas;
  - (2) planning and implementation of rehabilitation is carried out in a manner consistent with industry best practice;
  - (3) planning and implementation of rehabilitation is carried out in a manner consistent with relevant objectives and strategies in the **Forest Management Plan 2024 - 2033**;
  - (4) rehabilitated **native vegetation** in State Forest areas will ultimately develop into sustainable ecological systems which are compatible with surrounding **native vegetation** and its land uses, and approximates as closely as possible the pre-mining biodiversity and functional values;

- (5) rehabilitated private land areas return to a mix of productive agricultural land and native vegetation compatible with the original **native vegetation**, which at least maintains the extent of the existing **native vegetation** and enhances ecological connectivity; and
- (6) the matters identified in the report entitled, 'A Review of the Rehabilitation at Worsley Alumina's Boddington Bauxite Mine' prepared by URS Australia Pty Ltd relating to the assessment of ecosystem sustainability are given due consideration.

B9-2 The draft Rehabilitation Plan shall address the following topics which are relevant to long term sustainable rehabilitation:

- (1) objectives for rehabilitation, including site specific variation, and objectives of the **Forest Management Plan 2024 - 2033**;
- (2) an outline of proposed rehabilitation research priorities;
- (3) conduct and application of research;
- (4) topsoil management;
- (5) targets for nutrient cycling;
- (6) pest and disease control and management;
- (7) targets for flora and fauna recruitment, including specific targets for:
  - (a) the return of recalcitrant species;
  - (b) the return of key fauna habitat;
  - (c) the translocation of mature specimens of long-lived species required for fauna habitat (e.g. Xanthorrhoea and Macrozamia);
  - (d) the recolonisation of invertebrate fauna; and
  - (e) the recolonisation of mycorrhizal fungi;
- (8) hydrological function;
- (9) climate change consideration;
- (10) integration with State Forest management;
- (11) monitoring and adaptive management
- (12) plant species composition (including reference to the species listed in the report entitled, '*A Review of the Rehabilitation at Worsley Alumina's Boddington Bauxite Mine*' prepared by URS Australia Pty Ltd), including species vulnerability to fire;

- (13) long term sustainability, including criteria for assessing ecosystem sustainability on natural and disturbed land;
  - (14) completion criteria including an overall requirement that no extraordinary residual management liability (above the normal cost of managing undisturbed forest) shall accrue to the land management authority unless agreed by the State. Completion criteria should have an objective of achieving integration of the rehabilitation areas into large scale prescribed burning programs for the purpose of fire management prior to the hand-back of responsibility to the State; and
  - (15) peer review and reporting.
- B9-3 The proponent shall, at least twelve (12) months prior to commencement of **ground disturbing activities** within the **extended mining areas** (including mining and transport corridor construction), prepare and submit a final Rehabilitation Plan, taking into account all comments and recommendations (if any) received under condition B9-1, to the Minister for Environment for endorsement on the advice of the Environmental Protection Authority and the **DBCA**.
- B9-4 The proponent shall implement and comply with the endorsed Rehabilitation Plan referred to in condition B9-3.
- B9-5 The proponent shall make the endorsed Rehabilitation Plan referred to in condition B9-3 publicly available on the proponent's website.
- B9-6 The proponent shall review the endorsed Rehabilitation Plan annually and present its findings in an annual Compliance Assessment Plan submitted to the **CEO**. The review shall include the following:
- (1) presentation of results of monitoring; and
  - (2) plans for improvement in rehabilitation to meet objectives and targets where necessary.
- B9-7 The proponent may revise and amend the endorsed Rehabilitation Plan referred to in condition B9-4, in accordance with the review of condition B9-6 and subject to the amended Rehabilitation Plan undergoing review and revision as specified in condition B9-1.
- B9-8 The Minister for Environment may initiate a review and / or amendment of the endorsed Rehabilitation Plan referred to in condition B9-4.
- B9-9 The proponent shall submit the amended Rehabilitation Plan referred to in condition B9-7 to the Minister for Environment for endorsement on the advice of the Environmental Protection Authority and **DBCA**.
- B9-10 The proponent shall implement and comply with the endorsed amended Rehabilitation Plan referred to in condition B9-8 and B9-9.

B9-11 The proponent shall make the endorsed amended Rehabilitation Plan referred to in condition B9-8 and B9-9 publicly available on the proponent's website.

**B10 Environmental offsets – extended mining areas**

B10-1 The proponent shall implement offsets to achieve a net environmental benefit as a result of land **disturbance** due to mining activities.

B10-2 Prior to entering into the **extended mining areas**, the proponent shall prepare and implement an offsets program that addresses the following:

- (1) establishing conservation areas:
  - (a) provision of an area of land comparable to the area of State Forest disturbed in **extended mining areas** for conservation by means of conservation covenants or agreements; and
  - (b) the timeframe for establishment of conservation areas in conjunction with the proponent's **Ten Year Mine Plan**;
- (2) catchment and landscape enhancement for previously cleared land in the region:
  - (a) provision of up to \$100,000 per annum for the duration of mining of private land, up to a maximum of ten years; and
  - (b) the timeframe for establishment of catchment and landscape enhancement initiatives in conjunction with the proponent's **Ten Year Mine Plan**;
- (3) specific management programs:
  - (a) identification and contribution to jarrah forest conservation initiatives including:
    - (i) research and understanding of jarrah forest biodiversity values;
    - (ii) forest disease management; and
    - (iii) flora and fauna conservation programs.

B10-3 The offsets program must be prepared in consultation with the **Worsley Environmental Management Liaison Group**.

**B11 Water Supply Protection – extended mining areas**

B11-1 Prior to the commencement of any **ground disturbing activities** in areas proclaimed as water reserves or catchment areas under the *Metropolitan Water Supply, Sewerage, and Drainage Act 1909* or under the *Country Areas Water Supply Act 1947*, the proponent shall prepare a Water Resource Management Plan to the requirements of the Minister for Environment on advice of the **DWER** and the Water Corporation. The Water Resource Management Plan shall demonstrate that the **ground disturbing activities** shall have negligible impact on the quantity and quality of water supplies in the catchments.

B11-2 The proponent shall implement and comply with the endorsed Water Resource Management Plan referred to in condition B11-1.

B11-3 The proponent shall make the endorsed Water Resource Management Plan referred to in condition B11-1 publicly available on the proponent's website.

## PART B(C) – ENVIRONMENTAL OUTCOMES, PRESCRIPTIONS AND OBJECTIVES

The following conditions relate solely to the implementation of the proposal in the **PAA** as considered by the EPA in Report 1768.

### B12 Flora and vegetation – PAA

B12-1 The proponent must ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) **disturb** no more than 3,855 ha of **native vegetation**, 604 ha of **rehabilitation vegetation** and 74 ha of **plantation vegetation** after the date of this Statement.
- (2) ensure no **disturbance** or **adverse impacts** to:
  - (a) **threatened** flora including *Caladenia hopperiana*;
  - (b) *Caladenia caesarea* subsp. Mooradung;
  - (c) *Papistylus intropubens* and *Synaphea panhesya*;
  - (d) the **Mount Saddleback Heath Communities Priority Ecological Community** and **vegetation type G4**;
  - (e) **other significant vegetation**;
  - (f) **other significant flora** unless authorised by the CEO; and
  - (g) **old growth forest**.
- (3) ensure no **disturbance** or **adverse impacts** to more than:
  - (a) 2% of the **known population** of *Calytrix simplex* subsp. *simplex*;
  - (b) 8% of the **known population** of *Gastrolobium* sp. Prostrate Boddington;
  - (c) 2% of the **known population** of *Hibbertia ambita*, until it can be demonstrated that more than 100 individuals have been recorded, in which case 10% of the **known population**;
  - (d) 2% of the **known population** of *Halgania corymbosa*, until it can be demonstrated that more than 100 individuals have been recorded, in which case 10% of the **known population**;
  - (e) 11.9 ha of Williams vegetation complex after the date of this Statement; and
  - (f) 332.5 ha of Michibin vegetation complex after the date of this Statement.
- (4) ensure that the proposal does not cause or contribute to the introduction and/or spread of forest disease, including *Phytophthora cinnamomi*, outside of areas identified as infected by the pre-clearance surveys required by condition B12-3.

B12-2 The proponent shall implement the proposal to achieve the following environmental objective:

- (1) Avoid where practicable or otherwise minimise indirect **impacts** to flora and vegetation including but not limited to impacts from forest disease, dust, weeds, fire, changes in groundwater and surface water and fragmentation.

B12-3 Prior to **clearing** each area to be disturbed in the **PAA**, the proponent shall undertake surveys and forest disease mapping of that area consistent with **DBCA's *Phytophthora Dieback Interpreters Manual for Lands Managed by the Department*** and with **DBCA's *Phytophthora Dieback Management Manual***, as amended or replaced from time to time.

B12-4 Prior to **clearing** each area to be disturbed in the **PAA**, the proponent shall map the extent of **old growth forest** of that area in accordance with **DBCA's *Procedures for the assessment, identification and demarcation of old-growth forest***, as amended or replaced from time to time.

B12-5 Prior to **clearing** each area to be disturbed in the **PAA**, the proponent must undertake targeted pre-clearance vegetation and flora survey(s) of that area, in accordance with ***Technical guidance – Flora and vegetation surveys for environmental impact assessment***, or any approved updates of these guidelines. Targeted pre-clearance surveys shall:

- (1) target the following species and communities, but is not limited to:
  - (a) **threatened flora**;
  - (b) **priority flora**;
  - (c) new species, or undescribed species; and
  - (d) **threatened and priority ecological communities and vegetation type G4**.
- (2) require appropriate botanists with demonstrated experience in orchid surveys in the bioregion, for pre-clearance surveys of *Caladenia caesarea* subsp. Mooradung and threatened orchid species, including *Caladenia hopperiana*.

B12-6 In order to meet the outcomes of condition B12-1, objectives of condition B12-2 and satisfy the requirements of condition C4, within twelve (12) months from the date of this Statement, and annually thereafter, the proponent shall prepare and submit an annual Flora and Vegetation Environmental Management Plan and submit it to the **CEO** on advice from **DBCA**. This plan shall:

- (1) include details of the timing, methods, limitations, survey effort and results of the pre-clearance surveys required by conditions B12-3, B12-4 and B12-5 and demonstrate how the findings of the survey(s) have been considered, including identification of mitigation measures;

- (2) demonstrate buffer zones are appropriately sized to adequately protect the **environmental values** listed in conditions B12-1(2) and B12-1(3), from the effects of forest disease, dust, weeds, changes in groundwater and surface water and fragmentation; and
- (3) include actions to ensure that forest disease, dust, weeds, fire, changes in groundwater and surface water and fragmentation, are appropriately managed to ensure the environmental outcomes listed in conditions B12-1(2) and B12-1(3) are met.

B12-7 The proponent shall not commence **ground disturbing activities** within an area subject to the annual Flora and Vegetation Environmental Management Plan under condition B12-6, unless that plan has been approved by the **CEO**.

### **B13 Terrestrial fauna – PAA**

B13-1 The proponent must ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) **disturb** no more than the following **environmental values** after the date of this Statement:
  - (a) 276 ha of the Quindanning Timber Reserve;
  - (b) 2,033 ha of woylie (*Bettongia penicillata ogilbyi*) habitat which includes no more than 1,898 ha of the habitat shown in Figure 7;
  - (c) 4,324 ha of numbat (*Myrmecobius fasciatus*) habitat;
  - (d) 4,533 ha of **black cockatoo** foraging habitat;
  - (e) 0 (zero) trees being used, or that have **evidence of use**, by **black cockatoos** for breeding, shown in Figure 8, or as identified by pre-clearance surveys required by condition B13-4(1), unless the proponent has:
    - (i) submitted a written notice to the CEO documenting a proposal to clear such a tree or trees;
    - (ii) included in the notice referred to in condition B13-1(1)(e)(i) evidence that the tree or trees cannot be reasonably avoided;
    - (iii) included in the notice referred to in condition B13-1(1)(e)(i) an appropriate procedure that will be followed to ensure no **black cockatoos** will be present in the tree or trees at the time of the proposed clearing; and
    - (iv) within twenty-one (21) days of the submission of the notice referred to in condition B13-1(1)(e)(i) not received advice from the CEO that the proposed clearing is not authorised,

in which case the proponent may remove up to 24 trees covered by a notice issued under B13-1(1)(e)(i).

- (f) 4,459 ha of chuditch (*Dasyurus geoffroi*) habitat;
  - (g) 135 ha of western ringtail possum (*Pseudocheirus occidentalis*) habitat;
  - (h) 135 ha of quokka (*Setonix brachyurus*) habitat; and
  - (i) 245 ha of the red-tailed phascogale (*Phascogale calura*) habitat shown in Figure 9.
- (2) ensure **ongoing viability** of the woylie (*Bettongia penicillata ogilbyi*) population recorded at the Hotham North mine region shown in Figure 11 is not lost due to the proposal;
  - (3) ensure **ongoing viability** of any numbat (*Myrmecobius fasciatus*) population(s) recorded at the Hotham North and Marradong Timber Reserve mine regions shown in Figure 11 is not lost due to the proposal;
  - (4) ensure no **disturbance** to:
    - (a) the buffers identified by condition B13-4(2) for trees being used, or that have **evidence of use**, by **black cockatoos** for breeding (excluding the up to 24 trees referred to in condition B13-1(1)(e));
    - (b) peregrine falcon (*Falco peregrinus*) nests including a 30 m buffer unless the tree has not been used over two consecutive breeding seasons;
    - (c) **known records of significant short-range endemic fauna** where those fauna are only known from the **PAA** unless they are known to occur within the protected areas or ecological linkages shown in Figure 4 and Figure 5 respectively; and
    - (d) the offset values listed in Table 1 of condition B15-5 that intersect the **PAA** excluding any **disturbance** caused for the purpose of undertaking ecological restoration.

B13-2 The proponent shall implement the proposal to achieve the following environmental objectives:

- (1) minimise the risk of physical injury or mortality from **construction activities** on native fauna; and
- (2) minimise the risk of behavioural changes, health impacts, physical injury or mortality from **construction activities** on native fauna.

B13-3 Within the first twelve (12) months from the date of this Statement, the proponent shall commence:

- (1) woylie (*Bettongia penicillata ogilbyi*) surveys over the Hotham North mine region shown in Figure 11; and

- (2) numbat (*Myrmecobius fasciatus*) surveys over the Hotham North and Marradong Timber Reserve mine regions shown in Figure 11;

to determine the baseline population size during implementation of the proposal and to inform reporting associated with the Conservation Significant Fauna Environmental Management Plan required by condition B13-7.

B13-4 Prior to clearing each area to be **disturbed** in the **PAA**, the proponent shall undertake the following actions:

- (1) within seven (7) days prior to clearing, using a **fauna spotter** with experience in surveying for **black cockatoos**, **inspect** the area for **potential breeding trees**, and identify **suitable hollows** and determine if they are being used, or have **evidence of use**, by **black cockatoos** for breeding;
- (2) except where the tree is to be disturbed as one of the 24 trees referred to in condition B13-1(1)(e), identify the site-specific buffer (minimum of 30 metre radius from the base of the tree, unless advised otherwise in writing by the **CEO** for the purposes of **Critical infrastructure**) that should be applied to each identified tree that is being used or has **evidence of use** by **black cockatoos** for breeding, to ensure its viability for breeding use is not lost due to the proposal; and
- (3) identify which trees with **suitable hollows** that are not being used and do not show **evidence of use** by **black cockatoos** for breeding cannot be avoided, and document the reasons.

B13-5 The proponent shall make the methodology and findings of the inspections and buffer and avoidance determinations under conditions B13-4(1), B13-4(2) and B13-4(3), publicly available annually in a summary document on the proponent's website.

B13-6 During **clearing activities** in the **PAA**, the proponent shall undertake the following actions:

- (1) ensure the presence of **fauna handlers** to ensure condition B13-6(2) is met;
- (2) cease **clearing activities** in any area where woylie (*Bettongia penicillata ogilbyi*), numbat (*Myrmecobius fasciatus*), chuditch (*Dasyurus geoffroii*), western ringtail possum (*Pseudocheirus occidentalis*), quokka (*Setonix brachyurus*) or red-tailed phascogale (*Phascogale calura*) individual(s) are identified until:
  - (a) the individual(s) has been relocated by a **fauna handler**; or
  - (b) the individual(s) has been observed by the **fauna handler** to have moved on from the area to adjoining suitable habitat; and/or
  - (c) the **fauna handler** considers that the individual no longer occurs in the area.

B13-7 The proponent must prepare a Conservation Significant Fauna Environmental Management Plan to minimise and monitor impacts to **conservation significant fauna** from the proposal and submit it to the **CEO** for approval on advice from **DBCA**. The Conservation Significant Fauna Environmental Management Plan must:

- (1) demonstrate how impacts to **conservation significant fauna** from habitat fragmentation, mine operations and predation by feral animals will be minimised;
- (2) describe the following:
  - (a) the feral predator monitoring and management actions to be undertaken;
  - (b) the monitoring and management of ecological linkages to be undertaken;
  - (c) the monitoring and management of relocated animals;
  - (d) the **conservation significant fauna** monitoring to be undertaken including at both impact and control sites; and
  - (e) the contingency actions to be taken in the event of a decline to **conservation significant fauna** attributable to the proposal.
- (3) Include a definition for **ongoing viability** of the woylie as referred to in condition B13-1(2) and a definition for **ongoing viability** of the numbat as referred to in condition B13-1(3).
- (4) Include a definition for **inspect** as referred to in condition B13-4.

#### **B14 Rehabilitation and closure – PAA**

B14-1 The proponent must ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) rehabilitated landforms are stable and do not cause pollution or environmental harm;
- (2) rehabilitated vegetation is self-sustaining;
- (3) rehabilitated drainage lines are stable, not prone to erosion, and support ecological processes;
- (4) areas for which **rehabilitation** commences after the date of this Statement are rehabilitated to be consistent with the species diversity and abundance of **native vegetation** within comparative analogue or reference sites;
- (5) rehabilitated areas for which **rehabilitation** commences after the date of this Statement are rehabilitated to be consistent with the species diversity and abundance of fauna within comparative analogue or reference sites;

- (6) areas of State forest for which **rehabilitation** commences after the date of this Statement shall be rehabilitated with **coarse woody debris** consistent with comparative analogue or reference sites, to provide habitat for **threatened fauna** species, as soon as practicable and within twenty-four (24) months after commencing **rehabilitation**;
- (7) areas for which rehabilitation commenced before the date of this Statement are rehabilitated to be consistent with the **agreed completion criteria** that applied at the time the rehabilitation commenced.
- (8) prioritise rehabilitation areas, including specific targets for minimum timeframes from **disturbance** to rehabilitation, to reduce fragmentation and edge effects on remnant **native vegetation**;
- (9) prioritise rehabilitation areas, including specific targets for minimum timeframes from **disturbance** to rehabilitation, to **enhance** fauna ecological linkages;
- (10) monitoring of **agreed biodiversity indicators** and **agreed completion criteria** in consultation with **DBCA** and to the satisfaction of the **CEO**, and undertake independent review of biodiversity indicators and completion criteria every five (5) years following implementation of the proposal;
- (11) annual reporting on **agreed biodiversity indicators** and **agreed completion criteria**;
- (12) annual reporting on hectares rehabilitated; and
- (13) demonstrate that closure planning and rehabilitation are being undertaken in a progressive manner consistent with achievement of the above outcomes during operations, where practicable, and as soon as practicable upon closure.

B14-2 The proponent must prepare and submit a Rehabilitation Performance Report, within twelve (12) months of the issue of this Statement, and submit for approval to the **CEO** on advice from the **DEMIRS** and **DBCA**. The Rehabilitation Performance Report shall:

- (1) provide the results and analysis of long-term rehabilitation performance since mining commencement;
- (2) provide proposed biodiversity indicators and proposed completion criteria which, on approval of the **CEO**, may become **agreed biodiversity indicators** and **agreed completion criteria**;
- (3) provide historical results and outcomes of rehabilitation research and trials that were undertaken, targeting key issues facing the rehabilitation of bauxite mined areas;
- (4) provide a discussion of the results of past performance, research and trials, outcomes and improvement strategies; and

- (5) demonstrate how results of long-term rehabilitation performance have been used to inform proposed biodiversity indicators and completion criteria in condition B14-2(2), to ensure they are adaptive, evidence-based, effective, and achievable.
- (6) detail the **agreed completion criteria** applicable to **rehabilitation** that commenced before the date of this Statement.

B14-3 The proponent must prepare and submit an annual Rehabilitation Plan, by 30 September each year following the issue of this Statement, that satisfies the requirements of condition C4, to ensure the environmental outcomes required by condition B14-1 are achieved and submit for approval to the **CEO**. The plan shall:

- (1) report whether the environmental outcomes specified in condition B14-1 were achieved;
- (2) compare **environmental values** identified in condition B14-1(4), B14-1(5), B14-1(8), B14-1(9) and B14-1(11) annually;
- (3) include progress against **agreed completion criteria** and **agreed biodiversity indicators**;
- (4) identify actual progressive rehabilitation against schedule of progressive rehabilitation;
- (5) include research, trials and monitoring programs, targeting key issues in rehabilitation, to improve rehabilitation techniques, practices and outcomes;
- (6) provide results of research, trials and monitoring programs for rehabilitation;
- (7) demonstrate how outcomes from previous research, trials and monitoring programs have been incorporated into rehabilitation techniques and practices;
- (8) ensure that planning and implementation of rehabilitation is carried out in a manner consistent with relevant objectives and strategies in the **Forest Management Plan 2024 - 2033**, as amended or replaced from time to time;
- (9) include pest and disease control and management;
- (10) include topsoil management;
- (11) include climate change consideration; and
- (12) include rehabilitation monitoring, an adaptive management framework and continuous improvement strategies.

B14-4 The proponent must continue rehabilitation to achieve the outcomes required by condition B14-1 until the **CEO** confirms by notice in writing that it has been demonstrated that the relevant requirements in condition B14-1 have been met.

## **B15 Environmental Offsets – PAA**

B15-1 The proponent must implement offsets to counterbalance the significant residual impacts of the proposal on the following **environmental values**:

- (1) 2,033 ha of woylie (*Bettongia penicillata ogilbyi*) habitat;
- (2) 4,324 ha of numbat (*Myrmecobius fasciatus*) habitat;
- (3) 4,533 ha of **black cockatoo** habitat including up to 24 trees being used, or that have **evidence of use**, by **black cockatoos** for breeding where that clearing is authorised by the **CEO** under condition B13-1(1)(e);
- (4) 4,459 ha of chuditch (*Dasyurus geoffroii*) habitat;
- (5) 135 ha of western ringtail possum (*Pseudocheirus occidentalis*) habitat;
- (6) 135 ha of quokka (*Setonix brachyurus*) habitat;
- (7) 245 ha of red-tailed phascogale (*Phascogale calura*) habitat;
- (8) 11.9 ha of Williams vegetation complex; and
- (9) 332.5 ha of Michibin vegetation complex.

B15-2 The proponent must ensure the implementation of the offsets achieves the following environmental outcomes and objectives:

- (1) protection and enhancement of no less than 4,384 ha of remnant vegetation in perpetuity;
- (2) ecological restoration and protection in perpetuity of no less than 4,962 ha of agricultural land to ensure a **net-gain** in numbat, **black cockatoo**, chuditch, western ringtail possum, quokka and red-tailed phascogale habitat;
- (3) ecological restoration and protection in perpetuity of no less than a further 3,000 ha of agricultural land in the Williams River and Hotham River (including Bannister River, Wandering Brook & 14 Mile Brook) catchments shown in Figure 10;
- (4) installation of three artificial breeding hollows for every tree cleared that is being used, or that has **evidence of use**, by **black cockatoos** for breeding, where that clearing is authorised by the **CEO** under condition B13-1(1)(e);
- (5) protection of a woylie population that is at least double the size of the number of individuals impacted; and
- (6) contribute to key knowledge gaps, identified in consultation with **DBCA**, relating to the **environmental values** being impacted identified under condition B15-1, to ultimately assist with maintenance of the ongoing ecological integrity of the Northern Jarrah Forest Interim Biogeographic Regionalisation of Australia Sub-region.

B15-3 The proponent must implement the offsets in a manner that ensures:

- (1) the amount (in hectares) of habitation protection and ecological restoration in the first five (5) years after the date of this Statement exceeds by a factor of two (2) the amount (in hectares) of clearing of **native vegetation** within the **PAA** carried out in the first five (5) years after the date of this Statement.
- (2) the amount of ecological restoration in the first five (5) years after the commencement of clearing activities after the date of this Statement exceeds 700 ha; and
- (3) the amount (in hectares) of ecological restoration in the 10 years following the period referred to in condition B15-3(1) exceeds by a factor of two (2) the amount (in hectares) of clearing of **native vegetation** within the PAA carried out in the 10 years following the period referred to in condition B15-3(1).

### Local Offset Environmental Management Plan

B15-4 The proponent must prepare a Local Offset Environmental Management Plan that demonstrates how the environmental outcomes and objectives in conditions B15-2(1), B15-2(2) and B15-2(4) will be achieved, monitored and substantiated, and submit it to the **CEO**.

B15-5 The Local Offset Environmental Management Plan must include the implementation of the offset measures to the extent and at the locations as set out and described in Table 1:

**Table 1: Environmental values, locations and extent and type of offset measures required to meet conditions B15-2(1), B15-2(2) and B15-2(4)**

Environmental value	Offset locations	Extent of area to receive offset measures	Type of offset measures
Black cockatoo, chuditch, western ringtail possum and quokka habitat.	Lot 102 on Deposited Plan 23201	2,238 ha remnant to be protected in perpetuity.	– land acquisition
	Lot 100 on Deposited Plan 402144	1,341 ha remnant to be protected in perpetuity and 295 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
	Lot 2764 on Deposited Plan 138097	91 ha remnant to be protected in perpetuity.	– land acquisition

<b>Environmental value</b>	<b>Offset locations</b>	<b>Extent of area to receive offset measures</b>	<b>Type of offset measures</b>
Numbat, <b>black cockatoo</b> and chuditch habitat.	Lot 5 on Plan 14227	229 ha remnant to be protected in perpetuity.	– land acquisition
	Lot 7 on Deposited Plan 44367	1.2 ha remnant to be protected in perpetuity and 17.7 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
	Lot 633 on Deposited Plan 122638	97 ha remnant to be protected in perpetuity.	– land acquisition
	Lot 591 on Deposited Plan 122639	56 ha remnant to be protected in perpetuity.	– land acquisition
	Lot 2 on Plan 9255	16.8 ha remnant to be protected in perpetuity and 52 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
	Lot 1 on Diagram 97837	4.3 ha remnant to be protected in perpetuity and 25.9 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
	Lot 233 & 234 on Deposited Plan 249034	0.3 ha remnant to be protected in perpetuity and 5.9 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management

Environmental value	Offset locations	Extent of area to receive offset measures	Type of offset measures
	Lot 5199 on Deposited Plan 119572	13 ha remnant to be protected in perpetuity.	– land acquisition
	Lot 6636 on Deposited Plan 123932	75.5 ha remnant to be protected in perpetuity and 2 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
	Lot 388 on Deposited Plan 255829	20 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
	Lot 11 on Deposited Plan 24463	2.3 ha remnant to be protected in perpetuity and 14.2 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
Numbat, <b>black cockatoo</b> , chuditch and red-tailed phascogale habitat.	Lot 1771 on Deposited Plan 106910	218.6 ha remnant to be protected in perpetuity and 299.8 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	– land acquisition – on-ground management
	Lot 2026 on Deposited Plan 108024		
	Lot 2027 on Deposited Plan 108025		
	Lot 6971 on Deposited Plan 126879		
	Lot 2028 on Deposited Plan 252141		

Environmental value	Offset locations	Extent of area to receive offset measures	Type of offset measures
	Lot 159 on Deposited Plan 301925		
	Lot 160 on Deposited Plan 301925		
Numbat, <b>black cockatoo</b> and chuditch habitat.	To be determined	4,229 ha of agricultural land to undergo ecological restoration through revegetation and rehabilitation.	<ul style="list-style-type: none"> <li>– land acquisition</li> <li>– on-ground management</li> </ul>
<b>Black cockatoo</b> breeding trees.	Within the properties listed above	N/A – artificial breeding hollows.	<ul style="list-style-type: none"> <li>– on-ground management</li> </ul>

B15-6 The Local Offset Environmental Management Plan shall:

- (1) demonstrate that the environmental outcomes and objectives in conditions B15-2(1), B15-2(2) and B15-2(4) will be met;
- (2) describe how the offset measures will be implemented consistent with condition B15-5;
- (3) be prepared in consultation with **DBCA**;
- (4) spatially identify the areas (**Proposed Local Offset Conservation Areas**) in condition B15-5 proposed as:
  - (a) **acquired** lands offset areas;
  - (b) **acquired** lands offset areas to receive **on-ground management** offset measures;
- (5) demonstrate how the **environmental values** within the **Proposed Local Offset Conservation Areas** will be maintained, enhanced, managed and restored in order to counterbalance the significant residual impacts to the **environmental values** in condition B15-1 and achieve the environmental outcomes and objectives in conditions B15-2(1), B15-2(2) and B15-2(4);
- (6) demonstrate application of the principles of the WA Environmental Offsets Policy and the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy, or any subsequent revisions of these documents;

- (7) identify how the ongoing performance of the offset measures, and whether they are achieving the outcomes and objectives in conditions B15-2(1), B15-2(2) and B15-2(4), will periodically be made publicly available;
- (8) for the land acquisition offsets identified in condition B15-5:
- (a) demonstrate that the **Proposed Local Offset Conservation Areas** contain the minimum extents of the **environmental values** identified in condition B15-5;
  - (b) identify how the **Proposed Local Offset Conservation Areas** will be protected, being either the sites are ceded to the Crown for the purpose of management for conservation, or the sites are managed under other suitable mechanism for the purpose of conservation;
  - (c) specify the quantum of works associated with establishing the **Proposed Local Offset Conservation Areas** including for maintaining the offset for at least twenty (20) years; and
  - (d) identify the **relevant management body** for the on-going management of the **Proposed Local Offset Conservation Areas**, including its role, and the role of the proponent, and confirmation in writing that the **relevant management body** accepts responsibility for its role.
- (9) For **on-ground management** offsets identified in condition B15-5:
- (a) state the targets for each **environmental value** to be achieved by the **on-ground management**, including completion criteria, which will result in a **tangible improvement** to the **environmental values** being offset, including, but not limited to:
    - (i) **black cockatoo** foraging within eight (8) years of restoration;
    - (ii) chuditch, western ringtail possum and quokka presence within 10 years of restoration;
    - (iii) red-tailed phascogale presence within 20 years of restoration;
    - (iv) numbat presence within 20 years of restoration where that restoration could support the population(s) identified in accordance with condition B13-3(2);
    - (v) completion criteria to measure (at a minimum) species diversity, abundance/distribution, habitat structure and vegetation condition;
    - (vi) adaptive management to inform successful restoration; and
    - (vii) use of artificial breeding hollows by **black cockatoos**.

- (b) demonstrate the consistency of the targets with the environmental outcomes and objectives in conditions B15-2(1), B15-2(2) and B15-2(4) and the objectives of any relevant guidance, including but not limited to, recovery plans or area management plans; and
  - (c) detail the **on-ground management** actions, with associated timeframes for implementation and completion, to achieve the targets identified in condition B15-6(9)(a) and the requirement of condition B15-3.
- (10) detail the monitoring, reporting and evaluation mechanisms for the targets and actions identified under condition B15-6(9)(a) and condition B15-6(9)(c).

### **Regional Offset Environmental Management Plan**

B15-7 The proponent must prepare a Regional Offset Environmental Management Plan that demonstrates how the environmental outcomes and objectives in condition B15-2(3) will be achieved, and how this achievement will be substantiated, and submit it to the **CEO**.

B15-8 The Regional Offset Environmental Management Plan must:

- (1) demonstrate that the environmental outcomes and objectives in condition B15-2(3) will be met;
- (2) spatially identify the areas, (the **Proposed Regional Offset Conservation Areas**) to be **acquired** for **on-ground management**;
- (3) demonstrate how the **environmental values** within the **Proposed Regional Offset Conservation Areas** will be maintained, enhanced, managed and restored in order to achieve the environmental outcomes and objectives in condition B15-2(3);
- (4) demonstrate application of the principles of the WA Environmental Offsets Policy, the EPA's public advice 'Considering environmental offsets at a regional scale' and the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy, or any subsequent revisions of these documents;
- (5) identify how the ongoing performance of the offset measures, and whether they are achieving the outcomes and objectives in condition B15-2(3), will periodically be made publicly available;
- (6) identify how the **Proposed Regional Offset Conservation Areas** to be **acquired** will be protected, being either the sites are ceded to the Crown for the purpose of management for conservation, or the sites are managed under other suitable mechanism for the purpose of conservation;
- (7) for offsets **acquired** specify:

- (a) a timeframe and works associated with establishing the **Proposed Regional Offset Conservation Areas**, including a contribution for maintaining the offset for at least twenty (20) years from commencement of **on-ground management**; and
  - (b) identify the **relevant management body** for the on-going management of the **Proposed Regional Offset Conservation Areas**, including its role, and the role of the proponent, and confirmation in writing that the **relevant management body** accepts responsibility for its role.
- (8) where **on-ground management** is proposed:
- (a) state the targets for each **environmental value** to be achieved, including completion criteria, which will result in a **tangible improvement** to the **environmental values** being offset, including but not limited to:
    - (i) completion criteria to measure (at a minimum) species diversity, abundance/distribution, habitat structure and vegetation condition; and
    - (ii) adaptive management to inform successful restoration.
  - (b) demonstrate the consistency of the targets with environmental outcomes and objectives in condition B15-2(3) and the objectives of any relevant guidance, including but not limited to, recovery plans or area management plans;
  - (c) detail the **on-ground management** actions, with associated timeframes for implementation and completion, to achieve the targets identified in condition B15-8(8); and
  - (d) detail the monitoring, reporting and evaluation mechanisms for the targets and actions identified under condition B15-8(8) and condition B15-8(8)(c).

### **Woylie Offset Environmental Management Plan**

B15-9 The proponent must prepare a Woylie Offset Environmental Management Plan that demonstrates how the environmental outcomes and objectives in condition B15-2(5) will be achieved, and how this achievement will be substantiated, and submit it to the **CEO**.

B15-10 The Woylie Offset Environmental Management Plan shall:

- (1) be prepared in consultation with **DBCA**;
- (2) spatially identify the area(s) to receive **on-ground management** offset measures (the **Proposed Woylie Offset Conservation Area**);

- (3) demonstrate how the **environmental values** within the **Proposed Woylie Offset Conservation Area** will be maintained, enhanced, managed and restored in order to achieve the environmental outcomes and objectives in condition B15-2(5);
- (4) demonstrate application of the principles of the WA Environmental Offsets Policy and the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy, or any subsequent revisions of these documents;
- (5) identify how the ongoing performance of the offset measures, and whether they are achieving the outcomes and objectives in condition B15-2(5), will periodically be made publicly available;
- (6) identify how the **Proposed Woylie Offset Conservation Area** will be protected, being either ceded to the Crown for the purpose of management for conservation, or managed under other suitable mechanism for the purpose of conservation;
- (7) identify a timeframe and works associated with establishing the **Proposed Woylie Offset Conservation Area**, including a contribution for maintaining the offset for at least twenty (20) years from commencement of **on-ground management**;
- (8) identify the **relevant management body** for the on-going management of the **Proposed Woylie Offset Conservation Area**, including its role, and the role of the proponent, and confirmation in writing that the **relevant management body** accepts responsibility for its role;
- (9) where **on-ground management** is proposed:
  - (a) state the targets for each environmental value to be achieved, including completion criteria, which will result in a **tangible improvement** to the **environmental values** being offset;
  - (b) demonstrate the consistency of the targets with environmental outcomes and objectives in condition B15-2(5) and the objectives of any relevant guidance, including but not limited to, recovery plans or area management plans;
  - (c) detail the **on-ground management** actions, with associated timeframes for implementation and completion, to achieve the targets identified in condition B15-10(9)(a); and
  - (d) detail the monitoring, reporting and evaluation mechanisms for the targets and actions identified under condition B15-10(9)(a) and condition B15-10(9)(c).

## Research Offset Environmental Management Plan

B15-11 The proponent must prepare a Research Offset Environmental Management Plan that demonstrates how the environmental outcomes and objectives in condition B15-2(6) will be achieved, and how this achievement will be substantiated, and submit it to the **CEO**.

B15-12 The Research Offset Environmental Management Plan shall:

- (1) identify the objectives and intended outcomes, and specify the deliverables and completion criteria;
- (2) identify how the research will result in a positive conservation outcome, and will either improve management and protection or address priority knowledge gaps that have been identified as a research priority needed to improve management and protection of the ecological integrity of the Northern Jarrah Forest Interim Biogeographic Regionalisation of Australia Sub-region;
- (3) demonstrate the consistency of the objectives in condition B15-12(1) with any relevant guidance, including but not limited to, recovery plans or area management plans, the principles of the WA Environmental Offsets Policy, and the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy, or any subsequent revisions of these documents;
- (4) identify and justify how the research will support land **acquired** and/or **on-ground management** in achieving a positive conservation outcome;
- (5) provide an implementation and reporting schedule, including an outline of key activities, all deliverables, stages of implementation, reporting of research results (including interim results), reporting on implementation status, and milestones towards completion criteria;
- (6) identify the governance arrangements including responsibilities for implementing, and oversight of, the research program, agreements with government agencies, agreements with any third parties, and contingency measures;
- (7) identify the resources allocated to the research program;
- (8) identify how a research program summary, and the results (including interim results) of the research program will be communicated and/or published in an open access format; and
- (9) identify the third party (or third-parties) to carry out the work required to meet the outcomes of condition B15-12(1), who is satisfactory for the role to the **CEO**. In applying to the **CEO** for endorsement of the selected third parties, the proponent shall provide demonstration of the track record, experience, qualifications and competencies of the proposed third party to carry out the work and achieve the outcomes.

## **B16 Inland Waters – PAA**

B16-1 The proponent shall ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) no **adverse impacts** to **conservation significant flora, fauna or ecological communities** as a result of surface and/or groundwater changes attributable to the proposal;
- (2) no **adverse impacts** to **native vegetation** within or adjacent to the **PAA** as a result of surface and/or groundwater changes attributable to the proposal;
- (3) no **adverse impacts** to the hydrological regimes and water quality of the Hotham River, Marradong Brook, Augustus River, Murray River, Williams River and Thirty-Four Mile Brook attributable to the proposal;
- (4) no **adverse impacts** to **groundwater dependent ecosystems** within or adjacent to the **PAA** as a result of surface and/or groundwater changes attributable to the proposal;
- (5) no **disturbance** or **adverse impacts** to **native vegetation** within 30 m of the Augustus River bank attributable to the proposal;
- (6) No **adverse impacts** to neighbouring groundwater users as a result of the proposal.

B16-2 The proponent must review and update the Water Management Plan (South32 Worsley Alumina Version 5.4), that satisfies the requirements of condition C4 and demonstrates how achievement of the outcomes in condition B16-1 and B12-1(2)(a) and B12-1(2)(b) will be monitored and substantiated and submit for approval to the **CEO** prior to implementation of the proposal.

## **B17 Terrestrial Environmental Quality – PAA**

B17-1 The proponent must ensure the implementation of the proposal achieves the following environmental objective:

- (1) maintain the quality of land and soils so that **environmental values** are protected.

B17-2 The proponent must ensure the implementation of the proposal achieves the following outcomes:

- (1) ensure no acid sulfate soil contamination within the **PAA** or elsewhere attributable to the proposal;
- (2) ensure no secondary salinity occurs within the **PAA** or elsewhere attributable to the proposal; and

- (3) ensure soil compaction and soil quality is remediated as part of rehabilitation and mine closure activities, in line with timing requirements outlined in condition B14 and B2.

B17-3 The proponent must review and update the Construction Environmental Management Plan (South 32 Worsley Alumina Version 0, WOR-71183-FS-PM-PLN-0004), that satisfies the requirements of condition C4 and demonstrates how achievement of terrestrial environmental quality outcomes in condition B17-2 will be monitored and substantiated and how the environmental objective in condition B17-1 will be achieved, and submit for approval to the **CEO** prior to implementation of the proposal.

#### **B18 Social Surroundings (Aboriginal Heritage) – PAA**

B18-1 The proponent must ensure the implementation of the proposal achieves the following outcomes:

- (1) no **disturbance** to **Aboriginal heritage** sites within the **PAA** unless approval is granted to disturb that site under the *Aboriginal Heritage Act 1972* and has involved reasonable steps to consult with the **GKB AC**; and
- (2) subject to reasonable health and safety requirements, no interruption of ongoing access to land utilised for traditional use or custom by the **GKB AC**.

B18-2 The proponent must implement the proposal to meet the following environmental objective:

- (1) avoid, where possible, and otherwise minimise **adverse impacts** to **Aboriginal heritage** within and surrounding the **PAA**; and
- (2) ongoing consultation and engagement with the **GKB AC** about the achievement of the outcomes and objectives in condition B18-1 and condition B18-2(1) for the life of the proposal.

B18-3 Prior to **ground disturbing activities**, the proponent must identify **Aboriginal heritage** for all areas proposed to be cleared or indirectly impacted by the proposal in consultation with the **GKB AC**.

B18-4 The proponent must undertake appropriate engagement with the **GKB AC** on the Mine Closure Plan(s) required under condition B3-1, at least three (3) months before it is submitted to the **CEO**.

## **PART C – ENVIRONMENTAL MANAGEMENT PLANS AND MONITORING**

The following conditions relate to the implementation of the entire proposal.

### **C1 Environmental Management Plans: Conditions Related to Commencement of Implementation of the Proposal**

- C1-1 The proponent must not undertake **ground disturbing activities** until the **CEO** has **confirmed** in writing that the management plans required by conditions B12-6, B13-7, B15-4, B16-2 and B17-3 meet the requirements of those conditions, or as otherwise agreed by the **CEO**.
- C1-2 The Mine Closure Plan(s) required by condition B3-1 must be prepared and submitted for approval within twelve (12) months of the date of this Statement, or as otherwise agreed by the **CEO**.
- C1-3 If the Regional Offset Environmental Management Plan, Woylie Offset Environmental Management Plan and Research Offset Environmental Management Plan required by conditions B15-7, B15-9 and B15-11 respectively have not been submitted for approval by the **CEO** in the case of the Woylie Offset Environmental Management Plan and the Research Offset Environmental Management Plan, within two (2) years, and in the case of the Regional Offset Environmental Management Plan, within five (5) years of the date of this Statement, all **construction activities** are to cease immediately. **Construction activities** may only recommence after the Regional Offset Environmental Management Plan, Woylie Offset Environmental Management Plan and Research Offset Environmental Management Plan are submitted for approval by the **CEO**, or as otherwise agreed by the **CEO**.
- C1-4 If, within three (3) years in the case of the Woylie Offset Environmental Management Plan and the Research Offset Environmental Management Plan, and within six (6) years in the case of the Regional Offset Environmental Management Plan, of the date of this Statement, the **CEO** has not **confirmed** that the respective plans meet the requirements of conditions B15-8, B15-10 and B15-12 respectively, all **construction activities** are to cease immediately. **Construction activities** may only restart after the **CEO** notifies the proponent that the Regional Offset Environmental Management Plan, Woylie Offset Environmental Management Plan and Research Offset Environmental Management Plan meet the requirements of conditions B15-8, B15-10 and B15-12 respectively, or as otherwise agreed by the **CEO**.

### **C2 Environmental Management Plans: Conditions Relating to Approval, Implementation, Review and Publication**

- C2-1 Upon being required to implement the plan(s) under conditions B3-1, B13-7, B15-4, B15-7, B15-9, B15-11, B16-2 and B17-3, or after receiving notice in writing from the **CEO** that the plan(s) required under conditions B3-1, B12-6, B13-7, B14-3, B15-4, B15-7, B15-9, B15-11, B16-2 and B17-3 satisfies the relevant requirements, the proponent must:

- (1) implement the most recent version of the **confirmed** plan; and

- (2) continue to implement the **confirmed** plan referred to in condition C2-1(1), other than for any period which the **CEO** confirms by notice in writing that it has been demonstrated that the relevant requirements for the plan have been met, or are able to be met under another statutory decision-making process, in which case the implementation of the plan is no longer required for that period.

C2-2 The proponent:

- (1) may review and revise a **confirmed** plan provided it meets the relevant requirements of that plan, including any consultation that may be required when preparing the plan;
- (2) must review and revise a **confirmed** plan and ensure it meets the relevant requirements of that plan, including any consultation that may be required when preparing the plan, as and when directed by the **CEO**; and
- (3) must revise and submit to the **CEO** the **confirmed** plan if there is a material risk that the outcomes or objectives it is required to achieve will not be complied with, including but not limited to as a result of a change to the proposal.

C2-3 Despite condition C2-1, but subject to conditions C2-4 and C2-5, the proponent may implement minor revisions to a plan if the revisions will not result in new or increased **adverse impacts** to the environment or result in a risk to the achievement of the limits, outcomes or objectives which the plan is required to achieve.

C2-4 If the proponent is to implement minor revisions to a plan under condition C2-3, the proponent must provide the **CEO** with the following at least twenty (20) business days before it implements the revisions:

- (1) the revised plan clearly showing the minor revisions;
- (2) an explanation of and justification for the minor revisions; and
- (3) an explanation of why the minor revisions will not result in new or increased **adverse impacts** to the environment or result in a risk to the achievement of the limits, outcomes or objectives which the plan is required to achieve.

C2-5 The proponent must cease to implement any revisions which the **CEO** notifies the proponent (at any time) in writing may not be implemented.

C2-6 **Confirmed** plans, and any revised plans under condition C2-4(1), must be published on the proponent's website and provided to the **CEO** in electronic form suitable for on-line publication by the Department of Water and Environmental Regulation within twenty (20) business days of being implemented, or being required to be implemented (whichever is earlier).

### **C3 Conditions Related to Monitoring**

C3-1 The proponent must undertake monitoring capable of:

- (1) substantiating whether the proposal limitations and extents in Part A are exceeded; and

- (2) **detecting** and substantiating whether the environmental outcomes identified in Part B are achieved (excluding any environmental outcomes in Part B where a plan is expressly required to monitor achievement of that outcome).

C3-2 The proponent must submit as part of the Compliance Assessment Report required by condition D2, a compliance monitoring report that:

- (1) outlines the monitoring that was undertaken during the implementation of the proposal;
- (2) identifies why the monitoring was capable of substantiating whether the proposal limitation and extents in Part A are exceeded;
- (3) for any environmental outcomes to which condition C3-1(2) applies, identifies why the monitoring was scientifically robust and capable of **detecting** whether the environmental outcomes in Part B are met;
- (4) outlines the results of the monitoring;
- (5) reports whether the proposal limitations and extents in Part A were exceeded and (for any environmental outcomes to which condition C3-1 (2) applies) whether the environmental outcomes in Part B were achieved, based on analysis of the results of the monitoring; and
- (6) reports any actions taken by the proponent to remediate any potential non-compliance.

#### **C4 Environmental Management Plans: Conditions Relating to Monitoring and Adaptive Management for Outcomes Based Conditions**

C4-1 The plans required under conditions B3-1, B12-6, B13-7, B14-3, B15-4, B15-7, B15-9, B15-11, B16-2 and B17-3 must contain provisions which enable the substantiation of whether the relevant outcomes of those conditions are met, and must include:

- (1) **threshold criteria** that provide a limit beyond which the environmental outcomes are not achieved;
- (2) **trigger criteria** that will provide an early warning that the environmental outcomes are not likely to be met;
- (3) monitoring parameters, sites, control/reference sites, methodology, timing and frequencies which will be used to measure **threshold criteria** and **trigger criteria**. Include methodology for determining alternate monitoring sites as a contingency if proposed sites are not suitable in the future;
- (4) baseline data;
- (5) data collection and analysis methodologies;
- (6) adaptive management methodology;
- (7) **contingency measures** which will be implemented if **threshold criteria** or **trigger criteria** are not met; and

(8) reporting requirements.

C4-2 The environmental management plan required under condition B16-2 requires a Groundwater Dependent Ecosystem Monitoring Framework that establishes:

- (1) identification of all areas of **groundwater dependent ecosystems** and *Caladenia hopperiana* and *Caladenia caesarea* subsp. Mooradung individuals that have the potential to be impacted by the proposal;
- (2) baseline groundwater monitoring of levels and quality, at **groundwater dependent ecosystem** locations and *Caladenia hopperiana* and *Caladenia caesarea* subsp. Mooradung locations, for not less than twelve (12) months, that addresses, but is not limited to, the following parameters:
  - (a) groundwater levels;
  - (b) electrical conductivity or salinity;
  - (c) pH;
  - (d) nutrient levels (nitrogen and phosphorus);
  - (e) total dissolved solids; and
  - (f) dissolved metals.
- (3) comparison of monitoring results against comparable regional reference sites, to:
  - (a) distinguish regional climate/drying effects from proposal effects; and
  - (b) provide context for mounding and dryland salinity that may be caused by the proposal.
- (4) a monitoring procedure for water quality and groundwater levels, and schedule, for the identified locations of **groundwater dependent ecosystems** and *Caladenia hopperiana* and *Caladenia caesarea* subsp. Mooradung individuals; and
- (5) whether the trigger and threshold levels contained within the Water Management Plan (South32 Worsley Alumina Version 5.4) and any revisions approved under B16-2 are suitable to meet the outcomes.

C4-3 The environmental management plan required under condition B12-6 shall include:

- (1) annual monitoring of *Caladenia hopperiana* and *Caladenia caesarea* subsp. Mooradung individuals in the **PAA**. Monitoring is to be undertaken by appropriate botanists with demonstrated experience in orchid surveys in the bioregion. Monitoring shall address, but is not limited to, the following parameters:
  - (a) numbers of individuals;

- (b) plant health; and
  - (c) vegetation condition.
- (2) comparison of monitoring results against:
- (a) the preceding year; and
  - (b) the baseline.
- (3) For **disturbance** or adverse impacts to priority flora in condition B12-1(3), a **trigger criteria** that is less than:
- (a) 8% for the **known population** of *Gastrolobium* sp. Prostrate Boddington;
  - (b) 10% where more than 100 individuals have been recorded or 2% where less than 100 individuals have been recorded for the **known population** of *Hibbertia ambita*; and
  - (c) 2% of the **known population** of *Halgania corymbosa*, until it can be demonstrated that more than 100 individuals have been recorded, in which case 10% of the **known population** of *Halgania corymbosa*.
- (4) For **disturbance** or adverse impacts to **priority flora** in condition B12-1(3), a **threshold criteria** of:
- (a) 8% for the **known population** of *Gastrolobium* sp. Prostrate Boddington;
  - (b) 10% where more than 100 individuals have been recorded or 2% where less than 100 individuals have been recorded for the **known population** of *Hibbertia ambita*; and
  - (c) 2% of the **known population** of *Halgania corymbosa*, until it can be demonstrated that more than 100 individuals have been recorded, in which case 10% of the **known population** of *Halgania corymbosa*.

C4-4 Without limiting condition C3-1, failure to achieve an environmental outcome, or the exceedance of a **threshold criteria**, regardless of whether threshold **contingency measures** have been or are being implemented, represents a non-compliance with these conditions.

**C5 Environmental Management Plans: Conditions Related to Management Actions and Targets for Objective Based Conditions**

C5-1 The plans required under conditions B3-1, B12-6, B13-7, B14-3, B15-4, B15-7, B15-9, B15-11, B16-2 and B17-3 must contain provisions which enable the achievement of the relevant objectives of those conditions and substantiation of whether the objectives are reasonably likely to be met, and must include:

- (1) **management actions;**

- (2) **management targets;**
- (3) **contingency measures** if **management targets** are not met; and
- (4) reporting requirements.

C5-2 Without limiting condition C2-1, the failure to achieve an environmental objective, or implement a **management action**, regardless of whether **contingency measures** have been or are being implemented, represents a non-compliance with these conditions.

## **PART D – COMPLIANCE, TIME LIMITS, AUDITS AND OTHER CONDITIONS**

The following conditions relate to the implementation of the entire proposal.

### **D1 Non-compliance Reporting**

**D1-1** If the proponent becomes aware of a potential non-compliance, the proponent must:

- (1) report this to the **CEO** within seven (7) days;
- (2) implement **contingency measures**;
- (3) investigate the cause;
- (4) investigate environmental impacts;
- (5) advise rectification measures to be implemented;
- (6) advise any other measures to be implemented to ensure no further impact; and
- (7) provide a report to the **CEO** within twenty-one (21) days of being aware of the potential non-compliance, detailing the measures required in conditions D1-1(1) to D1-1(6) above.

**D1-2** Failure to comply with the requirements of a condition, or with the content of an environmental management plan required under a condition, constitutes a non-compliance with these conditions, regardless of whether the **contingency measures**, rectification or other measures in condition D1-1 above have been or are being implemented.

### **D2 Compliance Reporting**

**D2-1** The proponent must provide an annual Compliance Assessment Report to the **CEO** for the purpose of determining whether the implementation conditions are being complied with.

**D2-2** Unless a different date or frequency is approved by the **CEO**, the first annual Compliance Assessment Report must be submitted within fifteen (15) months of the date of this Statement, and subsequent reports must be submitted annually from that date.

**D2-3** Each annual Compliance Assessment Report must be endorsed by the proponent's Chief Executive Officer, or a person approved by proponent's Chief Executive Officer to be delegated to sign on the Chief Executive Officer's behalf.

**D2-4** Each annual Compliance Assessment Report must:

- (1) state whether each condition of this Statement has been complied with, including:
  - (a) exceedance of any proposal limits and extents;
  - (b) achievement of environmental outcomes;

- (c) achievement of environmental objectives;
  - (d) requirements to implement the content of environmental management plans;
  - (e) monitoring requirements;
  - (f) implement **contingency measures**;
  - (g) requirements to implement adaptive management; and
  - (h) reporting requirements;
- (2) include the results of any monitoring (inclusive of any raw data) that has been required under Part C in order to demonstrate that the limits in Part A, and any outcomes or any objectives are being met;
  - (3) provide evidence to substantiate statements of compliance, or details of where there has been a non-compliance;
  - (4) include the corrective, remedial and preventative actions taken in response to any potential non-compliance;
  - (5) be provided in a form suitable for publication on the proponent's website and online by the Department of Water and Environmental Regulation; and
  - (6) be prepared and published consistent with the latest version of the Compliance Assessment Plan required by condition D2-5 which the **CEO** has confirmed by notice in writing satisfies the relevant requirements of Part C and Part D.

D2-5 The proponent must prepare a Compliance Assessment Plan which is submitted to the **CEO** at least six (6) months prior to the first Compliance Assessment Report required by condition D2-2, or prior to implementation of the proposal, whichever is sooner.

D2-6 The Compliance Assessment Plan must include:

- (1) what, when and how information will be collected and recorded to assess compliance;
- (2) the methods which will be used to assess compliance;
- (3) the methods which will be used to validate the adequacy of the compliance assessment to determine whether the implementation conditions are being complied with;
- (4) the retention of compliance assessments;
- (5) the table of contents of Compliance Assessment Reports, including audit tables; and
- (6) how and when Compliance Assessment Reports will be made publicly available, including usually being published on the proponent's website within sixty (60) days of being provided to the **CEO**.

### **D3 Contact Details**

- D3-1 The proponent must notify the **CEO** of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty-eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

### **D4 Time Limit for Proposal Implementation**

- D4-1 Implementation of the proposal within the **extended mining areas** must be substantially commenced within fifteen (15) years from the date of this Statement.
- D4-2 The proponent must provide to the **CEO** documentary evidence demonstrating that they have complied with condition D4-1 no later than fourteen (14) days after the expiration of the period specified in condition D4-1.
- D4-3 If the proposal within the **extended mining areas** has not been substantially commenced within the period specified in condition D4-1, implementation of the proposal within the **extended mining areas** must not be commenced or continued after the expiration of that period.

### **D5 Public Availability of Data**

- D5-1 Subject to condition D5-2, within a reasonable time period approved by the **CEO** upon the issue of this Statement and for the remainder of the life of the proposal, the proponent must make publicly available, in a manner approved by the **CEO**, all validated environmental data collected before and after the date of this Statement relevant to the proposal (including sampling design, sampling methodologies, monitoring and other empirical data and derived information products (e.g. maps)), environmental management plans and reports relevant to the assessment of this proposal and implementation of this Statement.
- D5-2 If any data referred to in condition D5-1 contains trade secrets or any data referred to in condition D5-1 contains particulars of confidential information (other than trade secrets) that has commercial value to a person that would be, or could reasonably be expected to be, destroyed or diminished if the confidential information were published, the proponent may submit a request for approval from the **CEO** to not make this data publicly available and the **CEO** may agree to such a request if the **CEO** is satisfied that the data meets the above criteria. In making such a request the proponent must provide the **CEO** with an explanation and reasons why the data should not be made publicly available.

**Independent Audit**

- D5-1 The proponent must arrange for an independent audit of compliance with the conditions of this statement, including achievement of the environmental outcomes and/or the environmental objectives and/ or environmental performance with the conditions of this statement, as and when directed by the **CEO**.
- D5-2 The independent audit must be carried out by a person with appropriate qualifications who is nominated or approved by the **CEO** to undertake the audit under condition D6-1.
- D5-3 The proponent must submit the independent audit report with the Compliance Assessment Report required by condition D2, or at any time as and when directed in writing by the **CEO**. The audit report is to be supported by credible evidence to substantiate its findings.
- D5-4 The independent audit report required by condition D6-1 is to be made publicly available in the same timeframe, manner and form as a Compliance Assessment Report, or as otherwise directed by the **CEO**.

[signed on 20 December 2024]

Hon Reece Whitby MLA  
**MINISTER FOR ENVIRONMENT; CLIMATE ACTION**

<b>Key decision-making authorities consulted under section 45(2):</b>
Minister for Water Minister for Aboriginal Affairs Minister for Mines and Petroleum Minister for State Development Minister for Lands

**Table 2: Abbreviations and definitions**

Acronym or abbreviation	Definition or term
<b>Aboriginal heritage</b>	Means an Aboriginal site as defined in section 5 of the <i>Aboriginal Heritage Act 1972</i> (AHA).
<b>Activities</b>	Purposeful actions relating to mining, transporting and processing of bauxite ore and transportation of alumina powder.
<b>Acquired</b>	The protection of <b>environmental values</b> on an area of initially unprotected land for the purpose of conservation through improved security of tenure or restricting the use of land (e.g. ceding land to the Crown or perpetual conservation covenants). This includes upfront costs of establishing the offset site and the on-going management of costs of maintaining the offset for the long term (20 years).
<b>Adverse impact</b>	<p>Negative change that is neither trivial nor negligible that could result in a reduction in health, diversity or abundance of the receptor/s being impacted, or a reduction in environmental value or water availability. Adverse impacts can arise from direct or indirect impacts, or other impacts from the proposal.</p> <p>In relation to <b>Aboriginal heritage</b>, means an activity that would constitute an offence under section 17 of the AHA.</p>
<b>Agreed biodiversity indicators</b>	Parameters against which achievement towards required biodiversity outcomes can be steered, monitored and measured, and of which, are to be developed in consultation with <b>DBCA</b> and to the satisfaction of the <b>CEO</b> .
<b>Agreed completion criteria</b>	Parameters that represent achievement of outcomes for <b>rehabilitation</b> as at the time the <b>rehabilitation</b> commenced and for rehabilitation commencing after the date of this Statement-which are developed in consultation with <b>DBCA</b> and to the satisfaction of the <b>CEO</b> .
<b>Areas mined</b>	<p>An area of the mine, that:</p> <ul style="list-style-type: none"> <li>a) Is under the operational stage of the extraction of bauxite, contributing to the overall operation to supply bauxite; or</li> <li>b) has reached the completion stage of the extraction of bauxite, but has not begun rehabilitation.</li> </ul>
<b>Black cockatoos</b>	Carnaby's cockatoo ( <i>Zanda latirostris</i> ), Baudin's cockatoo ( <i>Zanda baudinii</i> ) and forest red-tailed black cockatoo ( <i>Calyptorhynchus banksii naso</i> ).
<b>Category of threat</b>	Conservation status categories used in the <i>Biodiversity Conservation Act 2016</i> , in order of highest to lowest, of extinct, extinct in the wild, critically endangered, endangered, vulnerable, species of special conservation interest (conservation dependent) and unlisted.

Acronym or abbreviation	Definition or term
<b>CEO</b>	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the <i>Environmental Protection Act 1986</i> , or the <b>CEO's</b> delegate.
<b>Clearing or Clearing activities</b>	Any activity where the removal of vegetation will be undertaken.
<b>Coarse woody debris</b>	<b>Coarse woody debris</b> is described in <b>DBCA's Forest Management Plan 2024-2033</b> . It includes fallen trees and branches that provide shelter and foraging sites for native mammals, reptiles, invertebrates and frogs.
<b>Completion of mining</b>	When an operational stage of a mine ceases in an area, which no longer contributes to the overall operation to supply bauxite.
<b>Confirmed</b>	<p>In relation to a plan required to be made and submitted to the <b>CEO</b>, means, at the relevant time, the plan that the <b>CEO</b> confirmed, by notice in writing, meets the requirements of the relevant condition.</p> <p>In relation to a plan required to be implemented without the need to be first submitted to the <b>CEO</b>, means that plan until it is revised, and then means, at the relevant time, the plan that the <b>CEO</b> confirmed, by notice in writing, meets the requirements of the relevant condition.</p>
<b>Conservation significant ecological communities</b>	<b>Threatened ecological communities</b> and <b>priority ecological communities</b> .
<b>Conservation significant fauna</b>	<b>Threatened fauna, priority fauna, other significant fauna</b> and <b>significant short-range endemic fauna</b> .
<b>Conservation significant flora</b>	<b>Threatened flora</b> and <b>priority flora</b> .
<b>Conservation and Parks Commission</b>	The Western Australian Conservation and Parks Commission which is a body corporate established under section 18 of the <i>Conservation and Land Management Act 1984</i> (the Act). The commission is an independent government advisory body for the protection of Western Australia's biodiversity and conservation estate.
<b>Construction activities</b>	Activities that are associated with the substantial implementation of a proposal including but not limited to, earthmoving, vegetation clearing, grading or construction of right of way. Construction activities do not include geotechnical investigations (including potholing for services and the installation of piezometers) and other preconstruction activities where no clearing of vegetation is required.

Acronym or abbreviation	Definition or term
<b>Contaminated</b>	Having a substance present at above background concentrations that presents, or has the potential to present, a risk or harm to human health, the environment or any <b>environmental value</b> .
<b>Contingency measures</b>	Planned actions for implementation if it is identified that an environmental outcome, environmental objective, <b>threshold criteria</b> , Environmental Quality Standard or <b>management target</b> are likely to be, or are being, exceeded. Contingency measures include changes to operations or reductions in <b>disturbance</b> or <b>adverse impacts</b> to reduce impacts and must be decisive actions that will quickly bring the impact to below any relevant <b>threshold criteria</b> or <b>management target</b> and to ensure that the environmental outcome and/or objective can be met.
<b>Critical infrastructure</b>	Includes infrastructure critical to the operation of the proposal such as conveyors, bridge crossings, bauxite residue disposal areas and other infrastructure where alternative alignments/locations may not be feasible.
<b>DBCA</b>	Means the Department responsible for administration of the <i>Biodiversity Conservation Act 2016</i> which at the time of writing is the Department of Biodiversity, Conservation and Attractions (DBCA).
<b>DEMIRS</b>	The Department responsible for administration of the <i>Mining Act 1978</i> which at the time of writing is the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS).
<b>Detecting/ Detectable</b>	The smallest statistically discernible effect size that can be achieved with a monitoring strategy designed to achieve a statistical power value of at least 0.8 or an alternative value as determined by the <b>CEO</b> .
<b>Disturb/ Disturbed/ Disturbance</b>	<p>Directly has or materially contributes to the <b>disturbance</b> effect on health, diversity or abundance of the receptor/s being impacted or on an <b>environmental value</b>.</p> <p>In relation to flora, vegetation or fauna habitat, includes to result in the death, destruction, removal, severing or doing substantial damage to.</p> <p>In relation to fauna, includes to have the effect of altering the natural behaviour of fauna to its detriment.</p> <p>In relation to <b>Aboriginal heritage</b>, means an activity that would constitute an offence under section 17 of the AHA.</p>
<b>Disturbance footprint</b>	The indicative disturbance footprint is provided within the mine development envelope as shown within Figures 1 and 2. The disturbance footprint was designed with “worst case” scenarios in mind and has included appropriate buffer space around infrastructure areas; however, actual infrastructure would be positioned based on site conditions (e.g. to avoid <b>black cockatoo</b> breeding trees with <b>evidence of use</b> ) to optimise the design during mining activities. The proponent is

Acronym or abbreviation	Definition or term
	still to adhere to the limits of clearing of vegetation and <b>disturbance</b> documented in the conditions.
<b>DWER</b>	The Department(s) responsible for administration of the <i>Metropolitan Water Supply, Sewerage, and Drainage Act 1909</i> and the <i>Country Areas Water Supply Act 1947</i> which at the time of writing is the Department of Water and Environmental Regulation (DWER).
<b>Enhance</b>	To increase or improve the quality or quantity of an <b>environmental value</b> .
<b>Environmental harm</b>	Has the meaning provided by section 3A(2) of the <i>Environmental Protection Act 1986</i> .
<b>Environmentally acceptable condition</b>	Refers to <b>DEMIRS</b> principal objective for environmental regulation: 'Resource industry activities are designed, operated, closed, decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed environmental outcomes and post-mining land-uses without unacceptable liability to the State' in <b>DEMIRS</b> Environmental Objectives Policy for Mining, Version 3.0, effective from 3 March 2020.
<b>Environmental value/s</b>	A beneficial use, or ecosystem health condition.
<b>Evidence of use</b>	Trees with a <b>suitable hollow</b> for <b>black cockatoo</b> breeding where evidence of potential use of that hollow has been observed. For example, chewing at the hollow entry.
<b>Extended mining areas</b>	The mine regions Hotham North Extension, Central, Brookton, Morgans and East Quindanning shown on Figure 3.
<b>Fauna handler/spotter</b>	A person who has attained the appropriate licence/s and authorisation/s under section 40 of the <i>Biodiversity Conservation Act 2016</i> and Biodiversity Conservation Regulations 2018.
<b>Forest Management Plan 2024-2033</b>	The Forest Management Plan 2024-2033 (FMP), prepared by the <b>Conservation and Parks Commission</b> (through the <b>DBCA</b> ) commenced on 1 January 2024, being the overarching framework to protect and manage forests on public lands in the State's south-west.
<b>Full Carbon Accounting Model</b>	The model used in Australia's National Greenhouse Gas Accounts for the land use, land use change and forestry sectors.
<b>GHG emissions</b>	Greenhouse gas emissions expressed in tonnes of carbon dioxide equivalent (CO <sub>2</sub> -e) as calculated: (a) in accordance with the definition of 'carbon dioxide equivalence' in Section 7 of the <i>National Greenhouse and Energy Reporting Act 2007</i> (Cth), or, if that definition is amended or repealed, the

Acronym or abbreviation	Definition or term
	meaning set out in an Act, regulation or instrument concerning greenhouse gases as specified by the Minister; or (b) applying the <b>Full Carbon Accounting Model</b> or another model approved by the <b>CEO</b> .
<b>GKB AC</b>	The Gnaala Karla Booja Aboriginal Corporation, being the Regional Corporation established under the Gnaala Karla Booja Indigenous Land Use Agreement registered on 17 October 2018 in regard to the Gnaala Karla Booja Agreement Area (WI2015/005).
<b>Greenhouse gas or GHG</b>	Has the meaning given by Section 7A of the <i>National Greenhouse and Energy Reporting Act 2007</i> (Cth) or, if that definition is amended or repealed, the meaning set out in an Act, regulation or instrument concerning greenhouse gases as specified by the Minister.
<b>Ground disturbing activities</b>	Any activity or activities undertaken in the implementation of the proposal, including any <b>clearing activities</b> , civil works or construction. Exploration is excluded from the meaning of 'ground disturbing activities'.
<b>Groundwater dependent ecosystem/s</b>	Communities of living organisms interacting with the non-living environment that are characterised by having ecological components that rely on groundwater for at least part of the year or part of their life cycles. Types of groundwater dependent ecosystems in the <b>PAA</b> include wetland, river, and riparian vegetation ecosystems.
<b>ha</b>	Hectares.
<b>Inspect</b>	The procedure for inspecting an area for <b>potential breeding trees</b> as defined in the Conservation Significant Fauna Environmental Management Plan required by condition B13-7.
<b>Known population</b>	For this Statement refers to identified and documented facts about the location or locations of a group or groups of flora of the same species, including through surveys for the relevant species, within the region delineated by the <b>PAA</b> surrounded by a 20 km buffer.
<b>Known records</b>	For this Statement refers to identified and documented facts about the location of a group of fauna of the same species.
<b>Management action/s</b>	The identified actions implemented with the intent of to achieving the environmental objective.
<b>Mount Saddleback Heath Communities Priority Ecological Community</b>	The Mount Saddleback Heath Communities listed by <b>DBCA</b> as a priority ecological community.

Acronym or abbreviation	Definition or term
<b>Management target/s</b>	A type of indicator to evaluate whether an environmental objective is being achieved.
<b>Ministerial Statement 719 or MS 719</b>	Ministerial Statement 719, as amended by Ministerial Statement 751.
<b>Mt</b>	Million tonnes.
<b>Native vegetation</b>	Native vegetation is defined by section 3(1) of the <i>Environmental Protection Act 1986</i> and means indigenous aquatic or terrestrial vegetation and includes dead vegetation unless that dead vegetation is of a class declared by regulation to be excluded but does not include vegetation in a plantation. Section 51A further defines that native vegetation includes vegetation that was intentionally sown, planted or propagated as required under the Act or another written law. However, in relation to the native vegetation to be cleared in the <b>PAA</b> this does not include <b>rehabilitation vegetation</b> .
<b>Net-gain</b>	For this Statement refers to improvements in the extent and/or condition of habitat for specified fauna species that exceed the losses of that habitat.
<b>Non-Safeguard GHG emissions</b>	Scope 1 Greenhouse gas emissions expressed in tonnes of carbon dioxide equivalent (CO <sub>2</sub> -e) that are a direct result of an activity or series of activities that comprise/s or form/s part of the proposal which: <ul style="list-style-type: none"> <li>(a) are not covered emissions under the <b>Safeguard Legislation</b>.</li> <li>(b) are calculated applying the <b>Full Carbon Accounting Model</b> or another model approved by the <b>CEO</b>.</li> </ul>
<b>Non-Safeguard Net GHG emissions</b>	<b>Non-Safeguard GHG emissions</b> for a period less any reduction in <b>GHG emissions</b> represented by sequestration of <b>GHG emissions</b> from rehabilitation and restoration associated with the Revised Proposal as calculated applying the <b>Full Carbon Accounting Model</b> or another model approved by the <b>CEO</b> .
<b>Notifiable event</b>	The notifiable event described in condition B1-1.
<b>Old growth forest</b>	Ecologically mature forest where the effect of unnatural <b>disturbance</b> is negligible. Criteria for determining old growth forest are maintained by <b>DBCA</b> .
<b>Ongoing viability</b>	The ongoing viability of a species as defined in the Conservation Significant Fauna Environmental Management Plan required by condition B13-7.
<b>On-ground management</b>	This includes revegetation (re-establishment of <b>native vegetation</b> in degraded areas) and rehabilitation (repair of ecosystem processes and management of weeds, disease or feral animals) with the objective to achieve a <b>tangible improvement</b> to the <b>environmental values</b> in the offset area.

Acronym or abbreviation	Definition or term
<b>Other significant fauna</b>	<p>Vertebrate or invertebrate fauna that although not listed as threatened or priority, may be otherwise significant. Example reasons for being otherwise significant include:</p> <ul style="list-style-type: none"> <li>- locally endemic or has an association with a restricted habitat type (e.g. surface water or groundwater dependent ecosystems)</li> <li>- new species or anomalous features that indicate a potential new species</li> <li>- representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range)</li> <li>- unusual species, including restricted subspecies</li> <li>- relictual status, being representative of taxonomic groups that no longer occur widely in the broader landscape.</li> </ul>
<b>Other significant flora</b>	<p>Any other new flora species, undescribed flora species or priority flora species other than:</p> <p style="padding-left: 40px;"><i>Acacia horridula</i>;</p> <p style="padding-left: 40px;"><i>Asteridea gracilis</i>;</p> <p style="padding-left: 40px;"><i>Banksia subpinnatifida</i> var. <i>imberbis</i>;</p> <p style="padding-left: 40px;"><i>Banksia subpinnatifida</i> var. <i>subpinnatifida</i>;</p> <p style="padding-left: 40px;"><i>Calothamnus quadrifidus</i> subsp. <i>teretifolius</i>;</p> <p style="padding-left: 40px;"><i>Goodenia katabudjar</i>;</p> <p style="padding-left: 40px;"><i>Lasiopetalum cardiophyllum</i>;</p> <p style="padding-left: 40px;"><i>Senecio leucoglossus</i>;</p> <p style="padding-left: 40px;"><i>Stylidium marradongense</i>;</p> <p style="padding-left: 40px;"><i>Tetratheca pilifera</i>;</p> <p>recorded in the pre-clearance surveys required under condition B12-5.</p>
<b>Other significant vegetation</b>	Any other threatened or priority ecological communities recorded in the pre-clearance surveys required under condition B12-5.
<b>PAA</b>	The Primary Assessment Area shown in Figure 3 which comprises the Worsley Mine Development Envelope, Bauxite Transport Corridor and Contingency Bauxite Mining Envelope shown in Figures 1 and 2.
<b><i>Phytophthora cinnamomi</i></b>	<i>Phytophthora cinnamomi</i> is one of 40 species of <i>Phytophthora</i> that have been detected in Western Australia. <i>Phytophthora</i> is a genus of plant pathogens.
<b><i>Phytophthora</i> Dieback Interpreters Manual for Lands Managed by the Department</b>	<b>DBCA</b> guidance, which is not publicly available. It ensures that the survey and mapping procedures for <i>Phytophthora</i> dieback are consistent with DBCA's <b><i>Phytophthora</i> Dieback Interpreters Manuals for Lands Managed by the Department</b> .

Acronym or abbreviation	Definition or term
<b>Phytophthora Dieback Management Manual</b>	Guidance published by <b>DBCA</b> in October 2020 which describes processes to assess risk and manage <i>Phytophthora</i> dieback. The practices and procedures that it describes can also be applied to reduce the spread of other soil-borne pathogens and weed seeds.
<b>Plantation vegetation</b>	One or more groups of trees, shrubs or plants intentionally sown, planted or propagated with a view to commercial exploitation.
<b>Pollution</b>	Has the meaning provided by section 3A(1) of the <i>Environmental Protection Act 1986</i> .
<b>Potential breeding tree</b>	Any existing tree of a species known to support <b>black cockatoo</b> breeding which has a diameter at breast height of 300 millimetres or greater that therefore may develop a breeding hollow.
<b>Priority ecological communities</b>	Ecological communities listed as priority by <b>DBCA</b> .
<b>Priority fauna</b>	Fauna listed as priority by <b>DBCA</b> .
<b>Priority flora</b>	Flora listed as priority by <b>DBCA</b> .
<b>Procedures for the assessment, identification and demarcation of old-growth forest</b>	Refers to the reference: Department of Parks and Wildlife (2017). <i>Procedures for the assessment, identification and demarcation of old-growth forest</i> FEM Procedure No. FEM075, Department of Parks and Wildlife. Perth, Western Australia.
<b>Proposed Local Offset Conservation Areas</b>	The area of land identified in condition B15-5.
<b>Proposed new land use(s)</b>	Land use consistent with the concepts set out in the proponent's Preliminary Decommissioning Plan endorsed by the former Department of Environment and Conservation on 26 October 2009 or as otherwise determined through consultation with the <b>Worsley Environmental Management Liaison Group</b> .
<b>Proposed Regional Offset Conservation Areas</b>	The area of land identified in condition B15-8(2).
<b>Proposed Woylie Offset Conservation Area</b>	The area of land identified in condition B15-10(2).
<b>Rehabilitation vegetation</b>	Native vegetation that has been intentionally sown, planted or propagated by the proponent as part of a rehabilitation program whether

Acronym or abbreviation	Definition or term
	or not that rehabilitation was required under the <i>Environmental Protection Act 1986</i> or another written law.
<b>Rehabilitation</b>	Rehabilitation commences when earthworks, including ripping and contouring, occur in preparation for the area to receive topsoil and woody debris.
<b>Relevant management body</b>	A party or parties that has a role in the establishment and/or on-going management of the <b>Proposed Local Offset Conservation Areas</b> , the <b>Proposed Regional Offset Conservation Areas</b> and the <b>Proposed Woylie Offset Conservation Area</b> . Note: This includes the role of the proponent.
<b>Safeguard Legislation</b>	The <i>National Greenhouse and Energy Reporting Act 2007</i> and subsidiary National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015.
<b>Scope of Biodiversity-related Investigations</b>	The 'Worsley Alumina Pty Ltd 4.4 Mtpa Expansion Scope of Biodiversity-related Investigations' document prepared by Strategen dated October 2007 (version FINAL3) endorsed by the former Department of Environment and Conservation on 15 April 2008.
<b>Significant short-range endemic fauna</b>	Invertebrate fauna that typically display characteristic ecological and life-history traits including poor dispersal powers, confinement to discontinuous habitats, usually highly seasonal activity patterns and low levels of fecundity, and depending on the exact nature of these traits, are at threat of significant decline and are therefore significant for conservation.
<b>Stakeholder Consultation Group</b>	<p>The <b>Stakeholder Consultation Group</b> will comprise members of the proponent's established community liaison committees or other consultative groups, non-government conservation organisation(s), relevant members of natural resource management groups within or adjoining proposed new mining areas, and relevant government agencies, including the Shire of Collie which have established research or related activities in or adjoining proposed new mining areas. <b>The Stakeholder Consultation Group</b> will have the following functions:</p> <ul style="list-style-type: none"> <li>• provide comment on the draft Rehabilitation Plan for the <b>extended mining areas</b> (refer condition B9-1); and</li> <li>• provide comment on any draft Bauxite Mining Plan(s) for the <b>extended mining areas</b> (refer conditions B8-1 and B8-8).</li> </ul>
<b>Suitable hollow/s</b>	Any hollow with dimensions suitable for use for breeding by <b>black cockatoos</b> . Characteristics of hollows used by each species is available in the SPRAT database: <a href="http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl">http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl</a>
<b>Tangible improvement</b>	A perceptible, measurable and definable improvement that provides additional ecological benefit and/or value.

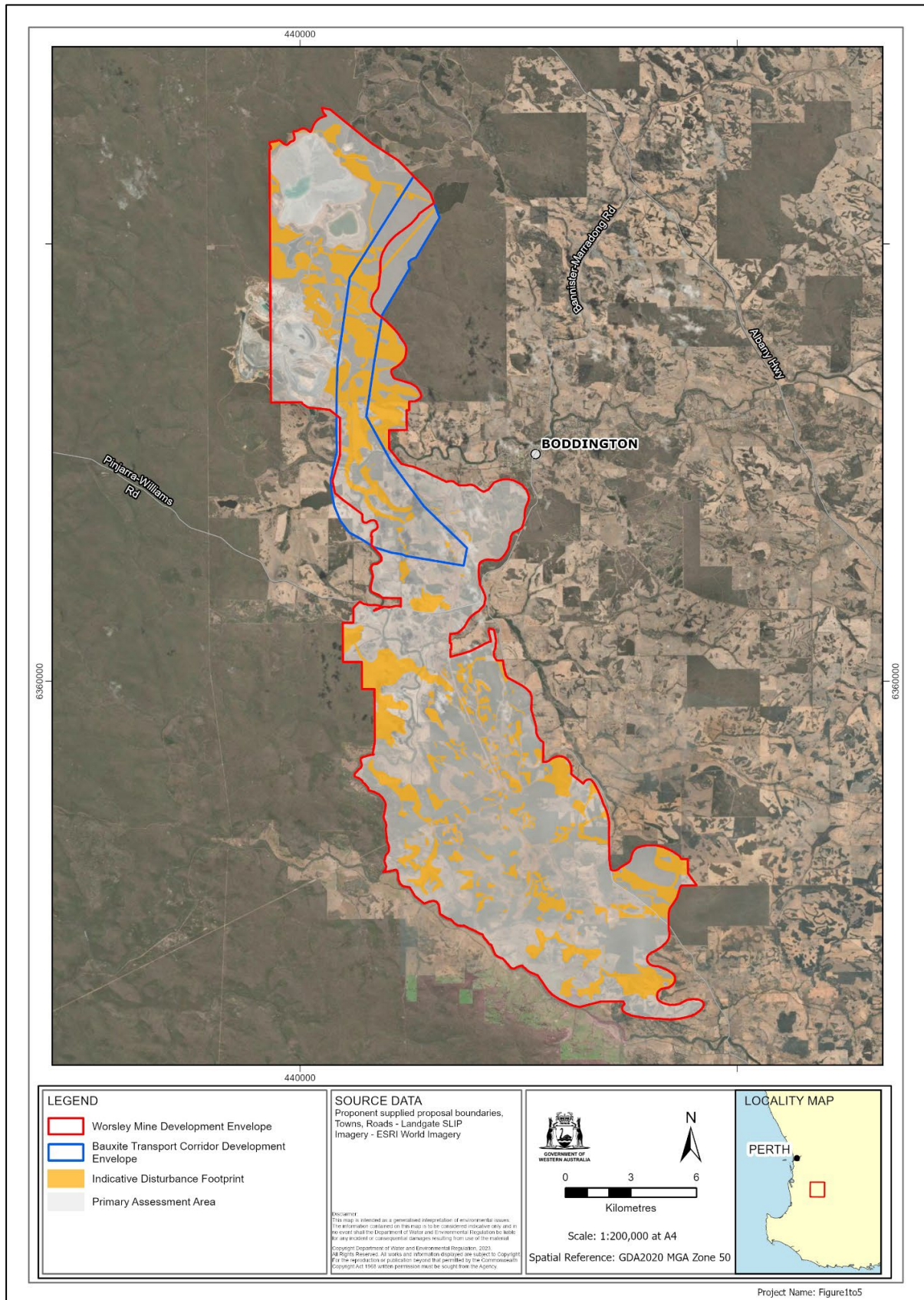
Acronym or abbreviation	Definition or term
<b>Technical guidance – Flora and vegetation surveys for environmental impact assessment</b>	The Technical guidance – Flora and vegetation surveys for environmental impact assessment (EPA 2016) including any revision to this technical guidance.
<b>Ten Year Mine Plan</b>	The ten year mine plan required annually by clause 16(10) of the <i>Alumina Refinery (Worsley) Agreement Act 1973</i> .
<b>Threatened ecological communities</b>	Ecological communities listed as threatened under the <i>Biodiversity Conservation Act 2016</i> or the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> .
<b>Threatened fauna</b>	Fauna listed as threatened under the <i>Biodiversity Conservation Act 2016</i> or the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> .
<b>Threatened flora</b>	Flora listed as threatened under the <i>Biodiversity Conservation Act 2016</i> or the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> .
<b>Threshold criteria</b>	The indicators that have been selected to represent limits of impact beyond which the environmental outcome is not being met.
<b>Trigger criteria</b>	Indicators that have been selected for monitoring to provide a warning that, if exceeded, the environmental outcome may not be achieved. They are intended to forewarn of the approach of the <b>threshold criteria</b> and trigger response actions.
<b>Vegetation type G4</b>	A vegetation grouping described as open scrub and tall shrubland of <i>Hakea trifurcata</i> and <i>Hakea undulata</i> with admixtures of mallee species including <i>Eucalyptus latens</i> and <i>Eucalyptus aspersa</i> on clay to clay-loam soils over outcrops on slopes.
<b>Worsley Environmental Management Liaison Group</b>	<p>The Worsley Environmental Management Liaison Group comprises representatives of state government agencies whose areas of responsibility are affected by the mining and refining operations of the proponent. The Worsley Environmental Management Liaison Group comprises of officers of the Department of Jobs, Tourism, Science and Innovation (Chair and Coordination) <b>DBCA, DWER, DEMIRS</b>, the Department of Planning, Lands and Heritage and the Department of Primary Industries and Regional Development. The Worsley Environmental Management Liaison Group shall have the following functions:</p> <ul style="list-style-type: none"> <li>• provide comment on the draft Rehabilitation Plan for the <b>extended mining areas</b> (refer condition B9-1);</li> </ul>

Acronym or abbreviation	Definition or term
	<ul style="list-style-type: none"> <li>• provide comment on the draft Bauxite Mining Plan(s) for the <b>extended mining areas</b> (refer conditions B8-1 and B8-8);</li> <li>• provide comment on the offsets program prepared for the <b>extended mining areas</b> (refer condition B10-3);</li> <li>• provide comment on any <b>Ten Year Mine Plan</b> prepared by the proponent pursuant to clause 16 (10) of the <i>Alumina Refinery (Worsley) Agreement Act 1973</i> where that plan includes activities related to the <b>extended mining areas</b> and provide reports on its findings to the Minister for State and Industry Development and the Minister for Environment</li> <li>• review the proponent's environmental performance for the <b>extended mining areas</b> annually against its Bauxite Mining Plan(s) and Rehabilitation Plan (refer conditions B8-6, B8-10, B9-4 and B9-10) ; and</li> <li>• consult with the proponent on any <b>proposed new land use(s)</b> (refer condition B3-3).</li> </ul> <p>Other agencies which may have areas of responsibility from time to time affected by the mining and refinery operations of the proponent may be involved in providing advice or become members of the Worsley Environmental Management Liaison Group.</p>

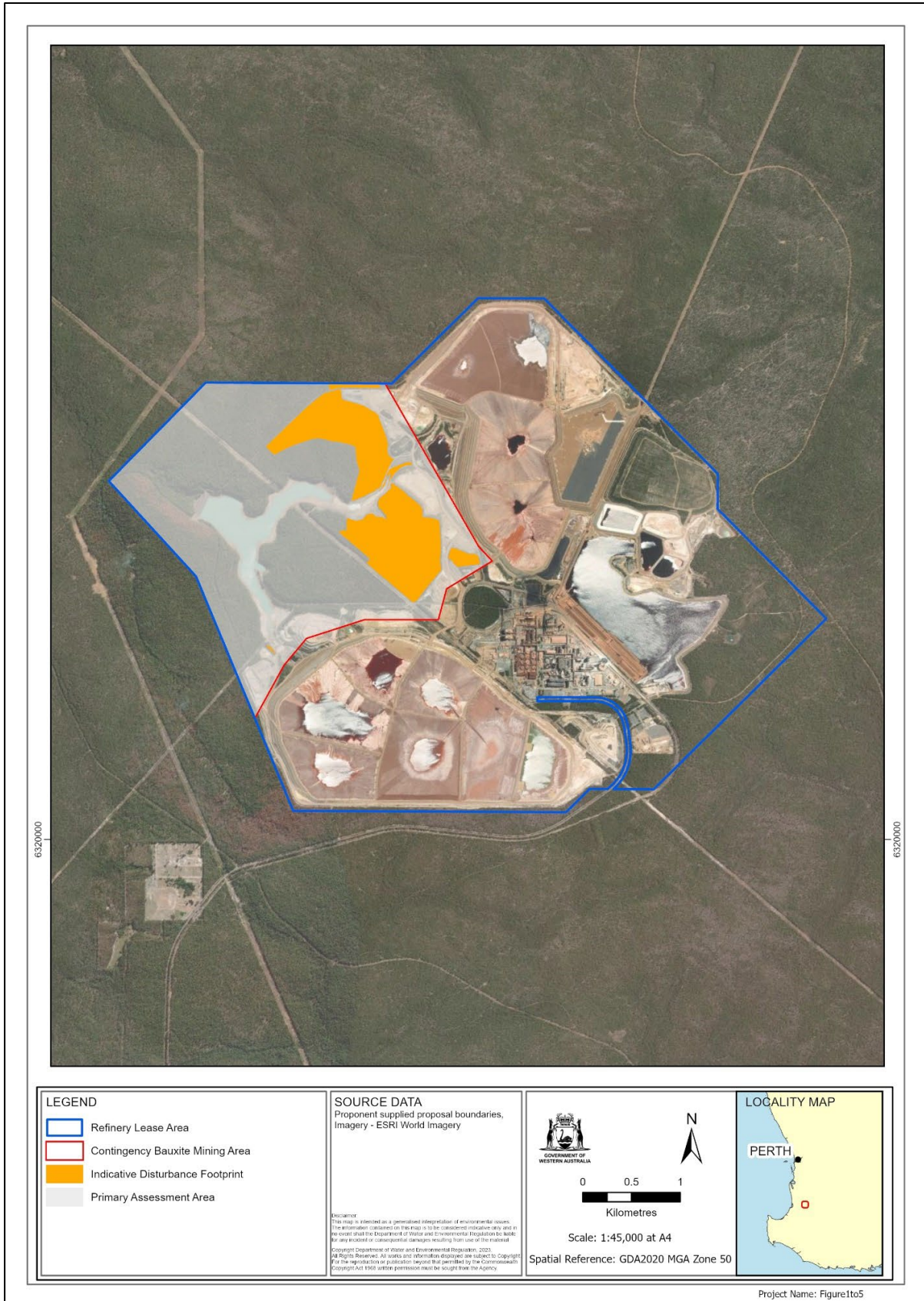
**Figures (attached)**

- Figure 1** Worsley Mine Development Envelope & Bauxite Transport Corridor
- Figure 2** Refinery Lease Area & Contingency Bauxite Mining Envelope
- Figure 3** Primary Assessment Area, Extended Mining Areas & Wellington Dam
- Figure 4** Pipeline Protected areas
- Figure 5** Ecological linkages
- Figure 6** Additional Caladenia protected areas
- Figure 7** Woylie habitat
- Figure 8** Black cockatoo breeding trees
- Figure 9** Red-tailed phascogale habitat
- Figure 10** Offset 3b location
- Figure 11** Mine regions of the PAA

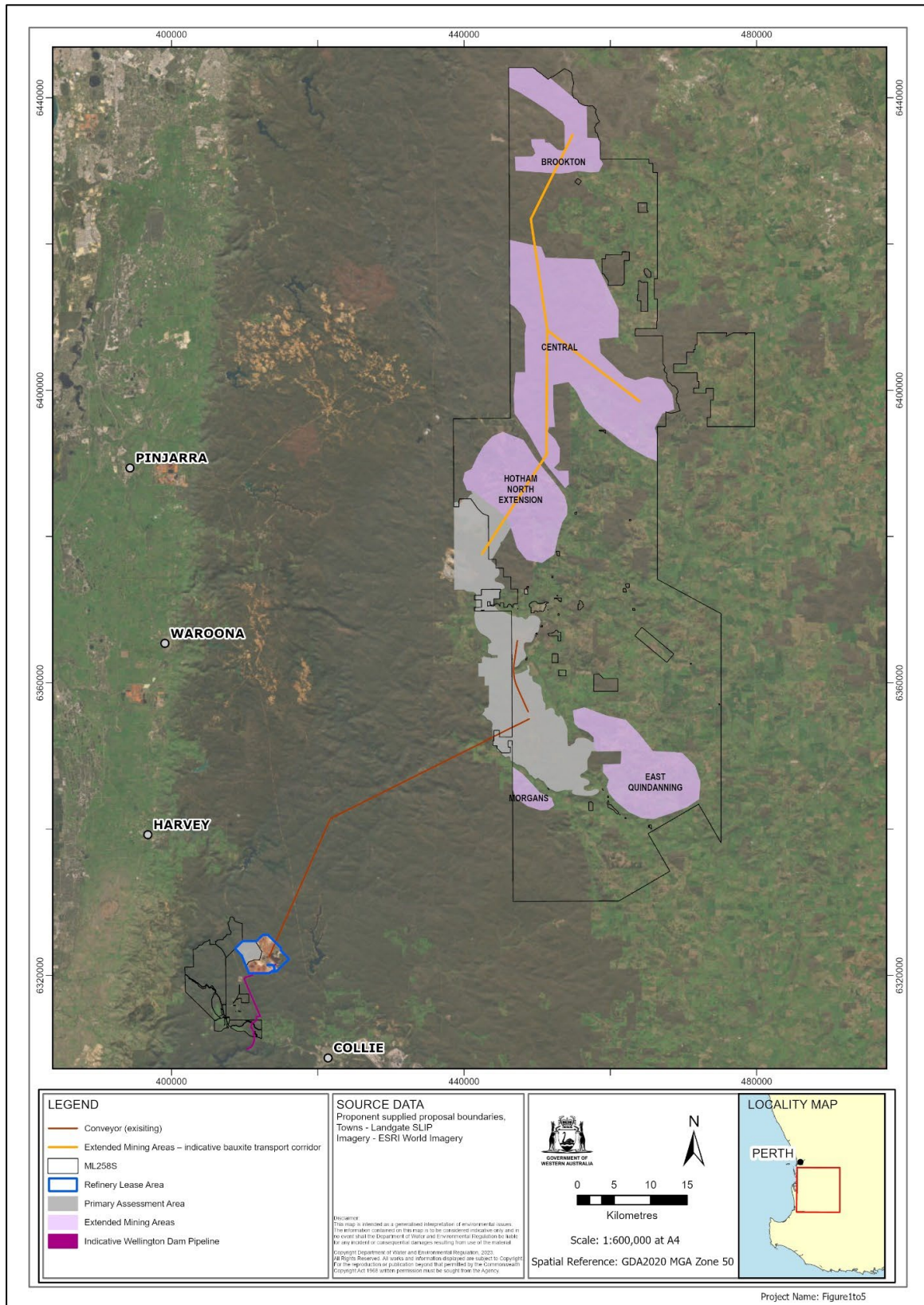
**Figure 1 Worsley Mine Development Envelope & Bauxite Transport Corridor**



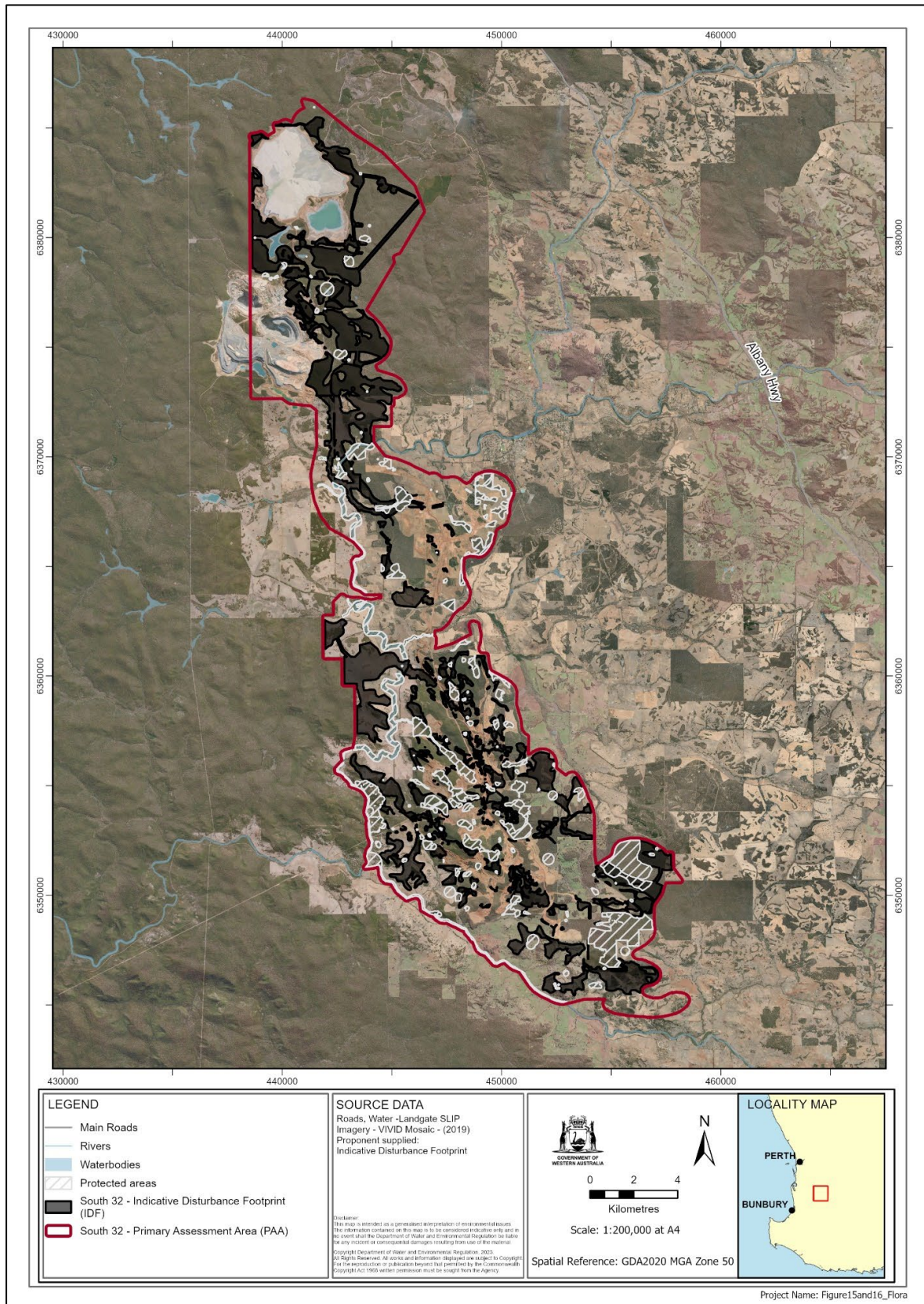
**Figure 2 Refinery Lease Area & Contingency Bauxite Mining Envelope**



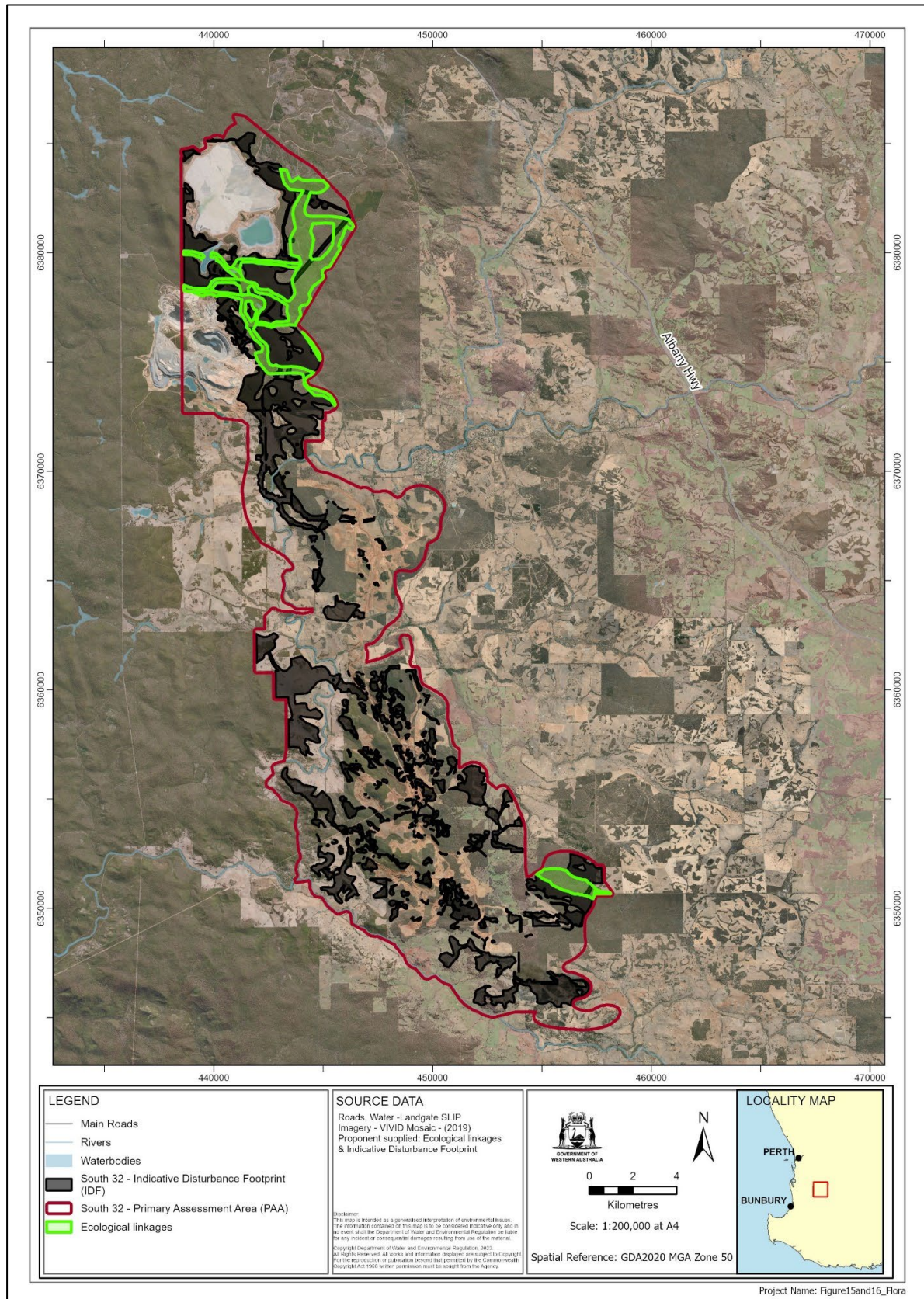
**Figure 3 Primary Assessment Area, Extended Mining Areas & Wellington Dam Pipeline**



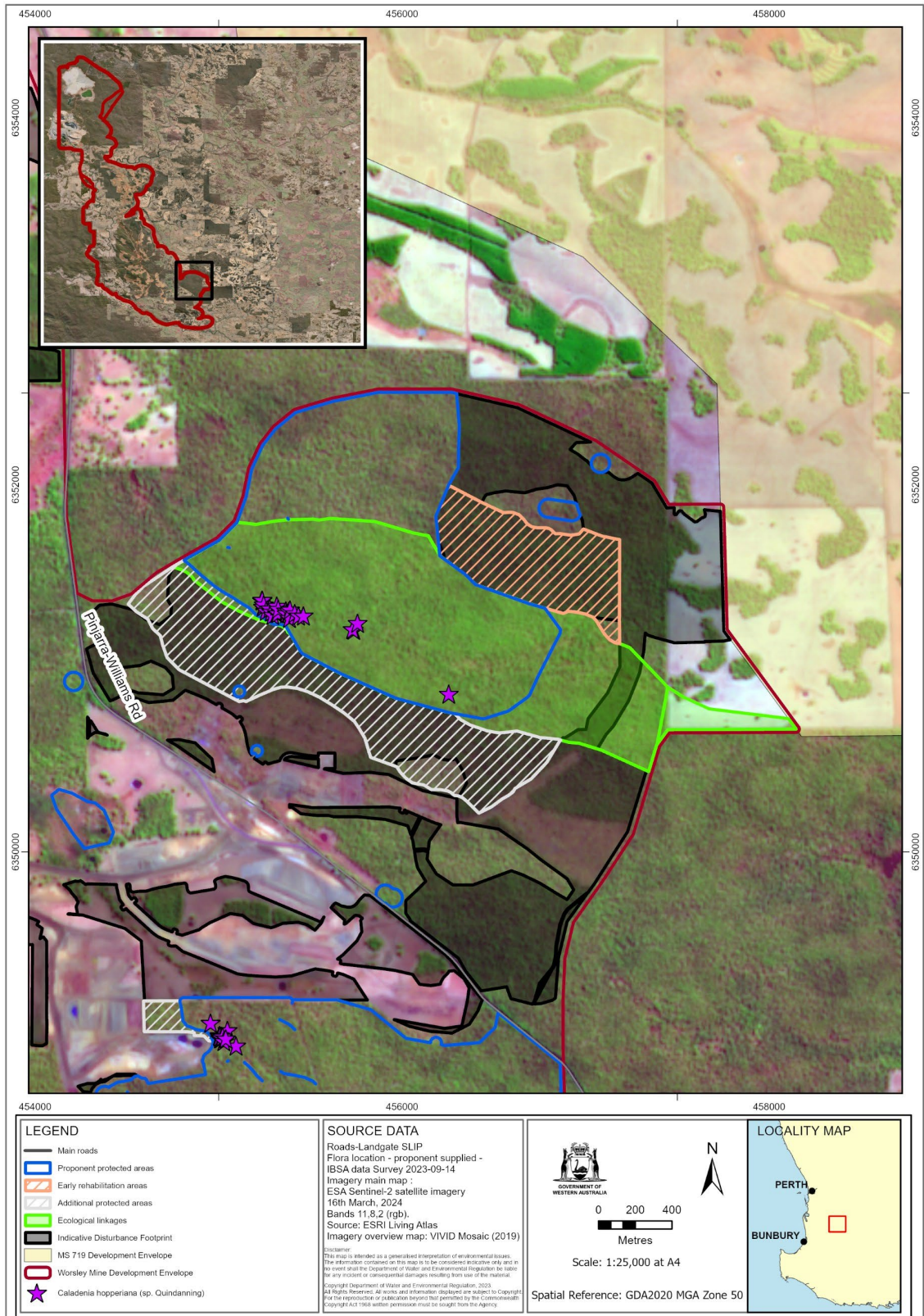
**Figure 4 Protected areas**



**Figure 5 Ecological linkages**

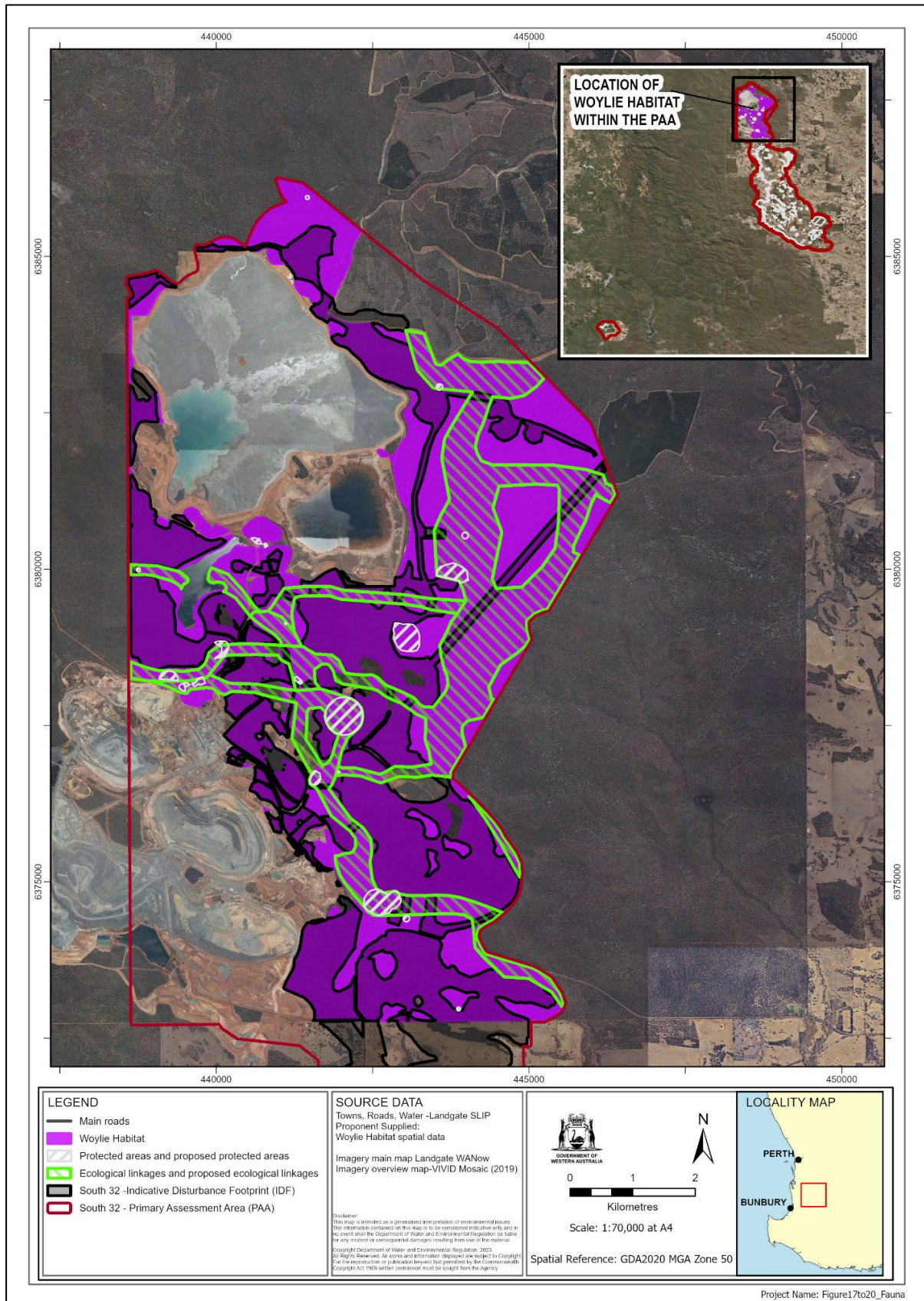


**Figure 6 Additional Caladenia protected areas**

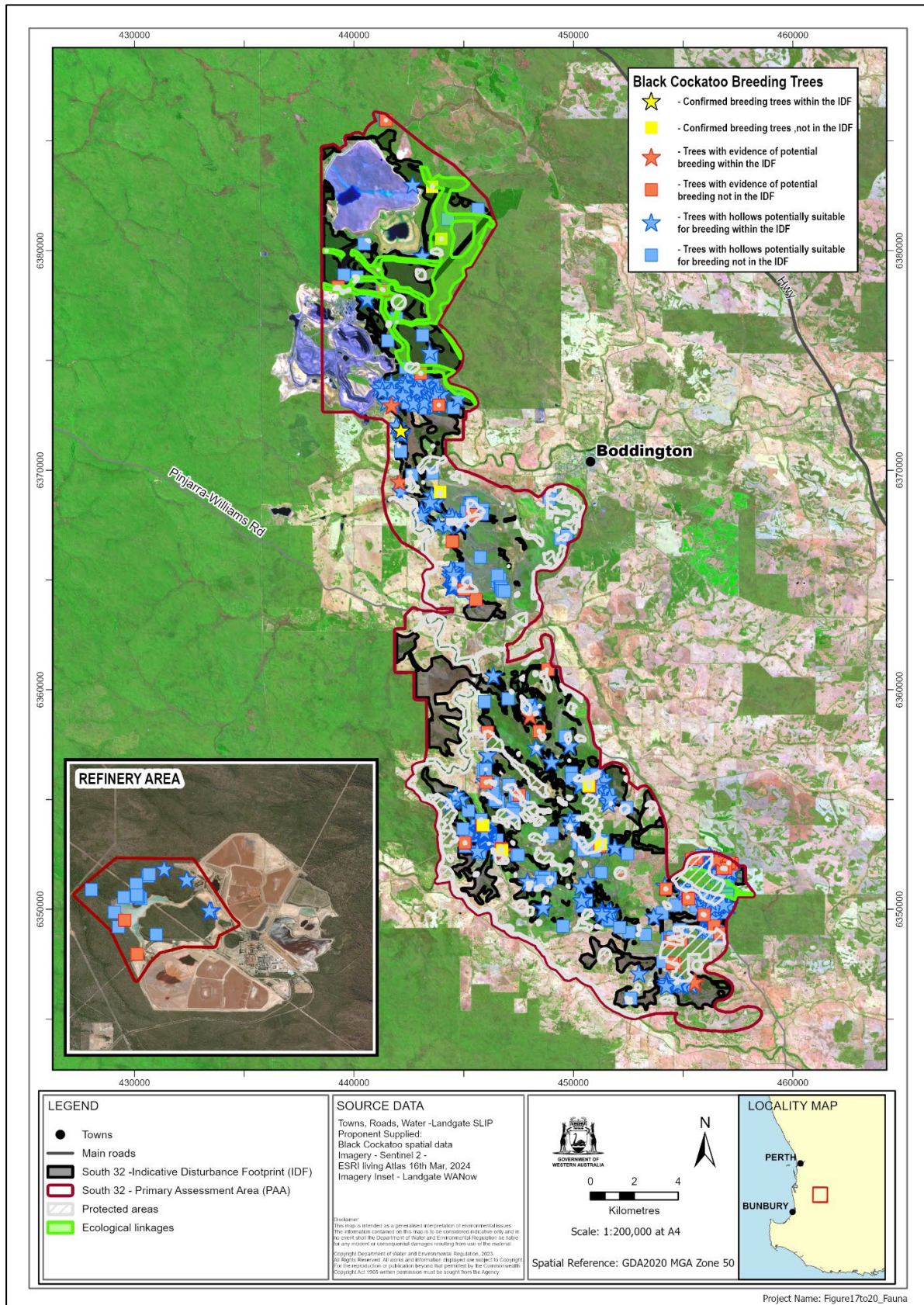


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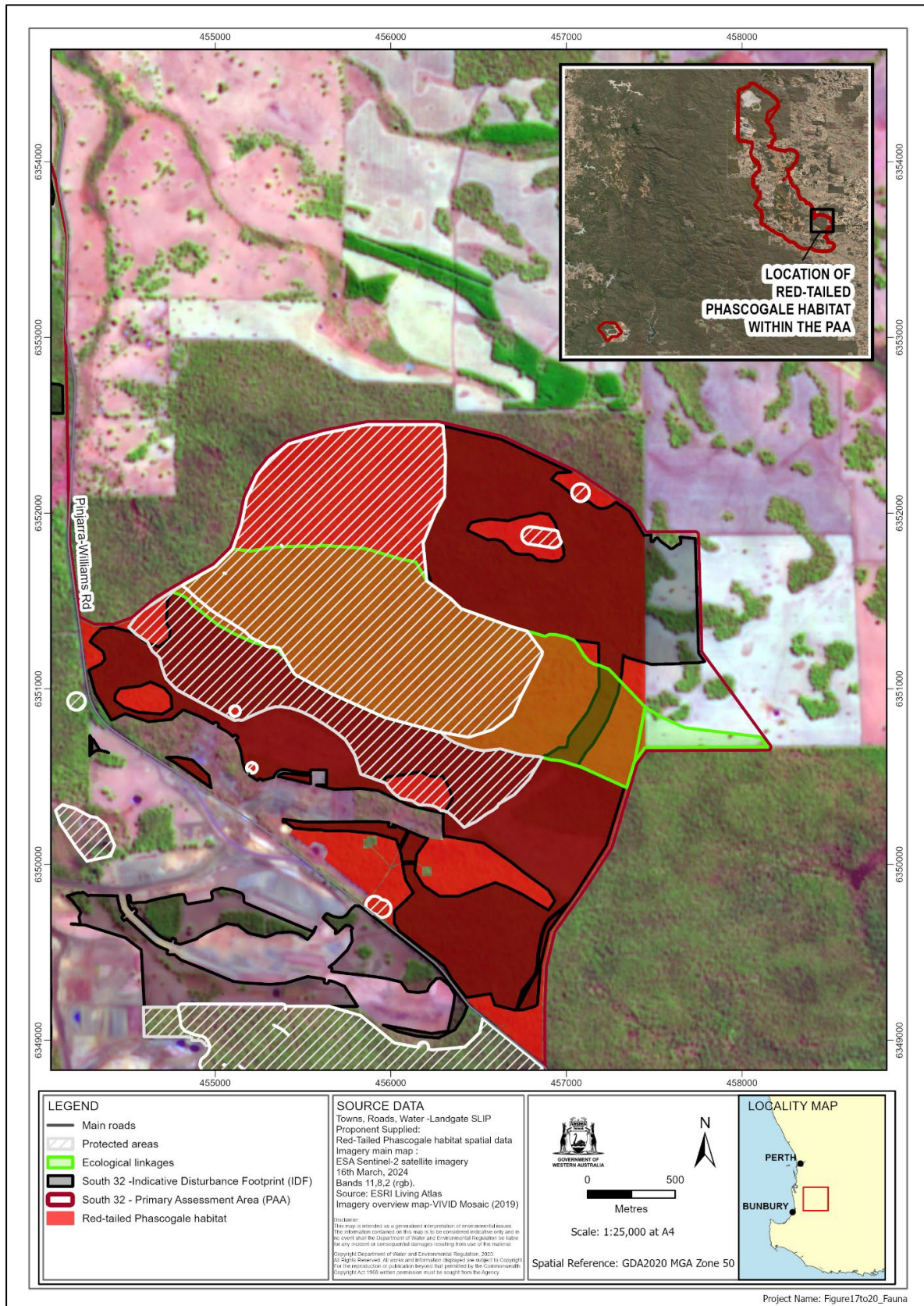
Figure 7 Woylie habitat



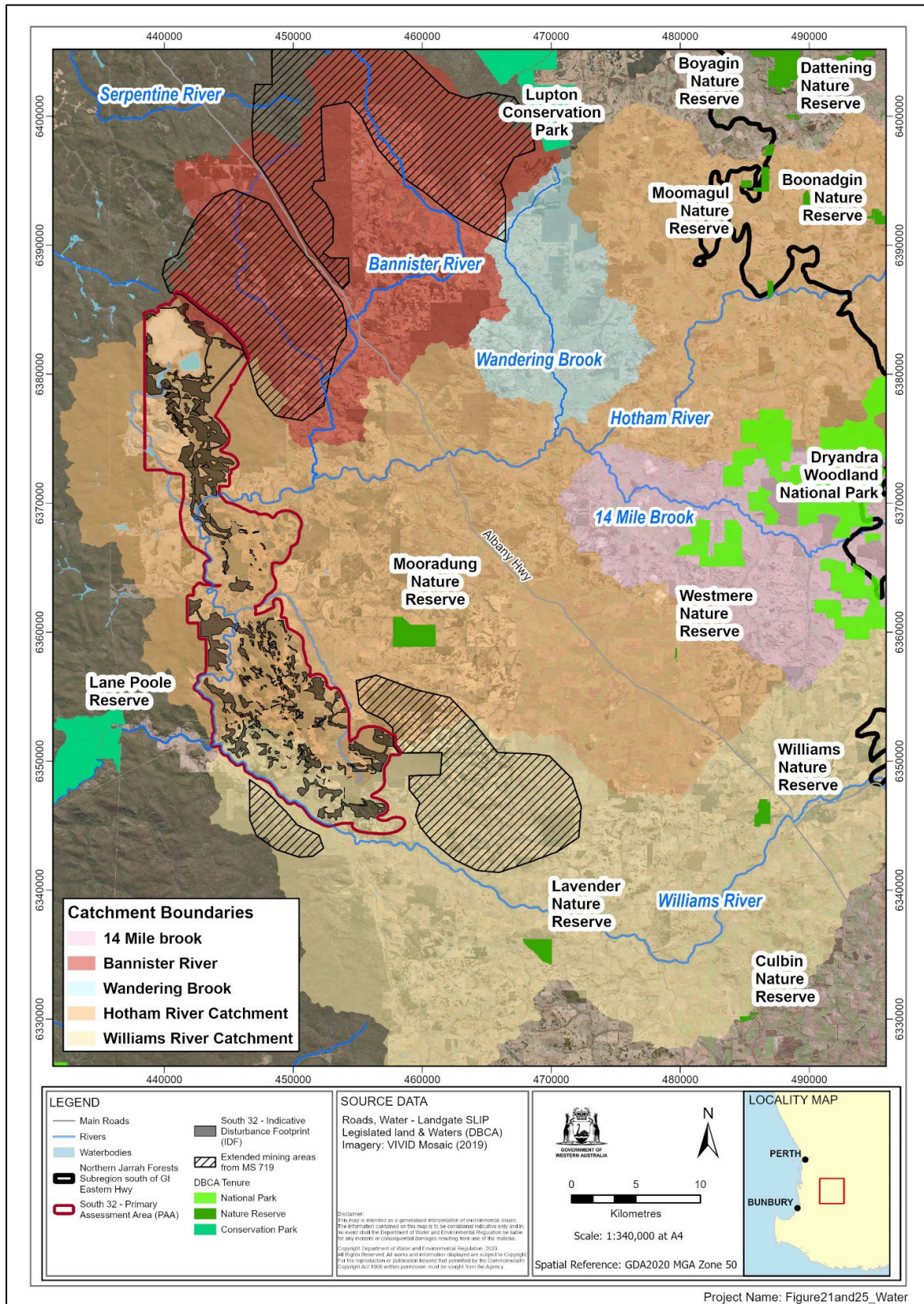
**Figure 8 Black cockatoo breeding trees**



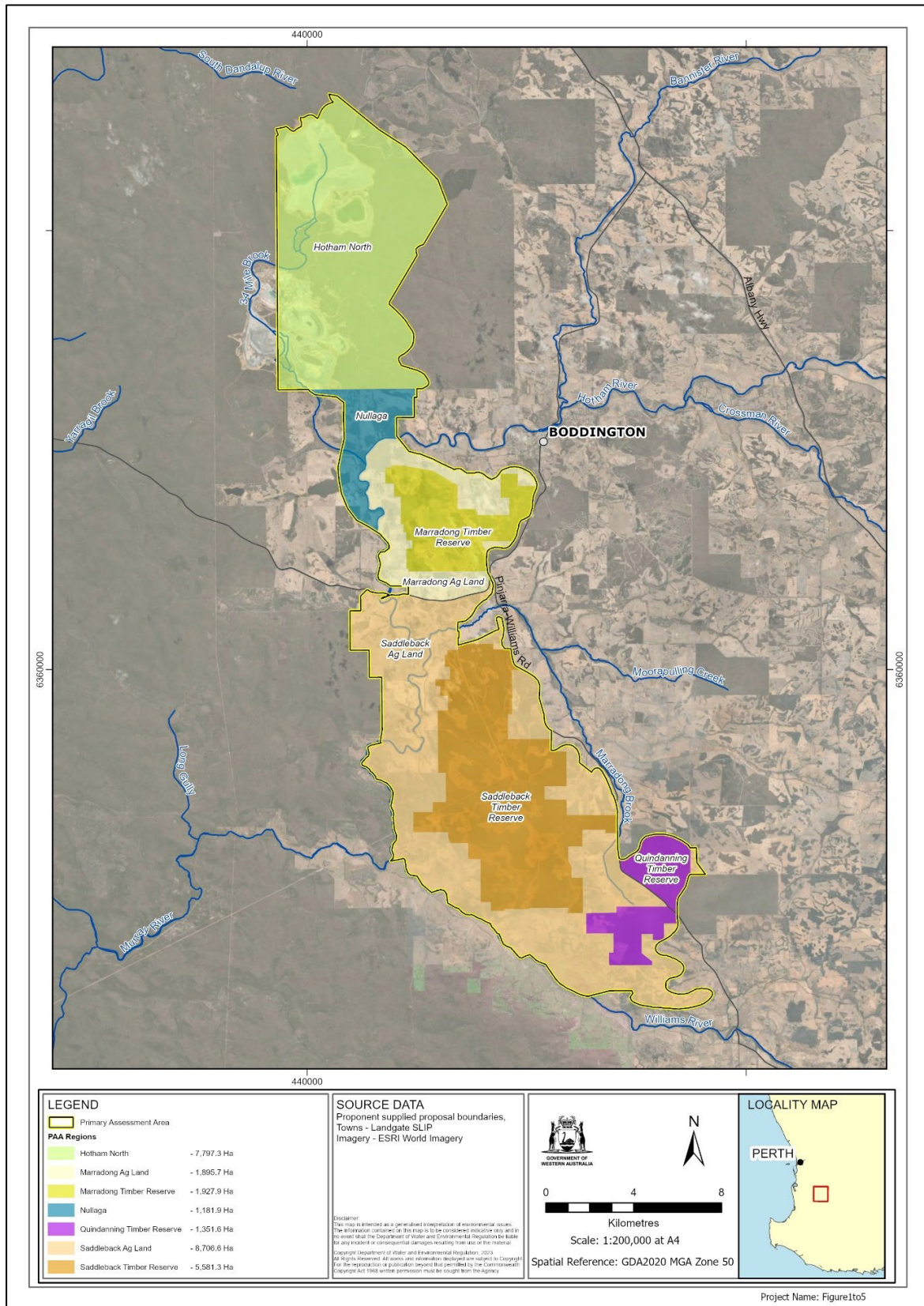
**Figure 9 Red-tailed phascogale habitat**



**Figure 10 Offset 3b location**



**Figure 11 Mine regions of the PAA**



## **Schedule 1**

All co-ordinates are in metres, listed in Map Grid of Australia Zone 50 (MGA Zone 50), datum of Geocentric Datum of Australia 2020 (GDA20).

Spatial data depicting the figures are held by the Department of Water and Environmental Regulation. Record no. DWERT3922-2.