

# Worsley Mine Development

## CONTINUING OPERATIONS

FACT SHEET – BIODIVERSITY OFFSETS

2022



## INTRODUCTION

**South32 Worsley Alumina is an integrated bauxite mining and alumina refining operation in the South West of Western Australia with a proud track record spanning more than 35 years.**

The Worsley Alumina Mine Development is the next phase of bauxite mining near the town of Boddington, providing access to future reserves and resources to sustain production at our Worsley Alumina refinery near Collie.

The project is a key enabler for Worsley Alumina to continue to deliver benefits to the Peel and South West regions, and Western Australia more broadly, for many years to come.

To inform and facilitate ongoing approval of operations at Worsley Alumina, a comprehensive Environmental Review and Impact Assessment has been undertaken and has been used to inform management processes and procedures to ensure ongoing impact associated with the project is minimised as much as practicable.

## BIODIVERSITY CONSERVATION

**Both Commonwealth (Environmental Protection & Biodiversity & Conservation Act 1999) and State legislation (Environmental Protection Act 1986) exists which seeks to protect and conserve environmental and biodiversity values for present and future generations.**

The information contained in this factsheet outlines the review and approach Worsley Alumina is taking to ensure the activities proposed are minimised, managed or appropriate offsets are provided to support the preservation of biodiversity values.



# BIODIVERSITY OFFSETS

**The total disturbance of remnant native vegetation, over time, for the project is 4,399 ha which is known to contain or represent habitat for Matters of National Environmental Significance (MNES) and especially protected fauna species.**

The species which have required focus and potential provision of offsets include; Black Cockatoos (Forest Red-tailed, Carnaby's and Baudin's); Woylie; Chuditch; Red-tailed Phascogale; Western Ringtail Possum and Quokka. Worsley Alumina is committed to ensure that negative impacts from activities associated with the project are reduced where possible and has applied the mitigation hierarchy to avoid, minimise and rehabilitate prior to implementing offsets. Offsets will only be implemented once all reasonable avoidance and mitigation measures have been exhausted and where a significant residual impact (SRI) remains.

Worsley Alumina has developed a Biodiversity Offset Plan (BOP) to ensure all plans to offset the SRI are clearly understood by all interested parties and ultimately met for the project.

Several offset options were identified following preliminary analysis to fully account for the SRI to conservation significant species from the Revised Proposal, following the implementation of avoidance, minimisation and mitigation measures. These offset options were then prioritised according to effectiveness, feasibility and scale, and in consideration of risks and additional benefits. This process has identified the following offsets as providing the lowest risk and greatest benefit for impacted conservation significant species:

- Direct Offset 1 – Provision of Worsley Alumina land for both habitat protection and ecological restoration (land that has not previously disturbed for mining or was restored from land cleared for agriculture prior to mining)
- Direct Offset 1 a) 4,175 ha of Worsley Alumina land for habitat protection (supporting offset for Carnaby's, Baudin's and Forest Red-tailed black cockatoo, Chuditch, Western Ring-tail Possum and Quokka;
- Direct Offset 1 b) 435 ha of ecological restoration of cleared agricultural land (supporting offset for Carnaby's, Baudin's and Forest Red-tailed black cockatoo, Chuditch and Quokka);
- Direct Offset 2 – Targeted ecological restoration of Red-tailed Phascogale habitat (220 ha habitat protection and 417 ha ecological restoration) in priority locations within the range of the species. This offset also provides benefits for Chuditch and black cockatoos;
- Direct Offset 3 – Targeted ecological restoration of black cockatoo habitat (4,299 ha) in priority locations within the range of the species. This offset also provides benefits for Chuditch;
- Direct Offset 4 – Strategic installation of artificial hollows (ratio of at least 3:1) in priority locations for black cockatoos;
- Direct Offset 5 – Woylie conservation reserve and associated actions;
- Indirect Offset – targeted research projects and partnerships aimed at improving the management and protection of impacted MNES, enhancing habitat values and/or counteracting the impact of clearing MNES habitat.

Offset programs and activities conducted under the BOP will be overseen and administered by Worsley Alumina with support from key stakeholders (including regulators) who will be sought to provide independent advice, where relevant.

## PLANNING FOR THE FUTURE

**As Worsley Alumina is a long-life operation, full consideration of biodiversity offsets from a strategic, regional level is required to ensure opportunities to achieve optimal cumulative biodiversity and socio-economic outcomes are recognised and acted upon.**

To support this a Biodiversity Offsets Strategy (BOS) has been developed to both maintain and enhance ecological values that will be impacted by Worsley Alumina's activities into the future, while also delivering enduring positive outcomes for the region and its communities.

NOTE: Planning for Biodiversity Offsets as part of this project are being negotiated and reviewed with the State and Commonwealth agencies as part of this project and may include updates or changes to the information contained within this factsheet.

## MORE INFORMATION

**More information about State and Federal offsets policies and guidelines can be found at the following locations:**

STATE:

- [https://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/WAEnvOffsetsPolicy-270911.pdf](https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/WAEnvOffsetsPolicy-270911.pdf)
- [https://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/WA%20Environmental%20Offsets%20Guideline%20August%202014.pdf](https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/WA%20Environmental%20Offsets%20Guideline%20August%202014.pdf)

FEDERAL:

- [https://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/WAEnvOffsetsPolicy-270911.pdf](https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/WAEnvOffsetsPolicy-270911.pdf)