

## About Worsley Alumina

**South32 Worsley Alumina is an integrated bauxite mining and alumina refining operation in the South West of Western Australia.**

Bauxite is mined near the town of Boddington, 130 kilometres south east of Perth. The bauxite is transported to the Worsley Alumina Refinery near Collie via an overland conveyor system that stretches more than 50 kilometres.

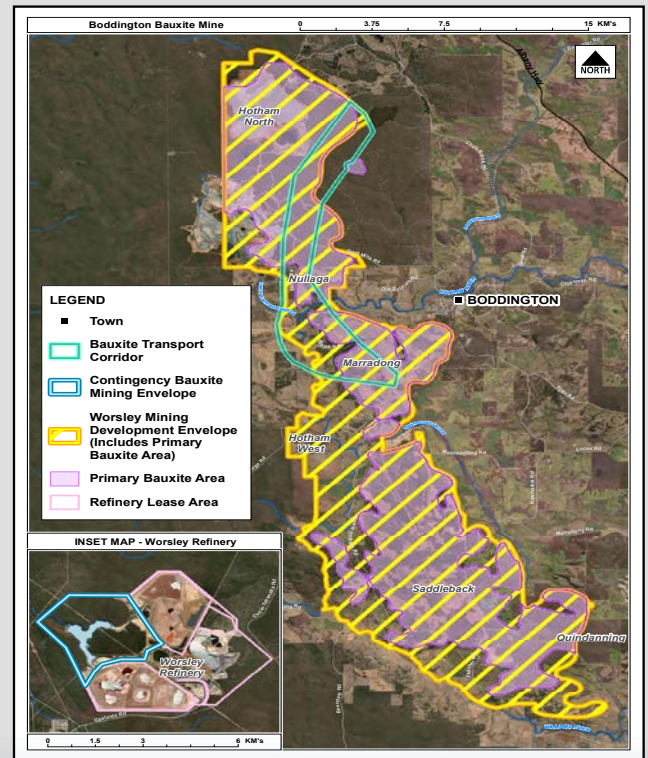
The alumina is used in the smelting process to produce aluminium. Aluminium is strong, flexible, light-weight, durable, 100 per cent recyclable. It plays a crucial role in producing lighter vehicles and other forms of transport due to its high strength-to-weight ratio.

Worsley Alumina has been a partner in developing the South West region for more than 35 years. The communities of Boddington, Collie and Greater Bunbury are home to 74% of our people.

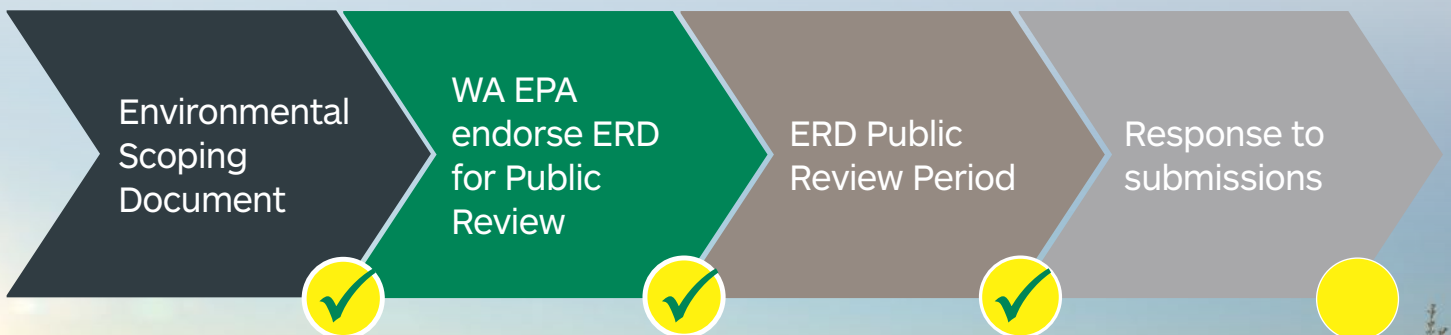
The Worsley Alumina Mine Development will enable the sustainable continuation of bauxite mining and secure the futures of more than 1,500 direct employees and 500 contractors. Worsley Alumina injects more than \$1 million per day into the local South West and Peel Regions.

The project is subject to a comprehensive State and Commonwealth environmental approval and public review process.

## Worsley Alumina Mine Development Map



## Project Timeline



# Project Overview

## The Worsley Mine Development proposes to

- expand the current approved mining envelope to the north and west, while utilising existing mining and conveying infrastructure
- develop transportation corridors to link existing and new mining areas, and;
- provide contingency mining envelopes to support additional bauxite supply as required

The project is subject to a comprehensive environmental review process through the Western Australian Environmental Protection Authority (WA EPA). The WA EPA will conduct an accredited assessment, fulfilling the requirements set by the Commonwealth Department of Agriculture, Water and the Environment (DAWE).

Worsley Alumina have developed an Environmental Review Document (ERD) to support the WA EPA's assessment of the project and inform the public of proposed management measures to minimise environmental impacts.

## CASE STUDY: Protecting Biodiversity and Operating Sustainably

**Worsley Alumina has actively pursued projects which protect fauna so that biological diversity and ecological integrity are maintained.**

Worsley Alumina has developed is protecting biodiversity through the installation of 24 small mammal nesting boxes across multiple areas and ages of their post mine rehabilitation.

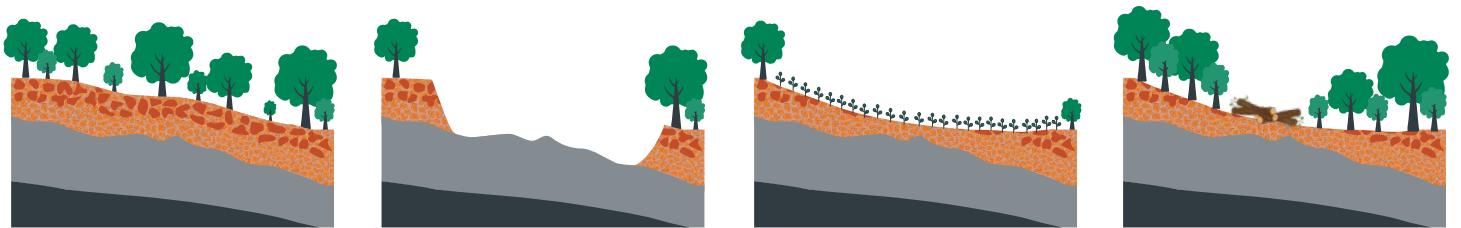
The nesting boxes are a temporary replacement for tree hollows, and encourage nesting, protection from predators, shelter and roosting for small mammals. These nesting boxes have the potential to influence Mardo, Honey / Pygmy Possums, and Phascogales. Best practice mine site rehabilitation practises also include the return of fauna habitat piles and returned course woody debris.

The nesting boxes are frequently studied by our environmental teams and enthusiastic volunteers and will continue to be observed

over the next couple of years to assess usage and determine if a broader installation program is required, including appropriate rehabilitation age and possible densities. Additionally, each nesting box has a life span of approximately 10 years and is made from mostly recycled and/or upcycled materials.



## Mining Process: Landscape Rehabilitation Journey

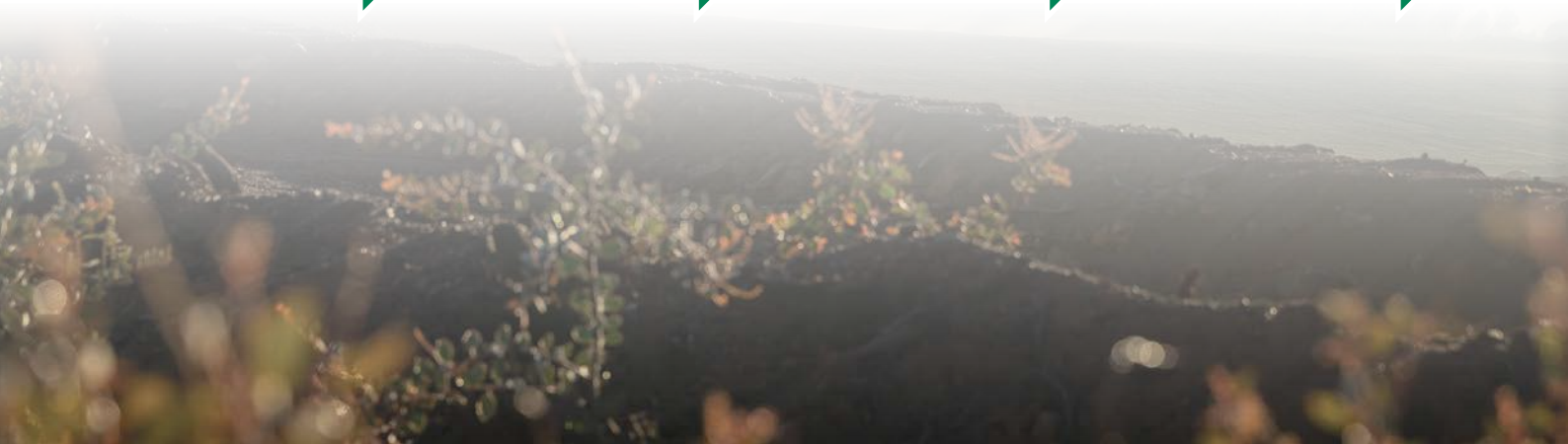


**STEP 1**  
Pre-mining  
Landscape

**STEP 2**  
Mining  
Landscape

**STEP 3**  
Post-mining  
rehabilitation

**STEP 4**  
Rehabilitation  
complete



# Key Environmental Factors

The Environmental Review Document outlines how Worsley Alumina will address the key environmental factors identified by the WA EPA to minimise any environmental impact and support the sustainable development of the project.

A copy of the ERD is available online at [www.south32.net/worsleyminedevlopment](http://www.south32.net/worsleyminedevlopment) or can be mailed to you on request by emailing [worsleyminedevlopment@south32.net](mailto:worsleyminedevlopment@south32.net)



## Clearing and Rehabilitation

- Bauxite mining involves the continual clearing and concurrent rehabilitation of vegetation as the mine path progresses through new areas.
- South32 has looked at continual improvements and has revised the proposed growth of the project to lessen the environmental impacts from what was originally proposed in 2017. The revised plan results in a 38% reduction in vegetation clearing, compared to our original referral.
- Since operations began in 1984, Worsley has rehabilitated approximately 3,200 hectares of natural vegetation. Through a Biodiversity and Forest Management Plan, the operation will rehabilitate 4,300 ha over the life of the Project.
- Clearing associated with the project has been designed to avoid areas of high environmental value as defined in the Worsley Alumina Protected Areas Plan.

## Biodiversity Offsets

A Biodiversity Offset Plan (BOP) developed for the Project outlines the integrated approach Worsley Alumina will take to deliver biodiversity offsets including:

- Direct Offsets including providing agreed parcels of Worsley owned freehold land and funding for Land Protection, Ecological Restoration and Land Management activities.
- Indirect offsets including financial support for key research projects and partnerships that will enable enhancement of habitat values.



- Ongoing monitoring of groundwater levels and quality.
- Buffers and setbacks from key rivers, streams and dams.
- No impacts expected for key freshwater species.



- Ongoing monitoring of air quality and particulate matter emissions.
- Active management of mining areas through water carts and dust suppressants.



- Working closely with the Traditional Owners to identify, protect and appropriately manage Aboriginal heritage and other sites as required.
- Heritage Management Plans in place with ongoing feedback and input from Traditional Owners.
- Continued support for our local Indigenous communities through direct investment in employment and procurement initiatives.



- South32 and Worsley Alumina are committed to a 50 per cent reduction in our Scope 1 and 2 emissions by 2035 and net zero emissions by 2050.
- Emissions reductions to be achieved with a combination of energy efficiency and fuel switching projects, other green energy options and possibly carbon offsets.



# Supporting Local Employment and Business

**Worsley Alumina is one of the largest employers in the Peel and South West Regions, employing more than 1,500 people and supporting over 500 contractors.**

Last financial year, Worsley Alumina spent more than \$158 million with local businesses and injected more than \$1 million a day into the local economy through salaries, local suppliers and community investment.

The Boddington, Collie and Greater Bunbury communities host our operations and are home to 74% of our employees.



**Worsley**  
injects more than  
**\$1M** daily  
into the South  
West economy

## Contact Us



More information about the project is available on our website [www.south32.net/worsleymineddevelopment](http://www.south32.net/worsleymineddevelopment)

A copy of the ERD is available on our website [www.south32.net/worsleymineddevelopment](http://www.south32.net/worsleymineddevelopment) or can be mailed to you on request by emailing [worsleymineddevelopment@south32.net](mailto:worsleymineddevelopment@south32.net).

If you would like to speak with us about the project, please call our free Community Call Line 1800 555 958 or email [worsleymineddevelopment@south32.net](mailto:worsleymineddevelopment@south32.net).