

Huntly mine transition and Pinjarra refinery production increase

Environmental assessment



Terrestrial fauna



Alcoa has been operating in Western Australia since 1963. Our Huntly and Willowdale mines send mined bauxite to our Pinjarra and Wagerup refineries where it's refined into alumina, the material used to make aluminium.

Aluminium plays a key role in decarbonisation. It's found in solar panels, wind turbines, electric vehicles, medical equipment and more. We continue to rely on it every day.

The assessment

We are seeking approval to transition Huntly Bauxite Mine to new operating areas and increase alumina production at Pinjarra Alumina Refinery by 5%. This requires assessment from the Environmental Protection Authority (EPA) and approval by the State and Commonwealth Governments to ensure it meets environmental standards and minimise impacts to the environment, cultural values and local communities.

Transitioning to new mine regions is essential for the continued operation of the Huntly mine and Pinjarra refinery. This project will protect thousands of ongoing local jobs, helping sustain the regional economy.

We've coupled studies to understand the environment and how our activities might affect it, with our knowledge and used these to prepare our Environmental Review Document. This includes extensive surveys to identify and protect conservation significant fauna.

EPA environmental objective aims to

protect terrestrial fauna to maintain biodiversity and keep ecosystems healthy.

Proposed activities

Alcoa's proposed mining activities that could impact terrestrial fauna include:

- Clearing land for roads, infrastructure, and mining areas.
- Transitioning mining operations into new locations.
- Operating mining and haulage equipment.

Key terms

Terrestrial fauna – Animals that live on or use land for part of their lives, including vertebrates (birds, mammals, reptiles, amphibians, and freshwater fish) and invertebrates (arachnids, insects, crustaceans, molluscs, and worms).

Short range endemic fauna – Animal species that live in a small and specific area such as spiders, snails and millipedes.

Black cockatoo nesting trees classifications:

Known – Have a hollow with recorded breeding activity.

Suitable – Have hollows but no recorded use.

Potential impacts

Mining activities have the potential to impact terrestrial fauna in the following ways:

Habitat loss and disturbance – Clearing and fragmentation of vegetation, changes in water quality and availability and impact of introduced light sources.

Feral animal attraction – Habitat changes may attract feral animals, increasing risks to native species.

Pollution and hazardous spills – Leaks from storage and handling of hazardous materials can affect soil, water, and fauna.

Weeds, disease, and dieback – Soil and vehicle movement can introduce weed and plant diseases, changing habitat for fauna.

Noise and collisions – Infrastructure and equipment may disturb fauna, with risks of entrapment or collision.

Environmental protection and fauna management

Alcoa is committed to minimise our impacts on fauna with Fauna Protection and Return one of five core pillars of our Forest Research Centre. Evidence shows 100% of mammals, and about 90% of birds and reptiles return to rehabilitated areas within 20 years. We manage potential impacts to terrestrial fauna through the application of the mitigation hierarchy – avoidance, minimisation, rehabilitation and offsets.

Avoidance zones

Alcoa has established avoidance zones within the proposed project area, where clearing is strictly limited for infrastructure that cannot be located within the mine development zones, with measures to retain habitat and protect fauna.

- 1,644 ha (82%) of mapped riparian and swamp vegetation, providing important habitat for fauna such as black cockatoo, quokka and chuditch.
- 174 km (80%) of mapped seasonal streams, which are key water sources for Black Cockatoos and Quokka and may contain Carter's Freshwater Mussel.
- 395 ha (89%) of mapped granite outcrop vegetation, which provides seasonal water sources for Black Cockatoos.

Fauna conservation

No more than 7,500 ha of native fauna habitat will be cleared over the 20-year life of the proposal.

Where clearing is required the following measures are implemented:

- **Black cockatoos** – Minimise clearing within 30m of known or suitable nest or night-time roosting trees.
- **Quokka** – No clearing within 50m of identified population; if unavoidable fauna spotters are engaged to corral into suitable habitat.
- **Carter's freshwater mussel** – No clearing within 100m of identified population; if unavoidable, they will be relocated to a suitable location.
- **Short-range endemic fauna** – No clearing within 50m of identified population, unless confirmed populations exist outside areas to be cleared.



Minimising construction and operational impacts

- Night-time operations limited to essential activities, with no blasting permitted.
- Vehicle movements restricted to designated roads with 40 km/h speed limits enforced.
- Lighting designed to reduce fauna disruption.
- Strict food and waste management to prevent fauna attraction.
- All chemicals stored safely in approved containers within containment areas.
- Staff are trained to protect and safely manage fauna on site.
- Fauna underpasses established to maintain habitat links within the mine regions.

Rehabilitate

For decades, we have continued to develop and follow leading science-based rehabilitation practices.

- We propose rehabilitation rates will match the clearing undertaken for mining and short term infrastructure on a rolling 3-year basis.

- Rehabilitation will be prioritised near environmentally significant areas.
- Logs and rocks are returned as part of the early stages of rehabilitation to create fauna habitat.

Offset

Our offset commitments are designed to protect, enhance and manage key habitat areas for threatened species in State Forest.

Our proposed offset areas are:

- 22,065 ha of black cockatoo habitat
- 17,020 ha of chuditch habitat
- 2,895 ha of quokka habitat, and
- 13,890 ha of woylie habitat.

In most cases, an area may represent habitat for more than one species. You can read more about our offsets projects in the Offset Information Sheet.



How Alcoa monitors potential impacts

Fauna monitoring – A qualified fauna spotter will be on site during timber salvaging and clearing to identify and relocate fauna such as chuditch or quokka.

Fauna mapping – Our Spatial system records fauna habitat locations based on survey and camera monitoring outcomes.

Clearing limits/extent – Clearing reconciliation conducted to ensure we comply with our clearing limits and extents.



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