28 August 2022



Due 29 August Public Submission

Professor Matthew Tonts Chair Environmental Protection Authority Locked Bag 10 JOONDALUP DC WA 6919

The Public Consultation Hub is the preferred route to contribute: https://consultation.epa.wa.gov.au/open-for-submissions/worsley-expansion-revised-per-2/

South32's Proposed Worsley Mine Expansion

Thank you for the opportunity for the Urban Bushland Council WA Inc. (UBC) to present comments in response to the proposed expansion of mining in the Northern Jarrah Forest.

Our organisation is a voluntary community association of 87 member groups (each with their own local membership from 10-165 individuals) and 100 individual supporter members – all of which have a common interest in the conservation of urban bushland and wetlands as well as the conservation of WA's natural biodiversity.

UBC is an incorporated, not-for-profit organisation registered as a charity. (https://www.bushlandperth.org.au/)

UBC is the key community organisation in WA providing a public voice on the need for retention of what remains of our urban bushland and wetlands which is also critical for a healthy and prosperous future. UBC also advocates for natural areas beyond the urban area following guidance from our members. We advocate to all levels of Government for natural areas protection. We do this with limited resources through the amazing efforts of our 'Friends Groups' and their many volunteers – from all walks of life 'working' to improve and maintain the health of patches of neighbourhood nature – many working in close collaboration with your authority, fellow agencies (eg Department of Water and Environmental Regulation, Department of Biodiversity, Conservation and Attractions, Department of Planning, Lands and Heritage, Water Corporation) and their local council.

Name and address: Christine Richardson Urban Bushland Council WA Inc (UBC) PO Box 326 West Perth 6872 Not confidential

SUMMARY OF SUBMISSION:

The Urban Bushland Council's submission addresses only the 'Environmental Factor – Terrestrial Fauna', using this factor as a demonstration of the high levels of biodiversity and uniqueness of species of plants, fauna and fungi. The UBC's advice is that the EPA does not recommend approval of the "South32's Proposed Worsley Mine Expansion".

We understand that, together with previous approvals, and with applications for approvals, the total aspirational area for clearing by South32 over the next 15 years will be **13,741 hectares** – the equivalent of 34.4 Kings Parks or 458 Optus Stadiums.

The Northern Jarrah Forest has already been heavily impacted – with only xx remaining intact. The UBC xx that the Northern Jarrah Forest now be left as intact as possible and be added to the conservation estate and be managed for conservation with well managed non-active recreation.

The EPA acknowledges that 'there is likely to be public concern around the proposal', 'including the scale of clearing for the proposal'. (Refer EPA Notice of decision to consent to change to proposal during assessment).

Public concern is certain.

The community, we observe, is angry and ashamed at the level of decline and extinction of species, the lack of appropriate action to prevent climate catastrophe, planning deficiencies, and lack of effective protection for our environment.

SUMMARY STATEMENT

The UBC calls on the EPA to reject this proposal due to the huge amount of clearing proposed that would, if allowed, increase the risk of the extinction of species.

The Northern Jarrah Forest should be added to the conservation estate of the State.

The UBC calls on the EPA, the WA McGowan Government, the resources sector, local councils and the community to significantly improve the reduction, reuse and recycling of aluminium.

ENVIRONMENTAL FACTOR: TERRESTRIAL FAUNA

<u>EPA OBJECTIVE</u>: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained. (https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Guideline-Terrestrial-Fauna-131216_3.pdf)

The proposed expansion will not deliver on this objective and instead will most likely lead to local extinction of animals (fauna), fung, plants and their associated habitat. The UBC urges the EPA to consider their much more responsible **Precautionary Principle.**

TERRESTRIAL FAUNA

Larger Fauna

The list of iconic animals living within the area of forest under consideration is remarkable. Present include:

- Southern Brown Bandicoot
- Chuditch
- Woylie
- Brush-tailed Phascogale
- Red-tailed Phascogale
- Quokka
- Western Ringtail Possum
- Rakali
- Numbat,
- three species of black cockatoo (Forest Red Taile, Baudin, Carnabys)
- Dell's Skink and
- Western False Pipistrelle.

Seventeen conservation significant fauna species occur there.

The area is also habitat for many other species.

South32 acknowledge that there will be 'significant residual impacts' on eight of the conservation significant species even after avoidance and mitigation measures. All species within the forest should have the right to survive into the future.

Most of the habitat has been assessed as being in excellent or high-quality condition. It is significant that the United Nations 'has recognised the Northern Jarrah Forests as one of a handful of Australian ecosystems most at risk of climate collapse'. (IPCC 2022 Ch 11 p80 https://www.ipcc.ch/report/ar6/wg2/). Clearing of this area will contribute significantly to such predicted decline.

Black cockatoo: The three species of black cockatoos are all in decline with Baudin's level of threat soon to be upgraded to 'Critically endangered.' (UBC talk, Merryn Prior BirdlifeWA 4/5/2022). Apart from the proposed clearing of significant foraging habitat South32 propose clearing 65 confirmed and high potential breeding trees. We do not accept as sensible or logical that 'confirmed black cockatoo breeding trees will be left'—deferred from clearing—until the residents have moved....whereby clearing will again be permitted'.

We understand that pairs of Carnaby's Cockatoos wanting to breed, return to the areas where they have had previous success or where they themselves were hatched and fledged. The result will be a net loss to cockatoos. We are not achieving a reversal in the fate of black cockatoos – we are moving them to extinction. In addition, the South32 proposal cannot be considered in isolation – it is adding significantly to the cumulative effect of habitat clearing that is impacting negatively on the survival of our iconic black cockatoos.

'Today's report [Australian 2021 State of the Environment Report https://www.dcceew.gov.au/science-research/soe] clearly shows that unless we radically change course, we're heading towards species extinctions, degraded landscapes and a less resilient nation.' (Dr Ayesha Tulloch Australian Research Council (ARC) Future Fellow, Queensland University of Technology as published in *The Conversation* July 2022 https://theconversation.com/that-patch-of-bush-is-gone-and-so-are-the-birds-a-scientist-reacts-to-the-state-of-the-environment-report-186135).

Macroinvertebrates

Under the *Environmental Protection, Biodiversity and Conservation (EPBC) Act* few invertebrate taxa from WA are listed as Matters of National Environmental Significance (MNES). This is not due to them potentially not being MNES, but because of limited knowledge.

Similarly, 'few Short Range Endemic (SRE) invertebrate taxa are currently listed under the *WA Biodiversity Conservation (BC) Act*.' Thus, we call upon the EPA to recognise the significance of these SRE species and to act to protect them.

Committee members of the UBC have a diverse range of knowledge, skills and experience. Some have considerable awareness and understanding of Short Range Endemic spiders from a different natural habitat, that of Underwood Avenue Bushland. Fire in this 34 hectare local bushland caused the death of over 200 mygalomorph female spiders - not immediately, but over a short time. Previous to this, only four species had been recorded within this bushland (pers comm Dr Leanda Mason, Department of Environment and Agriculture, Curtin University https://www.publish.csiro.au/pc/PC15044 and https://pubmed.ncbi.nlm.nih.gov/22911375/).

In its Discussion and conclusion, Phoenix ES Pty Ltd p 6, states:

'It is recognised that the area supports a highly diverse array of strongly range-restricted SRE taxa from dominant habitats of the region, i.e. habitats that do not appear to present a dispersal barrier. While only five taxa are restricted to the IDF, [Indicative Disturbance Footprint] the majority of taxa have a distribution of <20km (the length of the PAA [Primary Assessment Area] and considerable clearing has already occurred for both mining and agricultural purposes in the PAA and surrounds, suggesting many have already seen a reduction in their area of occupancy'.

Phoenix reports that 'The native vegetation/habitat is dominated by Marri, Jarrah and Wandoo woodlands or forests, in different positions in the landscape, which convey different micro-climatic conditions that influence SRE habitat distribution.' (P 40, Phoenix Report)

This is an indication of the complexity associated with natural survival of species. Mitigation cannot counteract this level of clearing.

Rehabilitation post-mining cannot replace the diverse micro-climates essential for SRE creatures nor the unique and interconnected species destroyed and / or detrimentally impacted. As Phoenix points out, SRE 'are essentially outcomes of the long and complex geological and climatic history of the Jarrah Forest (Wardell-Johnson & Horwitz 2000

https://www.researchgate.net/publication/37617941_Sustained_Unsustainability_An_Evaluation_of_Evide nce_for_a_History_of_Overcutting_in_the_Jarrah_Forests_of_Western_Australia_and_its_Consequences_f or_Fauna_Conservation) and whose 'individuals are characterised by being found within refugial habitats, have poor powers of dispersal and low fecundity' (EPA 2016; Harvey 2002 p 101)

Some species of isopods are 'of Gondwana ancestry'. (p 80 Phoenix Report). What an amazing heritage.

'Collectively, the surveys indicate that short-range endemism in the invertebrate fauna in this area of the Northern Jarrah Forest is much greater than previously thought' (p 112 Phoenix Report).

It is stated that additional taxa, in particular of mygalomorph spiders, millipedes and isopods, remain undetected despite extensive sampling (p 112 Phoenix Report).

The Phoenix report recognises in its acknowledgements, the remarkable and at times 'overwhelming' amount of work done by taxonomic experts and other scientists. The UBC calls on the EPA to respect the forest's unique diversity by not recommending approval to this proposal.

The objective of the EPA, as stated at the start of this comment and section is 'To protect terrestrial fauna so that biological diversity and ecological integrity are maintained'. This can only be achieved by recognising the terrible threats faced and by acknowledging that we have to do things differently.

The Urban Bushland Council welcomes the opportunity to bring our knowledgeable members together with the EPA to further explore our submission.

Your sincerely

Chairperson

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