## **Bushwalking WA (Federation of Western Australian Bushwalkers Inc)**

#### submission to

the inquiry into the rehabilitation of mining and resource projects as it relates to Commonwealth responsibilities

Inquiry terms of reference addressed in this submission:

- b) the adequacy of existing regulatory, policy and institutional arrangements to ensure adequate and timely rehabilitation;
- g) the potential social, economic and environmental impacts, including on matters of national environmental significance under the EPBC Act, of inadequate rehabilitation;
- j) proposals for reform of rehabilitation of mining and resources projects; and

#### **Our interest**

BWA is the peak body for bushwalking / hiking in WA. It represents the interests and concerns of its eleven member bushwalking clubs and the wider bushwalking community in WA. Bushwalkers comprise a small percentage of the community, but through their bushwalking activities across much of the state forests and reserves over the past half century, they have a unique insight into the impacts that bauxite mining and minesite rehabilitation are having on the forests and landscapes of the Darling Range near Perth.

#### Context

Bauxite mining within extensive leases (**Figure 1**) in the Darling Range near Perth commenced in 1965 and is supported by State Agreement Acts between the State Government and the miners. The mining operations may continue for another 50 years. Bauxite mining is a source of revenue to the State of WA and supports employment. However, the environmental legacy of the mining will be permanent and severely adverse. At least 60,000 ha (600 sq km) of mature forest will have been cleared and more than 60% of the northern jarrah forest and wandoo woodlands close to Perth will have been directly impacted or fragmented by mining and will include extensive areas of 'rehabilitated' former minesites. Today the wider community is mostly unaware of the impacts, but as Perth's population grows in coming years the demands will increase for access to recreational bushwalking and similar healthy recreational pursuits in natural undisturbed environments near the city.

#### **Our concerns**

- 1) With regard to Term of reference (g): the potential social, economic and environmental impacts, including on matters of national environmental significance under the EPBC Act, of inadequate rehabilitation;
  - i) 'World's best practice' rehabilitation strategies cannot successfully replicate or restore the original aged jarrah forest, wandoo woodlands and landscape impacted by bauxite strip-mining in the Darling Range. The implications of this essential fact are being overlooked and/or ignored. One consequence is that recreational and other values espoused in WA's Forest Management Plan (FMP) 2014–2023 are not being protected.
  - ii) In parallel with the extensive irreversible impacts of the strip-mining on biodiversity, landscape, unique soil profiles and water run-off, rehabilitated bauxite minesites within the Perth metropolitan area and beyond result in permanent loss of important recreational opportunities for current and future generations.
  - iii) The extent and condition of the vast areas of rehabilitated minesites will have profound impacts on the future land-use, public amenity values and recreational opportunities throughout the multi-use State Forest areas. Expansions of mining (Figure 2) and rehabilitated minesites will increasingly impact on and greatly reduce quality bushwalking opportunities in the region in coming years. Long-popular, traditional bushwalking areas to be lost to the mining will in the future extend from Lane Poole Reserve in the south, across Mount Solus area and Bannister Hill, to beyond Mount Dale in the north. Many traditional bushwalking areas will be affected.
  - iv) Bushwalkers most value walking in high quality, undisturbed natural or near-natural environments (**Figure 3**). Today and in the future they will avoid the rehabilitated minesite areas as the severely altered

condition of the landscape and vegetation is unsuitable for enjoyable bushwalking (**Figures 4a & 4b**): Vegetation species diversity is reduced, forest structure is dense and simplified, and earthworks remain for surface water control. Deep ripping for revegetation results in an uneven surface, generally with an extensive spread of boulders. Laterite 'breakaways' are striking, distinctive ancient landscape features of high visual amenity value at the edges of many bauxite ore 'pods' (**Figures 5a & 5b**), especially toward the eastern side of the Darling Range; They will be lost and replaced by an artificially smoothed landscape, devoid of those visual highlights.

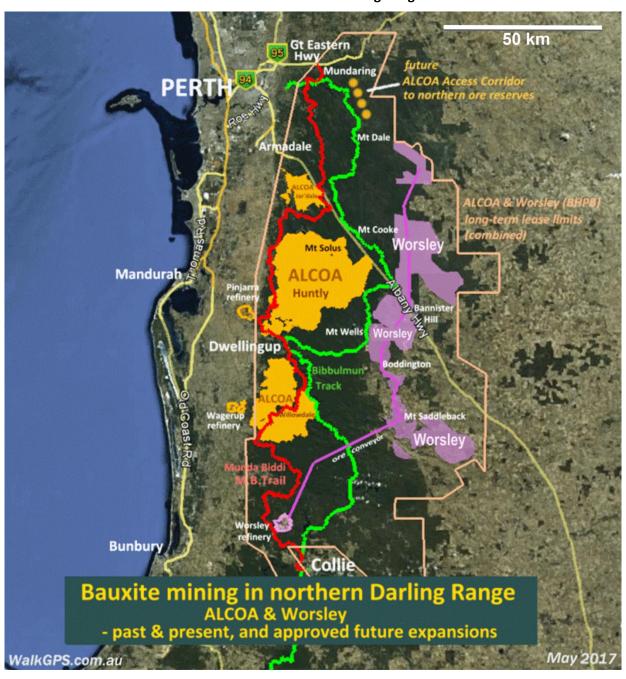
- 2) With regard to Term of reference (b): the adequacy of existing regulatory, policy and institutional arrangements to ensure adequate and timely rehabilitation;
  - i) WA State Government policies fail to adequately protect and/or enforce multiple-use forest management values including recreation and visual amenity. The WA Environmental Protection Authority (EPA) and State Government approvals of expansions and accelerations of the bauxite mining under old **State Agreement Acts** and the **Environmental Protection Act 1986** fail to properly consider and protect the future land-use and public amenity values of the multiple-use State Forest areas;
  - ii) The area covered by the **Forest Management Plan 2014–2023** ('FMP'; by Conservation Commission of Western Australia Dec. 2013) includes the bauxite mining areas. The basis of the approach to forest management in the plan stems from the principles of ecologically sustainable forest management (ESFM). That is, the economic and social values derived from the use of the natural areas covered by the plan, should be provided through a management system that is based on consideration of its impacts on biodiversity and is **precautionary** in nature.
    - Continuing to assume that extensive mined areas of our forests can be successfully rehabilitated despite continuing failures of the rehabilitation 'experiment' over the past half century is incompatible with a "precautionary" approach to forest management. Also, social values recognised in the FMP, including those concerning recreation and visual amenity, scenic quality, and sense of place cannot be effectively addressed and protected while mining operations and impacts are managed and condoned under the **State Agreements** which minimise public transparency, scrutiny and accountability. Relevant threats to recreation recognised in the FMP (page 117) include: "degradation of natural areas...that support recreation.." The draft plan of Aug. 2012 included on page 141 a note that "Management activities that disturb the landscape, in particular open-cut mining.... can have unwanted impacts if undertaken without appropriate planning." (This note was removed in the final Plan).
  - Ltd Bauxite-Alumina Project Expansion ERMP of May 2005 (approved by EPA in 2008) typically address recreational values in a cavalier way which do not seriously consider or admit to the long-term adverse implications upon future recreation of large rehabilitated minesite areas. e.g. Quote: "In the long term, recreational values will be re-established in areas where mining activities will disturb such values" (Worsley ERMP, 2005, Vol 1, p.3-114) and "The visual impact of mining operations will not be permanent and all mined areas will be rehabilitated to reflect pre-mining landscapes." (Worsley ERMP, 2005, Vol 1, p.3-117).
  - iv) Processes under the **State Agreements**, following expansion approvals and during mining and rehabilitation works, minimise transparency and community consultation on the part of the miners. There is lack of engagement with the recreational community by the miners and the State Government (e.g. Issues recently raised by the Dwellingup Community Compact (<a href="http://www.dwellingupwa.com.au/home">http://www.dwellingupwa.com.au/home</a> ).
    - Under the State Agreements the miners are required to submit updated mining plans annually for approval to a multi-agency liaison group ('MMPLG') so that the activities of other forest users can be integrated. But this group has no community representation or public accountability. The miners' community consultation processes focus on 'local' communities, bypassing the broader community including recreational bushwalkers. The miners' claimed "social licence to operate" cannot be legitimate in the absence of transparency and proper consultation with the community on the impacts of the current rate of mining expansions and the export of unprocessed bauxite.

# 3) With regard to Term of reference (j): proposals for reform of rehabilitation of mining and resources projects;

- i) The State Agreement Acts, under which the bauxite miners have long operated in WA, require amendments; to better reflect present-day standards; to force much greater public transparency and accountability and community consultation on the part of the miners; and to ensure in the national interest that values intended to be protected under the FMP are not compromised by bauxite mining and its environmental aftermath. State and national concerns around the sovereign risk implications of such amendments should not allow the State to continue ignoring the issues and compromising the values and precautionary emphasis of the Forest Management Plan and its ecologically sustainable forest management principles and objectives.
- ii) Any consideration of miners' future proposals for bauxite mining expansions needs to include a rigorous and transparent triple bottom line (TBL) analysis by government; This must fully recognise and 'account' for the negative implications for longer term environmental and social values of such extensive areas of rehabilitated minesites as well as the economic benefits of the mining.

### **FIGURES**

Figure 1 – Map of bauxite mining leases and approved (to date) mining areas in forests of northern Darling Range



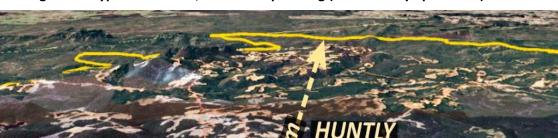


Figure 2 – Typical extensive, current strip-mining (Alcoa Huntly operations)

Figure 3 – Typical unmined northern jarrah forest (Eagle Hill area)



NORTH DANDALUP

Figures 4a & 4b- Typical rehabilitated minesite (Jarrahdale area, approx. 40 years post-rehabilitation)

Figure 4b



Figure 4b



Figures 5a & 5b – Walkers on the rocky slopes of typical laterite breakaways in the wandoo woodlands (eastern Darling Range) before mining. Such landscape features cannot be effectively restored post-mining and will be replaced by smoothed, graded slopes.

Figure 5a



Figure 5b

