



P.O. Box 656
Kalamunda
W.A. 6926
<http://nrpg.org.au/>
<https://www.facebook.com/KalamundaNRPG>

**Nature Reserves Preservation Group
of Kalamunda, Inc.**

18 Dec 2022

TO: Department of Biodiversity, Conservation and Attractions
forestmanagementplan@dbca.wa.gov.au

CC:

SUBJECT: Submission on the WA Draft Forest Management Plan 2024-2033

This submission is made on behalf of the Nature Reserves Preservation Group of Kalamunda (NRPG), a non-profit community organisation which has worked for 30 years to preserve the natural areas in Kalamunda and surrounds. As such we recognise that our Native Forests are incredibly precious, biodiverse and globally unique, and they have been subject to extensive clearing and logging over the past 200 years.

NRPG confirms that it fully supports the submissions on this draft made by:

- WA Forest Alliance (WAFA)
- Dr Beth Schultz

We include below, additional major issues that concern our group, contained within the 'operative text' areas of the draft (Parts C and D).

5.1 Term and operation of the plan.

"The plan will be implemented according to available resources."

Given the acknowledged importance of this plan, it is essential that "available resources" must be sufficient for timely implementation. This section should be re-worded to reflect such a commitment.

5.5.2 Climate adaptation: active forest management and ecological thinning.

"The primary objective of ecological thinning is to promote forest health and resilience in order to conserve biodiversity."

Despite the claimed potential of such a process benefiting the health and resilience of mine site rehabilitation areas and immature regrowth areas (particularly those under water stress in drought conditions), it appears the process may extend to other areas. Given that up to 8000ha of forest could be thinned every year, this has the potential to become 'logging' by another name. In order to allay any such fears, the parameters of the process should be clearly stated, including those relating to the methods and machinery used. There is widespread community concern over the effects of soil compaction and disturbance on tree growth and an increase in the spread of phytophthora dieback and marri canker, in the wake of thinning. The thinning process, followed as it is by the resultant light ingress and the burning of thinning 'debris', produces a crop of post-fire weeds, both native and introduced, as further detailed in references below. Such weeds prove more flammable than the native understorey. Post-thinning weed suppression should be planned and budgeted for.

The possibility of considering thinning regrowth Karri is of concern, since such areas of regrowth undergo a natural, rapid self-thinning process. Thinning such areas would be tantamount to commercial logging and should not take place.

"The FPC will provide operations and contract management, planning and operational support for ecological thinning in State forests and timber reserves ..."

Concerns are raised by having the Forest Products Commission providing these services. To ensure transparency, these processes should be monitored by an independent panel of experts, established by the Conservation and Parks Commission. Given the rapidly changing climatic conditions, close monitoring is essential, together with ongoing research.

5.5.3 Forest health and climate resilience.

While recognising the value of protected forests in building local resilience to climate change and mitigating its effects, the draft makes no **explicit** acknowledgement of the role of ecosystem biodiversity in improving this resilience. In the final plan, this vital role should be clearly stated, even emphasised. The subjects of biodiversity conservation and carbon storage should not be conflated, each should be assigned equal importance in management objectives and activities.

*“The overall storage in the planning area is **anticipated** to remain relatively stable as most of the forests won’t be subject to significant disturbance unless large-scale bushfires or other natural events occur.”*

Whilst this “*anticipation*” is optimistic, the creation of research projects should be enshrined in the final plan, to ensure that this important point remains valid for the duration. With the accepted likelihood of increasing frequency, intensity and extent of such large-scale bushfires, and the effects of Climate Change, more data on loss of carbon sequestration potential, forest stock losses and carbon emissions resulting from prescribed burning, would be useful. However further investigations should not delay actions to change regimes in accordance with the findings of the references provided below**.

5.5.4 Fire management

“Fire regimes that are sympathetic to the ecological requirements of forest ecosystems are essential for their effective functioning.”

Despite this acknowledgement, the current fire regimes do not comply with this statement. The obvious attention paid to planning prescribed burning programmes, has failed to prevent them causing extensive damage to unique ecosystems. Areas acknowledged as needing protection from burning, are being burnt in the course of prescribed burns. The use of encircling burns leaves no escape for native animals which raises strong concerns of their being burned alive in large numbers. Furthermore contingency plans for the care and treatment of harmed and displaced animals must be included. The recent (December 2022) prescribed burn (PB) in the Walpole designated wilderness area, crossed containment lines, resulting in a damaging burn of 25,000ha (10,000ha more than intended). Whilst the stated intention of the PB was to protect this valuable biodiverse habitat from wildfire during the coming bushfire season, with its hot burn, it achieved the exact opposite. DBCA’s statement that a “*comprehensive plan was prepared that met international risk management standards,*” (presumably ISO 31000) and had followed all protocols for prescribed burning, indicates that existing ‘*standards*’ and ‘*protocols*’ need updating. It seems little has changed since the December 2009 PB escape in the same area, with similar results.

“Burning mainly occurs over autumn and spring.”

Unfortunately, with the ‘window’ for such burning becoming smaller with the changing climate, more and more burning will be done in autumn and in spring (the worst season for many flowering plants and nesting birds).

“These burns are mostly low or moderate intensity, and often include many unburnt patches.”

Despite the complex planning and the efforts of on-ground staff, this statement is open to challenge. Many PBs are of high intensity, leaving few unburnt areas. Frequently, the cause is said to be unexpected changes in weather conditions. It may be time to investigate whether current weather protocols are adequate. The use of aerial ignition in such burns makes it more difficult to retain unburnt areas, making the concept of ‘mosaic burning’ unachievable. This ignition technique should be re-examined with a view to modification or even abandonment.

“Prescribed burn planning typically intends to avoid some parts of the planning area, such as wetlands, riparian vegetation, and rocky outcrops.”

Increasingly, this 'intent' fails to be achieved. Many such areas are severely burnt as a result of the prescribed burning regime. The 2019 Denbarker peat system fire was a devastating example. Estimated to be more than 5000yrs old, the system was destroyed. The number of examples of granite outcrop ecosystems destruction may also be increasing. A comprehensive and representative network of fire exclusion areas should be developed and maintained to preserve remaining areas.

"The protection of life (people and communities) is the primary consideration in the planning and implementing of fire management activities."

There is increasing community concern over the effects of bushfire smoke from prescribed burns and wildfires on the population at large. This plan should commit to increased acknowledgement of the cause and the correlation between an increase in respiratory problems and deaths, and prescribed burns and wildfires.

"Maintain capability in fire management, including prescribed fire, bushfire risk mitigation, detection and suppression." (Management activities table).

This statement should ensure more effort is targeted at ensuring **ALL** emerging technologies are examined and where suitable, strategically employed in the early detection of and response to fires. Where found suitable, technologies should be fast-tracked for fireground deployment and the process fully funded. Close cooperation with the Department of Fire and Emergency Services (DFES) will be essential. In the final plan, details of these potential technologies should be outlined, including timelines for deployment.

Studies on the frequency of burn vs the flammability and likelihood of burning, indicate that forests self-thin and become much less flammable after longer periods being unburned. References**:

- ****"Self-thinning forest understoreys reduce wildfire risk, even in a warming climate"** Zylstra, P. J.; Bradshaw, S. D.; Lindenmayer, D. B. Environmental Research Letters (2022), <https://doi.org/10.1088/1748-9326/ac5c10> (Attached)
- ****"Wildfire risk management across diverse bioregions in a changing climate"** Tristan Campbell, S. Don Bradshaw, Kingsley W. Dixon & Philip Zylstra 13:1, 2405-2424, DOI: 10.1080/19475705.2022.2119891 <https://doi.org/10.1080/19475705.2022.2119891> (Attached)

Therefore with much greater implementation of modern rapid detection and response technologies, it may be possible to significantly reduce the frequency and need for prescribed burns, and therefore reduce the hazards to human health, property and our natural areas, for long term sustainability

"The department is committed to working with Noongar Traditional Owners through a partnership approach to better understand, share and incorporate cultural fire knowledge." (Key points and considerations)

Welcome and overdue as this statement is, the plan must emphasise that traditional burning is no 'silver bullet'. There may be very few areas in the south west where these techniques will succeed in returning the forests to their pre-European-settlement state. The rapidly changing climate and frequency of wide scale prescribed burning will make any application of traditional burning even more difficult.

5.5.5. Weeds

See earlier comments on the need for post-fire weed suppression.

Conclusion.

Despite the encouraging signs within this plan – the creation at least 400,000 ha of New National Parks and other protected areas and protection of a further 320,360 ha of forest ecosystems, this draft gives too little detail on areas of southern forests intended for inclusion in the conservation estate. The draft fails to consider urgently needed new protection for the Northern Jarrah Forests. Correctly amended, this draft would also provide protection for these areas of high biodiversity, from the depredations of mining. The draft does not appear to address the need for adequate, effective protection of forest under threat from mining activities.

The Northern Jarrah Forests are currently under threat from three egregious and outdated State agreements, viz:

- Alumina Refinery Agreement Act 1961
- Alumina Refinery (Pinjarra) Agreement Act 1969
- Alumina Refinery (Wagerup) Agreement and Acts Amendment Act 1978.

As some of these leases will run until 2045, unless the inevitable impacts and devastating biodiversity losses under these agreements are prevented by changes in this draft, the Northern Jarrah Forests will have no future.

If further environmental biodiversity losses are to be avoided, the current prescribed burning policy needs revision and improvement. The draft should be modified to:

- Re-assess, modify or abandon the current insistence on an annual prescribed burn target and consider allocating prescribed burning to more 'relevant' areas (such as forest areas within the Rural Urban Interface).
- Create and respect 'no-burn' areas of high biodiversity.
- Significantly increase the use of modern rapid-detection and response technology to reduce or eliminate the need for prescribed burns. More effort in preventing wildfires from growing to large out-of-control fires by using these technologies, could be less costly in lives, property and our environment.
- Re-assess the fuel age requirements and commit to funding research in this area.

Appendix 2 Montreal process criteria for the conservation and sustainable management of temperate and boreal forests.

Given the wide-ranging scope of these criteria, their age and the rapidly changing climatic conditions, it is necessary to reconsider the criteria. Are they still valid after almost three decades, or is it time they were revised?

NRPG appreciates this opportunity to comment on such an important document and we look forward to the final version being carefully considered to address the concerns and issues that have been raised in this submission, as well as those of the WA Forest Alliance and Dr. Beth Shultz.

Yours sincerely,

Steve Gates
President, Nature Reserves Preservation Group Inc
smgates@tpg.com.au
0400-870-887