

POST-LOGGING REGENERATION BURN BREACH REPORT

317-508-0011 'Swing Mid' Warburton – Woods Point Road, The Triangle

This report details information regarding a post-logging regeneration burn exceeding the logging coupe net area and entering into a critically endangered Leadbeater's Possum (*Gymnobelideus leadbeateri*) Special Protection Zone.

Abstract

On two separate occasions, the 27th of April and 31st of May 2019, community field surveyors investigated VicForests logging coupe 317-508-0011 'Swing Mid' along Warburton – Woods Point Road, near The Triangle. The initial investigation found that the post-logging regeneration burn that was undertaken in an attempt to regenerate VicForests logging coupe 317-508-0011, had escaped the confines of the coupe boundary and had devastated parts of a critically endangered Leadbeater's Possum Special Protection Zone. As a result of the findings detailed within this report, we recommend and conclude that:

- The organization/s responsible for the post-logging regeneration burn of coupe 317-508-0011 have breached the *Code of Practice for Timber Production 2014* and have therefore conducted illegal timber harvesting operations.
- VicForests continue to carry out their logging operations while ignoring the most relevant and up-to-date science derived from the Australian National University scientists. By doing so, in this instance VicForests have breached mandatory prescription 2.2.2.2 and 2.2.2.3 of the *Code of Practice for Timber Production 2014*.
- The current timber harvesting exclusion zone of just 200m around each verified sighting of a Leadbeater's Possum is grossly inadequate for the protection of this species and should be extended by at least 1km as recommended by the Australian National University scientists.
- The Department of Environment, Land, Water and Planning (DELWP) or the Office of the Conservation Regulator (OCR) must visit the site of this investigation as soon as possible and subsequently must prosecute whoever is responsible for this breach of the '*Code of Practice for Timber Production 2014*'.

Introduction

The highlands Leadbeater's Possum (*Gymnobelideus leadbeateri*) (LBP), one of the faunal emblems of the state of Victoria, is a critically endangered possum species found within a highly restricted range in the Central Highlands of Victoria. Wildlife of the Central Highlands (WOTCH) is a community group consisting of citizen scientists who use a variety of techniques to record the LBP and other threatened species in a desperate fight to protect them from VicForests logging operations in the Central Highlands of Victoria. The post-logging regeneration burns undertaken by different organisations, but mostly DELWP and VicForests, are supposed to be burns of low intensity that regenerate tree species which have been lost through the process of logging operations (VicForests, 2019). These burns are not supposed to be of high severity, nor are they supposed to escape the confines of the logged area, but despite this, the escape of post-logging regeneration burns are repeated occurrences that WOTCH and regional communities are observing frequently.

Surveyors: Jake Mckenzie, Hayley Forster

wotch.reports@gmail.com

Dates of investigations: 27/04/2019, 31/05/19 & 21/07/2019

Authors: Jake Mckenzie, Amber Fordyce

Wildlife of The Central Highlands Inc.

Date of report: 08/08/2019

Investigation location overview

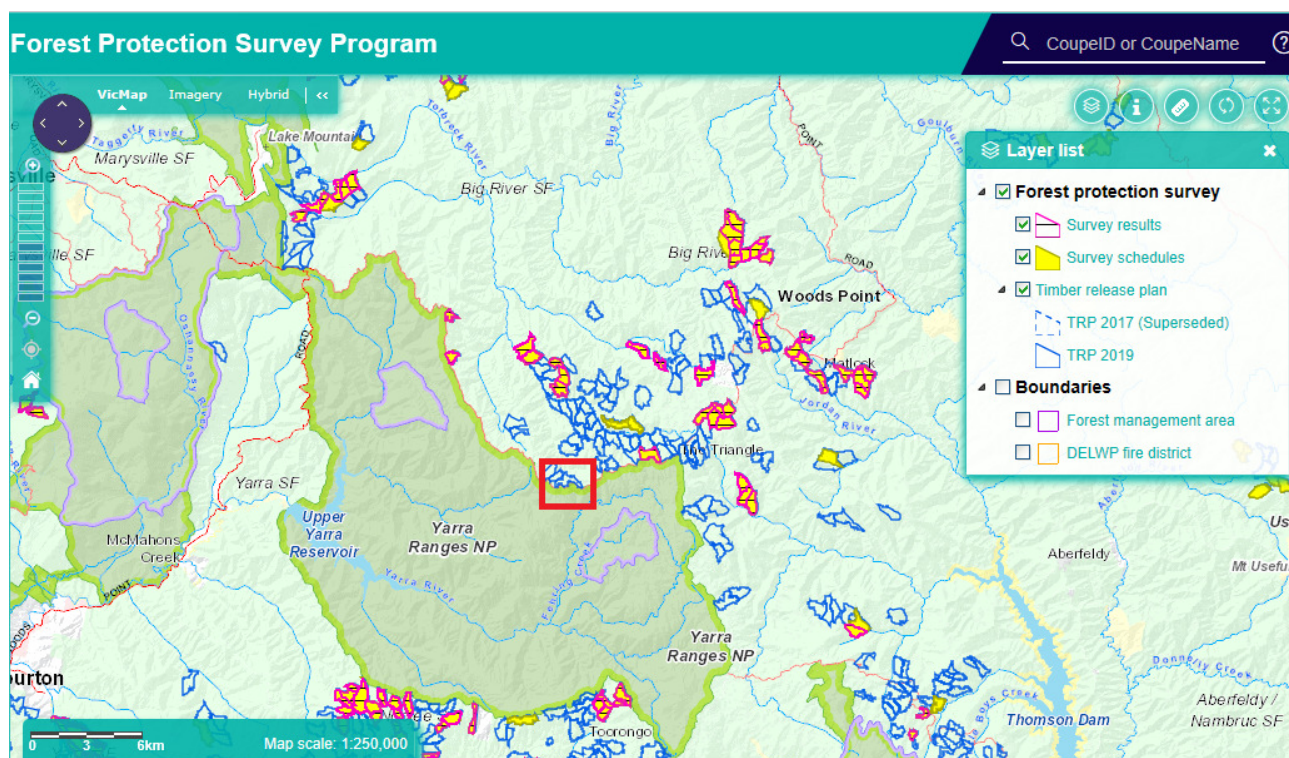


Figure i. detail from: "Forest Protection Survey Program Interactive Map 2019", accessed on 19/06/2019. DELWP's website: <https://maps.ffm.vic.gov.au/ForestProtectionSurveys/>

Note: red box indicates investigation location

Methodology

The aftermath of the escaped post-logging regeneration burn of VicForests logging coupe 317-508-0011 was investigated on two separate occasions by volunteer field surveyors. The first investigation (investigation #1) was undertaken on the 27th of April 2019 and the second investigation (investigation #2) was undertaken on the 31st of May 2019, the logging coupe had already been clearfell logged and burnt on both occasions.

Investigation #1

During investigation #1, photographic evidence and video footage with GPS coordinates were obtained of the post-logging regeneration burn aftermath that had 'escaped' the boundary of the logging coupe and entered into a critically endangered Leadbeater's Possum Special Protection Zone (LPSPZ). At this stage the logging coupe was no longer on fire, however parts of the logged area were still smoldering, see Figure 1.h.

Investigation #2

On the second visit, the boundary of the post-logging regeneration burn that had breached the confines of the LPSPZ was recorded on a hand-held Garmin GPS device by traversing the obvious edge of the burn. At this time, photographic evidence and video footage were again taken of the escaped post-logging regeneration burn aftermath, as well as some of the adjacent unburnt LPSPZ, see Figure 1f.

Note: At the time of this second visit, the area had been subject to recent snowfall due to the logging coupe's high altitude (approximately 940m-1040m).

Results

Results 1 – photographic evidence

The following photographs were taken at and beyond the boundary of VicForests logging coupe 317-508-0011 off Warburton – Woods Point Road on the 27th of April, 31st of May and 21st of July 2019. They show the post-logging regeneration burn exceeding the boundary of the logging coupe net area (the logged area in these images) which in this case is a Leadbeater’s Possum Special Protection Zone.



Figure 1a. image number ‘**DSC01094**’ showing the boundary of the logging net area of coupe 317-508-0011 (the cleared area) and the Leadbeater’s Possum Special Protection Zone (the burnt standing trees) taken at approximately “55H 0403254 5846961 (UTM/Zone 55H)” during visit #1.



Figure 1b. image number ‘**DSC01097**’ showing a number of burnt cut stumps within the logging net area and burnt trees (including a stag tree) within the Leadbeater’s Possum Special Protection Zone, also taken at approximately “55H 0403254 5846961 (UTM/Zone 55H)” during visit #1.



Figure 1c. image number 'DSC01107' of the post-logging regeneration burn aftermath having burnt into the Leadbeater's Possum Special Protection Zone during visit #1.

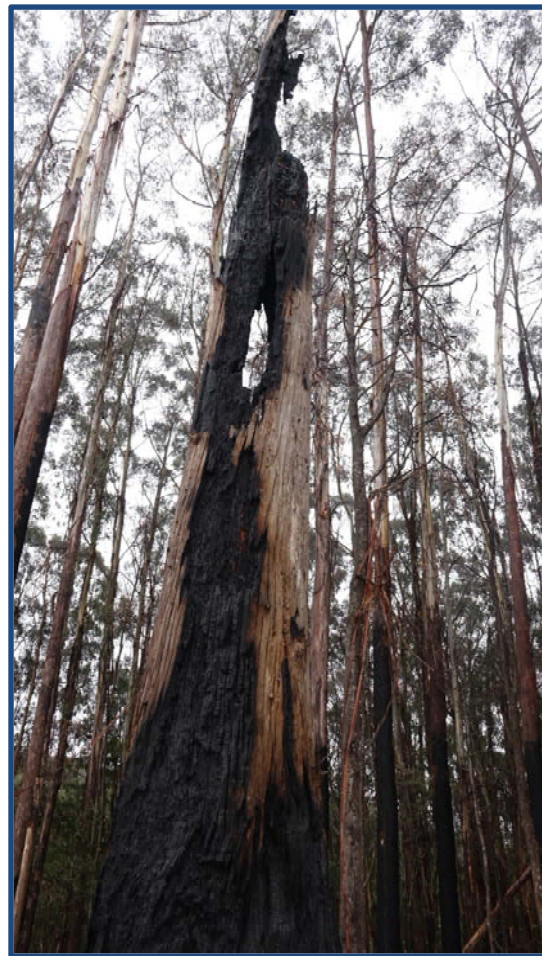


Figure 1d and 1e. image numbers 'DSC01124' and 'DSC01274' showing an unburned LBP stag tree within the Leadbeater's Possum Special Protection Zone and a burnt LBP stag tree consumed during the post-logging regeneration burn that escaped into the Leadbeater's Possum Special Protection Zone. Note; these are not images of the same stag trees.

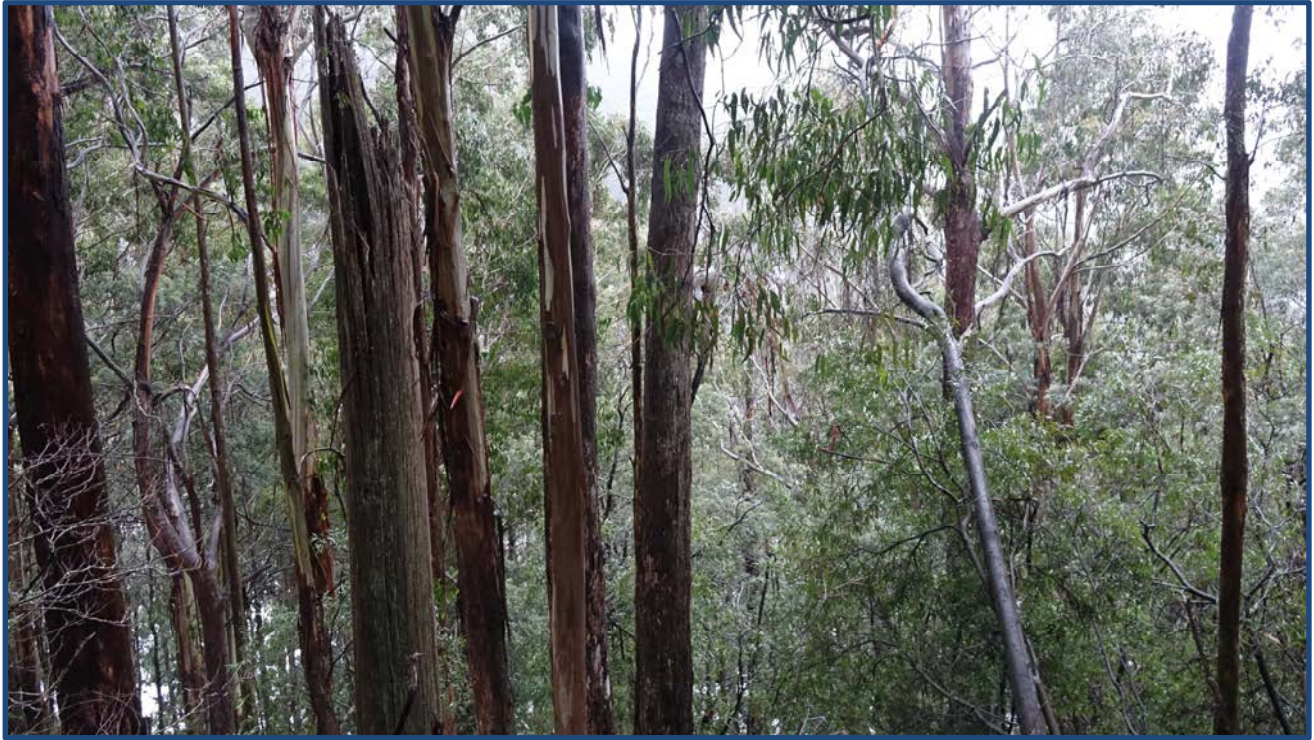


Figure 1f. image number 'DSC01283' of the unburnt area within the Leadbeater's Possum Special Protection Zone with a stag tree in the left of frame taken during visit #2.



Figure 1g. image number 'DSC01275' taken during visit #2 of the post-logging regeneration burn aftermath having burnt a Leadbeater's Possum stag tree and its surrounding habitat feed trees within the Leadbeater's Possum Special Protection Zone.



Figure 1h. image number '**DSC01090**' of logged and burnt area within the logging coupe. The center of the photograph shows the forest floor still smoldering from the post-logging regeneration burn.



Figure 1i. drone photograph '**DJI_0047**' of burnt Leadbeater's Possum Special Protection Zone on the left-hand side and burnt retained 'habitat' trees in the center and on the right-hand side within the logged area.

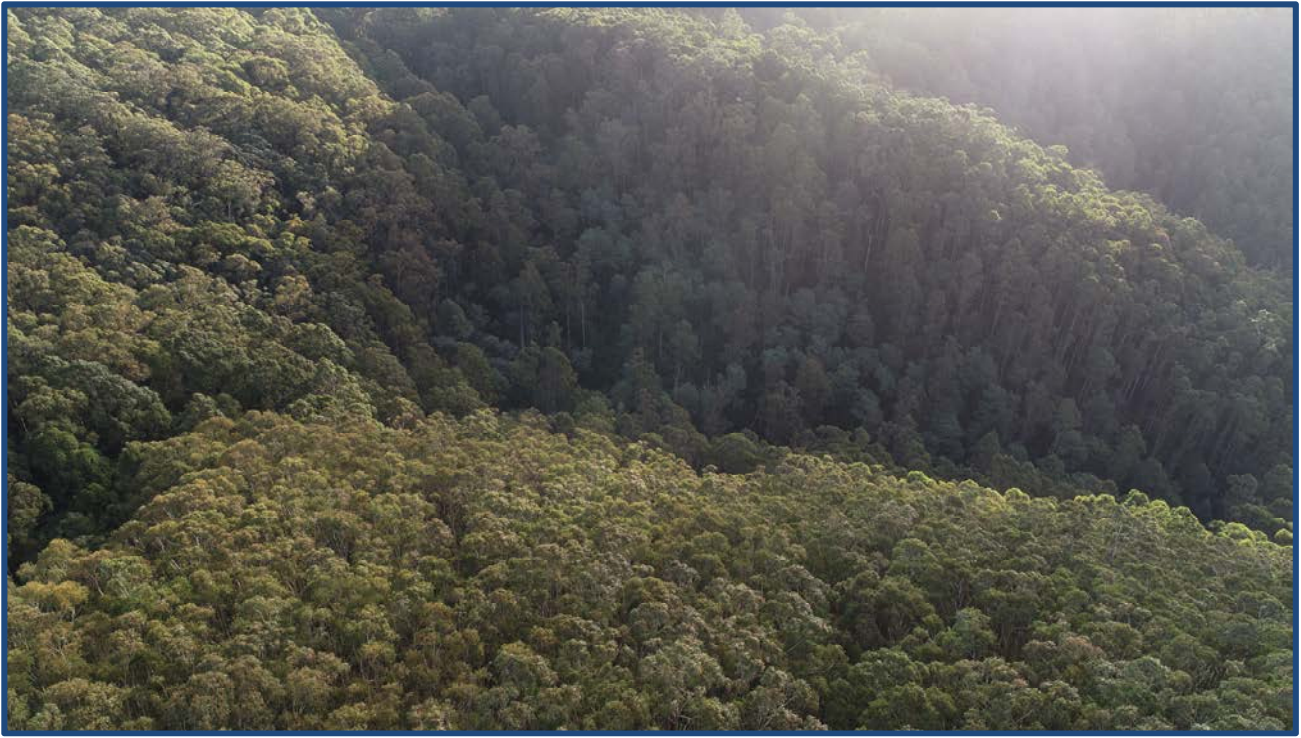


Figure 1j. drone photograph 'DJI_0048' looking west into the remainder of the Leadbeater's Possum 200m Timber Harvesting Exclusion Zone within the logging coupe and within General Management Zone (GMZ).



Figure 1k. drone photograph 'DJI_0051' looking north from the logged and burnt area of the coupe. Dungaree Creek lies at the bottom of the valley at the top of the photograph. With exception to the last couple of years, this valley has seen very little clearfell logging operations.



Figure 1l. drone photograph 'DJI_0070' showing almost the entire extent of the logged and burnt area of coupe 317-508-0011. The Yarra Ranges National Park and Upper Yarra Water Catchment is pictured in the top right-hand corner of this photograph.



Figure 1m. drone photograph 'DJI_0042' showing the burnt 'habitat' trees retained during the logging operations. Given these retained trees are Alpine Ash (*Eucalyptus delegatensis*), they will likely die from this intensive regeneration burn. This image also shows VicForests failure to retain vegetation or any kind of buffer along Warburton – Woods Point Road.

Results 2, Maps

Figure 2. Escaped Post Harvest Burn For 317-508-0011 'Swing Mid': Leadbeater's Possum Advisory Group (LBPAG) Buffers & Records For Leadbeater's Possum; Area of LBPAG Buffer Special Protection Zone (SPZ) Affected By the Burn; Roads, Watercourses, Contours, National Parks & Forest Management Zones For State Forest; VicForests Current Timber Release Plan (TRP);

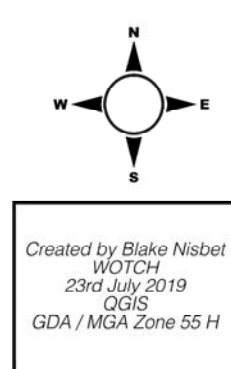
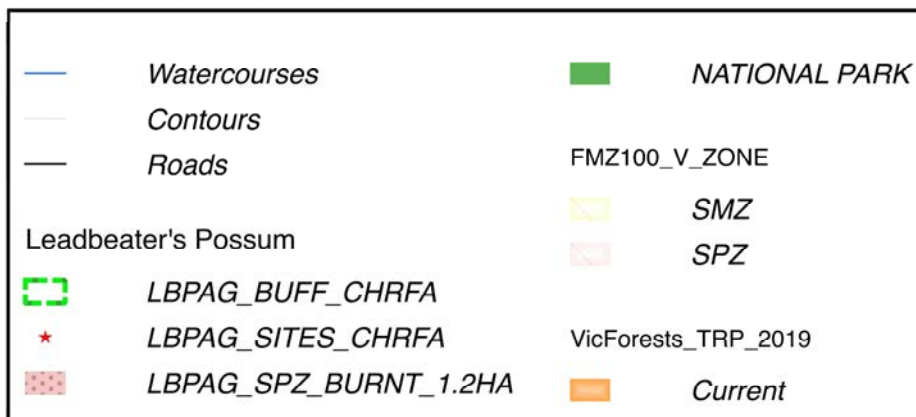
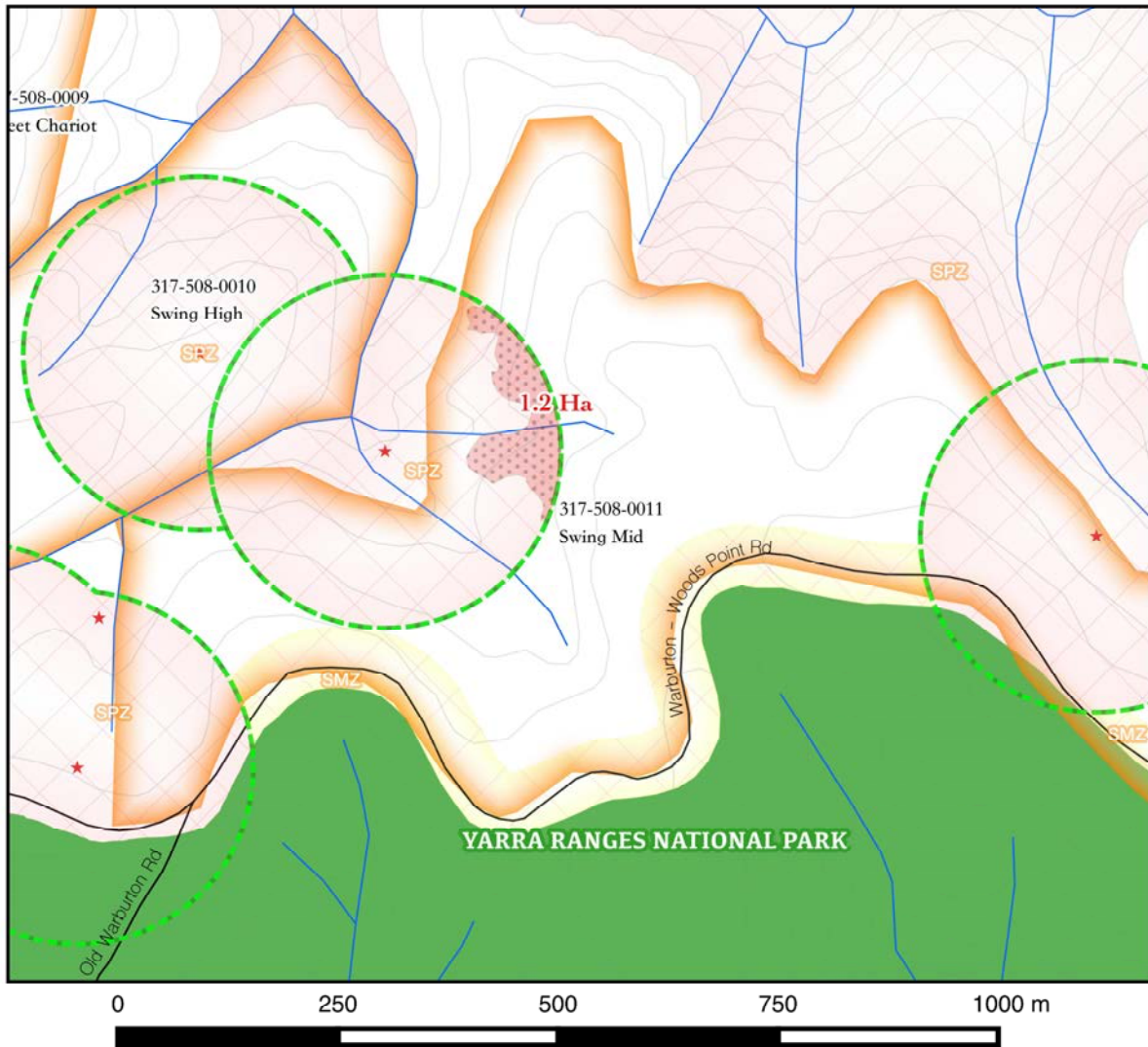


Figure 2. map showing most of coupe 317-508-0011, the Leadbeater's Possum Special Protection Zones within the area and the 1.2 hectares of burnt forest from the post-logging regeneration burn within a Leadbeater's Possum Special Protection Zone.

Discussion

On the 27th of April 2019 WOTCH field surveyors discovered that a post-logging regeneration burn had escaped the confines of the logged area within VicForests logging coupe 317-508-0011 and breached the boundary of a Leadbeater's Possum Special Protection Zone (LPSPZ). At this time the logging coupe was still smoldering, see Figure 1h. The boundary of the burnt area within the LPSPZ was traversed by a field surveyor on the 31st of May and was calculated using GIS software to be approximately 1.2 Hectares in size, see map Figure 2.

The escape of this burn into the LPSPZ buffer is especially concerning given the findings of Blair et al. (2017), who stated that the LBP was "virtually eliminated" by a fire of any severity and LBP numbers decline with increases in areas that are burnt. Due to the height of the burn scars on the trees, both within the LPSPZ and within the logged area, it can be assumed that this burn was of high severity. As seen in Figure 1e, this high severity burn has consumed at least one Leadbeater's Possum stag tree, therefore completely compromising any individuals that may have been occupying the area within the LPSPZ and the forests surrounding this logged coupe.

The following subsection, mandatory prescriptions, outlines some of the legislative requirements that have been breached as a result of the findings of this investigation.

Mandatory Prescriptions

It is mandatory for VicForests, the Department of Environment, Land Water and Planning and any other organizations undertaking timber harvesting operations within state forest of Victoria to comply with all prescriptions outlined within the *Code of Practice for Timber Production 2014* (the Code). The following excerpts show specific prescriptions that have been breached during the logging operations and post-logging regeneration burn of VicForests logging coupe 317-508-0011.

Excerpt 1 – Page 34 of the Code

2.2 Environmental Values in State forests

2.2.2 Conservation of Biodiversity

Mandatory Actions

Addressing biodiversity conservation risks considering scientific knowledge

- 2.2.2.2 The **precautionary principle** must be applied to the conservation of biodiversity values. The application of the precautionary principle will be consistent with relevant monitoring and research that has improved the understanding of the effects of forest management on forest ecology and conservation values.
- 2.2.2.3 The advice of relevant experts and relevant research in conservation biology and flora and fauna management must be considered when planning and conducting timber harvesting operations.

Throughout the planning stages and during the logging of this coupe, along with all other coupes, VicForests have chosen to ignore the most relevant and up-to-date science produced by the Australian National University who recommend that all locations where Leadbeater's Possum has been recorded will be protected by a 1km buffer by which logging is excluded, Lindenmayer et al. (2013). **Therefore, VicForests have breached mandatory prescription 2.2.2.2 and 2.2.2.3 of the Code.**

2.2 Environmental Values in State forests

2.2.2 Conservation of Biodiversity

Mandatory Actions

Addressing biodiversity conservation risks considering scientific knowledge

2.2.2.5 Protect areas excluded from harvesting from the impacts of timber harvesting operations.

2.6 Forest Regeneration and Management

2.6.1 Regeneration

Mandatory Actions

2.6.1.8 All practical measures must be taken to protect areas excluded from harvesting from the impacts of burns and other regeneration activities.

As post-logging regeneration burns are part of timber harvesting operations, the organization/s responsible for the escaped post-logging regeneration burn of VicForests logging coupe 317-508-0011 failed to “*Protect areas excluded from harvesting from the impacts of timber harvesting operations*” and did not comply with the prescription of “*All practical measures must be taken to protect areas excluded from harvesting from the impacts of burns and other regeneration activities*”. **The organization/s responsible have therefore breached mandatory prescription 2.2.2.5 and 2.6.1.8 of the Code.**

Further to organizations operating in state forest having to comply with the Code, it is also mandatory for them to comply with Appendix 5 of the ‘*Management Standards and Procedures for timber harvesting operations in Victoria’s State forests 2014*’ (Management Standards and Procedures) which is the ‘*Planning Standards for timber harvesting operations in Victoria’s State forests 2014*’ (Planning Standards). The following excerpt is from Table 9 of the Planning Standards.

Table 9 Landscape management FMZ rules.

FMA	Place	Significance	Zoning management actions	Management Actions
Central Highlands FMAs	Warburton–Woods Point Road / Reefton Spur Road and Upper Yarra Reservoir Rd		Maintain a 50 m SMZ either side of Warburton–Woods Point Road / Reefton Spur Road and Upper Yarra Reservoir Rd. Include prominent views of Cement Creek, Armstrong Creek in SMZ.	Develop and comply with a SMZ plan

From the Code: “SMZs are managed to conserve specific features, while catering for timber harvesting operations under special conditions specified in SMZ plans and the Planning Standards”. As is evident in Figure 11 and Figure 1m, drone photographs DJI_0070 and DJI_0042, throughout their logging operations VicForests have failed to obtain any kind of tree buffer up to Warburton – Woods Point Road. **Therefore, the logging of coupe 317-508-0011 by VicForests is again in breached of the Code.**

Recommended Prescriptions by Scientists at the Australian National University

The following prescriptions relevant to this report were recommended by David Lindenmayer, David Blair, Lachlan McBurney and Sam Banks from the Australian National University in their paper produced in July 2013; *New Restoration Forest Management Prescriptions to conserve Leadbeater’s Possum and Rebuild the cover of Ecologically Mature Forest in the Central Highlands of Victoria*:

“Prescription 2 – Protection of recorded locations

2.1 All locations where Leadbeater’s Possum has been recorded present in the past 15 years will be protected by a 1 km buffer from which logging (both clearfell and thinnings) is excluded.

Prescription 3 – Protection of Hollow-bearing Trees

3.1 Each hollow-bearing tree (whether living or dead) will be surrounded by a buffer of unlogged forest measuring 100 m in radius.

3.3 All trees 100 or more years old should be protected and surrounded by a buffer of unlogged forest measuring 100 m in radius.

Prescription 5 – Protection of Streamside Buffers

5.1.1 Streamside buffers will be widened to a minimum of 100 m either side of a stream, whether permanent or temporary/seasonal.

Prescription 6 – Silvicultural System and Coupe Design

6.1.1 Variable retention harvesting methods will replace clearfelling in Victorian montane ash forests from 1st January 2014.

6.1.2 Clearfelling methods will not be employed after 31st December 2013.

6.4.1 Regeneration burns will be of low intensity and low severity.

6.4.2 During regeneration burns, all living and dead hollow-bearing trees will be protected with a 100 m buffer as outlined in Prescription #3 above.”

In order to prevent incidents like this (the burning of a LPSPZ) from ever occurring again, the above prescriptions as well as all the prescriptions outlined in the *New Restoration Forest Management Prescriptions to conserve Leadbeater’s Possum and Rebuild the cover of Ecologically Mature Forest in the Central Highlands of Victoria* must be adopted by all Victorian Government organizations, including VicForests and DELWP. The continued negligence displayed by VicForests by ignoring these prescriptions will inevitably cause the extinction of the Leadbeater’s Possum.

Final Remarks/Conclusion

- The organization/s responsible for the post-logging regeneration burn of coupe 317-508-0011 have breached the *Code of Practice for Timber Production 2014* and have therefore conducted illegal timber harvesting operations.
- VicForests continue to carry out their logging operations while ignoring the most relevant and up-to-date science derived from the Australian National University scientists. By doing so, in this instance VicForests have breached mandatory prescription 2.2.2.2 and 2.2.2.3 of the *Code of Practice for Timber Production 2014*.
- The zoning management actions for Warburton – Woods Point Road under Table 9, Landscape management FMZ rules, of the Planning Standards requires a 50m Special Management Zone be maintained either side of the road. VicForests logging operations within coupe 317-508-0011 failed to leave any trees or substantial vegetation along this road. This issue has also occurred with other logging coupes along Warburton – Woods Point Road including coupe 317-508-0009, coupe 317-508-0010, coupe 320-501-0025 and coupe 320-501-0001 as well as many others in The Triangle area. By doing so, VicForests have again breached the *Code of Practice for Timber Production 2014*. This issue is not covered in-depth throughout this report, but non-the-less should certainly be followed up by the Department of Environment, Land, Water and Planning officers by visiting these logging coupes along Warburton – Woods Point Road.
- VicForests logging coupe 317-508-0011, accompanied by many other completed and scheduled logging coupes along Warburton – Woods Point Road, falls directly adjacent the Yarra Ranges National Park. This is also the catchment of the Upper Yarra Reservoir, drinking water for residents of Melbourne.

Recommendations

WOTCH recommends the following:

- The current timber harvesting exclusion zone of just 200m around each verified sighting of a Leadbeater's Possum is grossly inadequate for the protection of this species and should be extended by at least 1km as recommended by the Australian National University scientists.
- The Department of Environment, Land, Water and Planning or the Office of the Conservation Regulator (OCR) must visit the site of this investigation as soon as possible and subsequently must prosecute whoever is responsible for this breach of the '*Code of Practice for Timber Production 2014*'.
- The entirety of the LPSPZ that has been devastated by this post-logging regeneration burn must be compensated by VicForests by protecting a further 100 hectares of optimal Leadbeater's Possum habitat currently scheduled in other areas of similar forest around The Triangle.
- We further recommend these 100 hectares of protected forest be scattered throughout VicForests logging coupes 320-502-0039 'The Mailman', 320-502-0038 'Dr J' and 320-503-0030 'Quiche Lorraine' as these areas contain high-quality Leadbeater's Possum habitat.

Appendices

Further evidence of escaped post-logging regeneration burns in the Central Highlands of Victoria.



1 - Photograph of the post-logging regeneration burn aftermath from VicForests logging coupe 'Shaq is Back' 349-514-0004 south of Powelltown. This burn has also escaped the confines of the coupe boundary and devastated this wet creek line vegetation along a tributary of Savin Creek, giving an indication that this was another high-severity burn. Photograph taken at approximately "55H 0399004 5804122 (UTM/Zone 55H)".



2 - Photograph of the post-logging regeneration burn aftermath from VicForests logging coupe 'Shaq is Back' 349-514-0004 south of Powelltown. This photograph again shows the obvious high severity of the post-logging regeneration burn as it has killed a number of habitat and hollow-bearing trees that were supposed to be safe along the riparian buffer between the two logging coupes. Photograph taken at approximately "55H 0399004 5804122 (UTM/Zone 55H)".



3 - Without supervision, this post-logging regeneration burn of VicForests logging coupe 'Amok' 484-501-0037 in the Tanjil State Forest, became out of control in extremely windy conditions and escaped the confines of the logging coupe boundary. See attached video for location coordinates.

References

Blair, D., McBurney, L., Banks, S., Blanchard, W. & Lindenmayer, D. (2017). *The Leadbeater's Possum Review*. Canberra: ANU Research Publications.

Lindenmayer, D., Blair, D., McBurney, L. & Banks, S. (2013). *New Restoration Forest Management Prescriptions to Conserve Leadbeater's Possum and Rebuild the Cover of Ecologically Mature Forest in the Central Highlands of Victoria*.

VicForests (2019). *Regeneration*. <http://www.vicforests.com.au/regrowing-our-forests-1/regeneration/stage-two-1>
Retrieved 02/07/2019.

Acknowledgements

We wish to thank the Fauna and Flora Research Collective (FFRC) for their ongoing guidance with the write up of WOTCH's reports and survey work.

