



Correa reflexa var. lobata. EVA DAVIS-JONES

DETECTION REPORT

Correa reflexa var. lobata (Powelltown correa)

Dandenong Ranges National Park, Olinda-Bartlett Track *PP-01-BA* & Kalorama-Track 13 *PP-02-BA*

Correa reflexa var. lobata (Powelltown Correa) Detection Report:

Dandenong Ranges National Park Olinda - Bartlett Track *PP-01-BA* & Kalorama - Track 13 *PP-02-BA*



Report documenting significant populations of the Endangered *Correa reflexa* var. *lobata* (Powelltown Correa) within VicForests and Forest Fire Management Victoria's proposed sites for log removal operations, in the Dandenong Ranges National Park.

Abstract

Flora surveys by the Victorian National Parks Association and Southern Dandenongs Landcare Group were undertaken within VicForests and Forest Fire Management Victoria's proposed sites for log removal operations. These sites are within the Dandenong Ranges National Park and are known as the Olinda - Bartlett Track site *PP-01-BA* and the Kalorama – Track 13 site *PP-02-BA*.

Significant populations of the Endangered *Correa reflexa* var. *lobata* (Powelltown Correa) were recorded within the areas earmarked for log removal operations. We estimate that the population likely exceeds 1000 endangered plants which are within the proposed log removal operation areas across the two sites.

Correa reflexa var. *lobata* (Powelltown Correa) is listed as Endangered under the Flora and Fauna Guarantee Act and will likely meet criteria to be listed under Commonwealth legislation.

The use of heavy machinery within the area where *Correa reflexa* var. *lobata* (Powelltown Correa) is present will cause direct mortality of plants and will threaten plants through the compaction of soil, changes in microclimates and the spread of endangering pathogens such as *Phytophthora*. The repeated usage of planned burning at this site further threatens the persistence of *Correa reflexa* var. *lobata*.

The methodology, results, discussion, conclusions and recommendations are outlined below.

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Introduction:

Scope of works at the Olinda & Kalorama sites

The Victorian National Parks Association (VNPA) and Southern Dandenongs Landcare Group (SDLG) have been in correspondence with Forest Fire Management Victoria (FFMV) regarding planned operations for log removal in the Dandenong Ranges National Park since July 2021.

The planned operations at the two sites were initially broadacre in nature. At the Olinda – Bartlett Track site, this covered the entire area between Barges Track and Bartlett Track adjacent the Olinda Falls. At the Kalorama – Track 13 site, this covered the entire area between Melba Track (west), Track 11 (east), Track 18 (south) and Road 10 (north). FFMV has since informed us in May 2023 that the scope of works has been scaled back to edge treatments only and provided us with the following planning maps of the edge treatment zones below. Despite this correspondence, the FFMV website still lists the proposed operations for these sites as "Broadacre" and states that "scope of works still being confirmed".

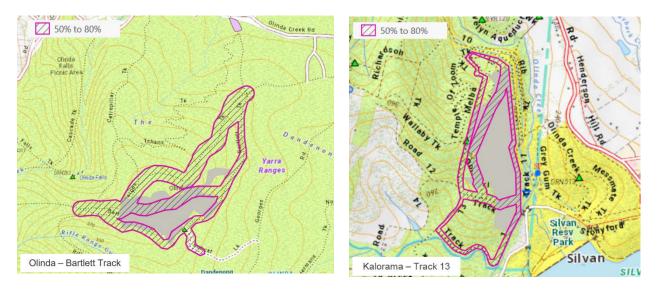


Figure a. Maps from FFMV showing the proposed zones for log removal in pink hashing and the storm impacted areas in solid grey.

FFMV informed us that the planned operations include the reinstatement of internal temporary control lines, which can be seen mapped in Figure a above. FFMV have also made it clear that a key objective of the planned log removal operations is to facilitate the use of future planned burning operations at the sites. At the Olinda site, a large portion of the site was subject to a planned burn in 2018 and the remainder of the site remains long-unburnt, devoid of fire since a bushfire in 1962. At the Kalorama site, nearly all of the forest has been subject to planned burns in either 2017 or 2021, and only a small section in the sites south remains long-unburnt.

The Olinda site is listed as Damp Forest Ecological Vegetation Class (EVC), however sections of the site contain Mountain Ash (*Eucalyptus regnans*) and other wet species indicative of Wet Forest EVC. The Kalorama site is mostly listed as Shrubby Foothill Forest EVC, with patches of Damp Forest and Riparian Forest also present in the site.

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¹ FFMV website, accessed 5 September 2023. < <u>Dandenong and Yarra Ranges (ffm.vic.gov.au)</u>>.

Powelltown Correa

Correa reflexa var. lobata (Powelltown Correa) is listed as Endangered under the Flora and Fauna Guarantee Act 1988² and meets criteria to be listed under Commonwealth legislation using the Common Assessment Method (CAM) signed between Victoria and the commonwealth³.

Correa reflexa var. lobata does not have an Action Statement under the FFG Act. A relative species Correa lawrenciana var. genoensis (Genoa River Correa) is listed under the EPBC Act and shares similar growing habitats, but occurs in slightly more damp conditions.

Variety *lobata* is endemic to Victoria with a restricted range east of Melbourne/Naarm and requires moister sheltered positions in semi-shade and dappled shade⁴. It's found in the Damp Forest, Shrubby Foothill Forest and Valley Grassy Forest EVCs. It's most easily distinguished from other varieties of *Correa reflexa* by its deeply lobed calyx⁵.

The species was assessed due to the impacts of the 2009 bushfires on its populations which resulted in recommendations to gain scientific understanding of its mode(s) of regeneration, threats and locations, which are poorly understood⁶.

The Habitat Importance Model (HIM) for *Correa reflexa var. lobata* indicates that both sites hosts high quality habitat for the species⁷, with the likelihood of important habitat across the entire sites ranked between 78-84 (out of 100)⁸.

² Flora and Fauna Guarantee Act 1988 - Threatened List (DEECA, 2023). < Flora and Fauna Guarantee Act 1988 Threatened List (DEECA, 2023).

³ Common Assessment Method, Fact Sheet. Department of Environment, Land, Water and Planning (2020)

⁴ Flora of Melbourne. A guide to the Indigenous Plants of the Greater Melbourne Area 4th Edition, Marliyn Bull, Hyland Publishing Ltd Limited (2014)

⁵ VicFlora website for Correa reflexa var. lobata (Royal Botanic Gardens Victoria, 2023). < VicFlora: Correa reflexa var. lobata>.

⁶ Recovery of Victorian rare or threatened plant species after the 2009 bushfires, Black Saturday Victoria 2009 – Natural values fire recovery program. Arthur Rylah Institute for Environmental Research (2012)

⁷ Naturekit Habitat Important Model for Powelltown Correa (DEECA, 2023). < NatureKit Victoria >.

⁸ Most HIMs contain values ranked between 1 and 100, with higher values indicating a higher likelihood of important habitat.

Methodology:

The following methods were used for flora surveys which occurred over multiple survey dates;

- Surveyors traversed through VicForests/FFMVs proposed sites for log removal operations in the Dandenong Ranges National Park (Olinda & Kalorama sites).
- Surveys were targeted within the areas proposed by FFMV for edge treatment (up to 40m off tracks): these areas were mapped in pink hashing and provided to us by FFMV on 10 May 2023.
- Surveyors which are experienced in the identification of native plants searched for *Correa* reflexa var. lobata throughout the areas proposed for edge treatment.
- Surveyors used the key distinguishing features to identify *Correa reflexa var. lobata* plants such as the deeply lobed calyx of the flowers.
- Where Correa reflexa var. lobata plants were identified, surveyors marked a GPS waypoint bearing the location of the plant(s) using the following methodology for a waypoint name:
 - ❖ The first three letters were 'CRL', representing the scientific name of the species.
 - Following these three letters is '1P' in cases where there was only one plant identified in the immediate area.
 - ❖ In cases where there was more than one plant in the immediate area, the waypoint name was marked to reflect how many plants were identified within the immediate area.
 - ❖ By way of example, 'CRL1P' represents the geographic location of one Powelltown Correa plant, whereas 'CRL2P3M' represents two plants found within a 3m radius of the GPS waypoint coordinates.
 - ❖ A unique prefix number was later assigned to each waypoint to assist with the cross referencing of images to waypoints.
- Powelltown Correa plants were occasionally photographed with a GPS in the frame for proof of location, but not all plants were photographed for ease of time and data consumption.
- In circumstances where the flowering parts of the plant were not present, plants were assumed to be *Correa reflexa* var. *lobata* as all flowering individuals were identified to be var. *lobata* (not var. *reflexa*).

Results:

The results section of this report is split up into the following:

Results 1 is a sample series of photographs of *Correa reflexa* var. *lobata* plants recorded in the field and is detailed within this report below.

Results 2 is a series of maps which display the geographic locations of *Correa reflexa* var. *lobata* at the Olinda & Kalorama sites and is detailed within this report below.

Results 3 is the full series of photographs of *Correa reflexa var. lobata* plants recorded in the field and is not detailed within this report below. To access these images, please use the following Drive link: Series of Photographs and GPS Data - Powelltown Correa

Results 4 are GPX files containing the geographic locations of all *Correa reflexa* var. *lobata* plants recorded in the field and are not detailed within this report below. To access this data, please use the same Drive link above for Results 3.

Results 1. Photographs of Correa reflexa var. lobata



Figure 1. Photograph of *Correa reflexa* var. *lobata* at waypoint '004CRL1P' in the Olinda – Bartlett Track site.

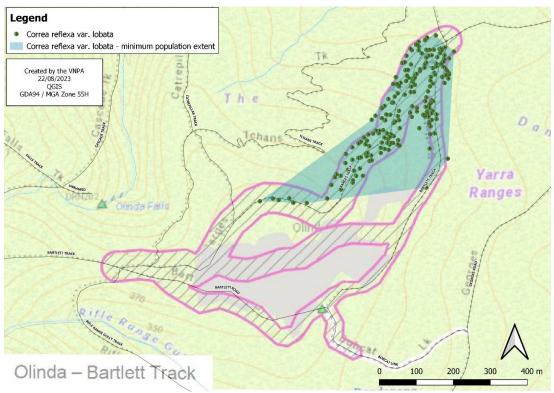


Figure 2. Photograph of *Correa reflexa* var. *lobata* at waypoint '039CRL1P' in the Olinda – Bartlett Track site.

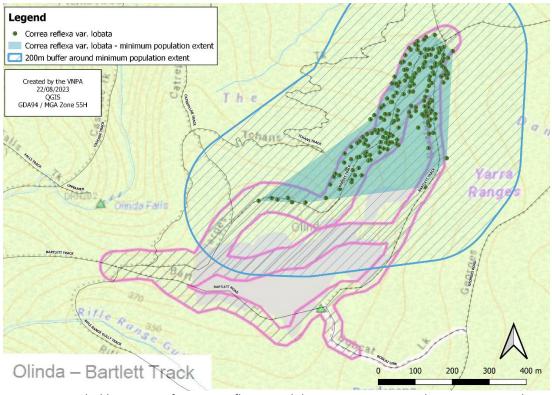


Figure 3. Photograph of *Correa reflexa* var. *lobata* at waypoint 'S007CRL1P' in the Kalorama – Track 13 site.

Results 2. Maps of *Correa reflexa var. lobata* in the proposed sites for log removal operations

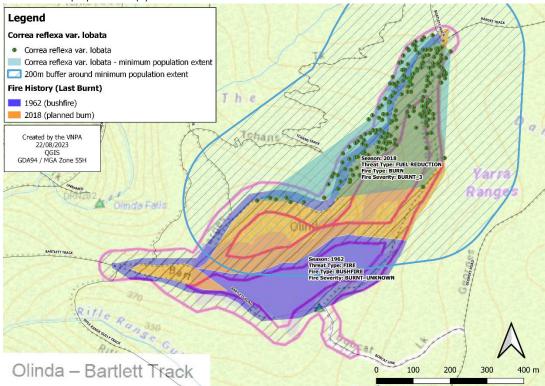


Map 1. Recorded locations of *Correa reflexa* var. *lobata* by the VNPA & SDLG as well as the minimum population extent: Olinda – Bartlett Track Site.

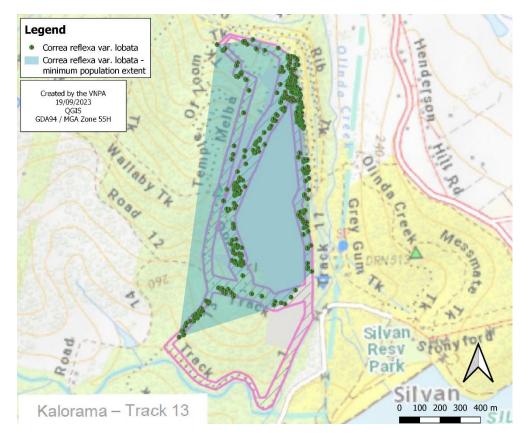


Map 2. Recorded locations of Correa reflexa var. lobata, minimum population extent and 200m buffer

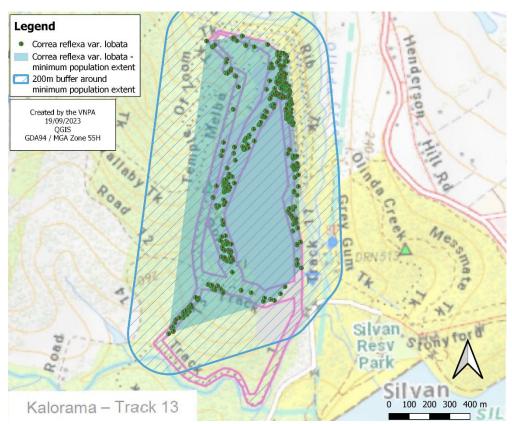
around the population(s): Olinda – Bartlett Track Site.



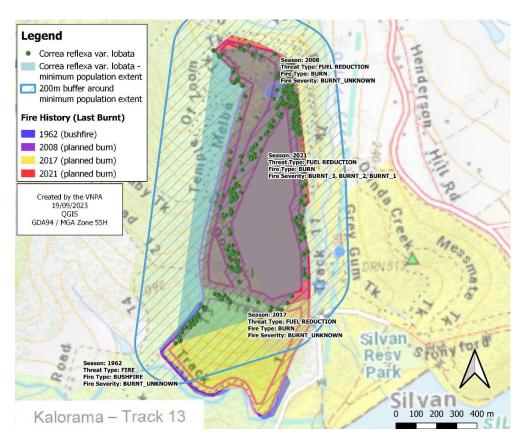
Map 3. Recorded locations of *Correa reflexa* var. *lobata*, minimum population extent with 200m buffer and fire history: Olinda – Bartlett Track Site.



Map 4. Recorded locations of *Correa reflexa* var. *lobata* by the VNPA, SDLG & VFA as well as the minimum population extent: Kalorama – Track 13 Site.



Map 5. Recorded locations of *Correa reflexa* var. *lobata*, minimum population extent and 200m buffer around the population(s): Kalorama – Track 13 Site.



Map 6. Recorded locations of Correa reflexa var. lobata, minimum population extent with 200m

buffer and fire history: Kalorama – Track 13 Site.

Discussion:

Impacts of proposed operations on Correa reflexa var. lobata

The use of heavy logging machinery off-track for the proposed log removal operations severely threatens the populations of *Correa reflexa var. lobata* at the Olinda and Kalorama sites. The machinery required to extract the logs would compact soil, displace soil seed banks and kill, damage and expose resprouting organs of resprouter plants, which are particularly susceptible to the mechanical disturbances associated with logging machinery⁹.

This is extremely concerning as the populations of endangered *Correa reflexa* var. *lobata* at the two sites likely consist of adult plants which have resprouted after the planned burns from 2017, 2018 & 2021 (see Maps 3 & 6 of this report). This is supported in the *Silvan Reservoir flora and fauna assessment report* which Melbourne Water commissioned prior to undertaking similar log removal operations in the Silvan Reservoir, following the June 2021 storm events. The report states for *Correa reflexa* var. *lobata* that "There is inadequate data to determine establishment conditions required for this species after fire. Adult plants generally respond as a 're-sprouter' after a fire event, depending on the severity of the fire." ¹⁰

Furthermore, the use of heavy machinery off track will inevitably cause disturbance to understory plants that cast shadows on the forest floor, such as Tree Ferns and broad-leaf shrubs. These plants influence the local microclimate, and the damage or loss of these plants will increase light and temperatures in the understory, altering the microclimate where *Correa reflexa* var. *lobata* plants occur¹¹. Disturbance events associated with logging machinery can also lead to increases in fungal pathogens - which can cause plant disease, and decreases in fungal symbionts - which can benefit plant health, which could further threaten the populations of *Correa reflexa var. lobata*¹².

The report commissioned by Melbourne Water recommended that for *Correa reflexa* var. *lobata* plants in the Silvan Reservoir within the proposed areas of log removal treatment that: "Known locations of this species at the site should be protected from inadvertent damage from machinery during remediation works with temporary fencing." As a minimum precaution, FFMV and VicForests must protect the Powelltown Correa's minimum population extents from inadvertent damage from logging machinery by creating machinery exclusion zones over the areas in blue shading of Map 1 and Map 4 in this report.

We note that the *Code of Practice for Timber Production (as amended 2022)* outlines protective prescriptions for two related *Correa* species which occupy similar wet environments - *Correa lawrenceana* var. *genoensis & Correa lawrenceana* var. *cordifolia* - and triggers the establishment of 200m Special Management Zones around populations of these species¹⁴. As this Code of Practice aims

⁹ Bowd, E.J., Banks, S.C., Bissett, A., May, T.W. and Lindenmayer, D.B., 2021. Direct and indirect disturbance impacts in forests. *Ecology Letters*, 24(6), pp.33.<

<u>Direct and indirect disturbance impacts in forests</u>.

¹⁰ Silvan Reservoir Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm debris removal in Silvan Reservoir | Melbourne Water>.

¹¹ Bowd, E.J., Banks, S.C., Bissett, A., May, T.W. and Lindenmayer, D.B., 2021. Direct and indirect disturbance impacts in forests. *Ecology Letters*, 24(6), pp.33.

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¹² Bowd, E.J., Banks, S.C., Bissett, A., May, T.W. and Lindenmayer, D.B., 2021. Direct and indirect disturbance impacts in forests. *Ecology Letters*, *24*(6), pp.125.Direct and indirect disturbance impacts in forests>.

¹³ Silvan Reservoir Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm debris removal in Silvan Reservoir | Melbourne Water>.

¹⁴ Schedule 1 – MSPs for timber harvesting operations in Victoria's state forests (DELWP, 2022), pp 97,109. < Code of Practice for Timber Production - MSPs>.

to strike balance between a commercially viable timber industry and the conservation of environmental values, this protection could be considered weak or minimal. The establishment of 200m machinery exclusion zones around the population is more appropriate within the Dandenong Ranges National Park, where there should be no commercial incentive for logging, and we have mapped these protection zones in Maps 2 & 5 of this report.

The impact of rapid-fire succession also severely threatens the populations of *Correa reflexa* var. *lobata* at the two sites. The population(s) at the Olinda site was subject to a planned burn just five years ago, in 2018, and FFMV is planning another burn at the site scheduled for 2025 (Burn number: PP-MET-DRP-0107) just 7 years later. The population(s) at the Kalorama site was subject to planned burns in either 2017 or 2021, with most of the population occurring within the areas burnt in 2021. FFMV is planning another burn at the Kalorama site scheduled for 2024 (PP-MET-DRP-0106), which would place successive fires in 7 years across some of the Powelltown Correa's population extent at the site and successive fires within 3 years for the majority of the population extent at the site.

It's thought that successive fire events within a five-year period could lead to declines of *Correa reflexa* var. *lobata*¹⁵, and in the absence of scientific certainty - successive fires within 7 years may also risk population declines. This would not be surprising given that the minimum Tolerable Fire Interval (TFI) for the Moist Forest Ecological Vegetation Group (EVG) is 25 years (relevant to the Olinda Site), and for the Foothills Forest EVG at the Kalorama Site is 10 years¹⁶, and the successive fire events which are planned for the two sites by FFMV would breach the TFIs for these vegetation communities¹⁷.

Any future planned burns at the two sites (burn numbers: PP-MET-DRP-0106 & 0107) must be rescheduled in accordance with the TFIs for these two vegetation communities, being 2043 at the earliest for the Olinda Site and 2031 at the earliest at the Kalorama Site, assuming low severity, to allow for the persistence of endangered *Correa reflexa* var. *lobata* plants. Any future planned burns must continue to avoid the long-unburnt forest across the two sites, which in the case of the Olinda site contains Mountain Ash (*Eucalyptus regnans*) and wet forest species.

Considerations under the Flora and Fauna Guarantee Act 1988

Due to the species being listed under the Flora and Fauna Guarantee Act 1988 (FFGA), FFMV & VicForests must give considerations to the Act for the proposed operations across the two sites. Under section 4B(1) of the FFGA¹⁸, FFMV & VicForests (as public authorities) must give proper consideration to the objectives of the FFGA in the context of the proposed log removal operations in the Dandenong Ranges National Park. These objectives include¹⁹:

"(a) to guarantee that all taxa of Victoria's flora and fauna, other than taxa specified in the Excluded List, can persist and improve in the wild and retain their capacity to adapt to environmental change; and

(b) to prevent taxa and communities of flora and fauna from becoming threatened and to recover

¹⁵ Silvan Reservoir Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm Damage Remediation Project: Flora and Fauna Assessment (Ecology Australia, 2021), pp48. < Storm debris removal in Silvan Reservoir | Melbourne Water>.

¹⁶ Conservatively assuming low fire severity

¹⁷ Cheal, D. (2010) Growth stages and tolerable fire intervals for Victoria's native vegetation data sets. Fire and Adaptive Management Report No. 84. Department of Sustainability and Environment, East Melbourne, Victoria, Australipp25. <<u>Cheal 2010</u>>.

¹⁸ Flora and Fauna Guarantee Act 1988, pp17. < Flora and Fauna Guarantee Act 1988 (legislation.vic.gov.au)>.

¹⁹ Flora and Fauna Guarantee Act 1988, pp15-16. < <u>Flora and Fauna Guarantee Act 1988 (legislation.vic.gov.au)</u>>.

threatened taxa and communities so their conservation status improves; and

- (c) to protect, conserve, restore and enhance biodiversity, including—
- (i) flora and fauna and their habitats; and
- (ii) genetic diversity; and
- (iii) ecological communities; and
- (iv) ecological processes; and
- (d) to identify and mitigate the impacts of potentially threatening processes to address the important underlying causes of biodiversity decline; and
- (e) to ensure the use of biodiversity as a natural resource is ecologically sustainable; and
- (f) to identify and conserve areas of Victoria in respect of which critical habitat determinations are made."

Section 4B(3) also states that²⁰: "Without limiting subsections (1) and (2), consideration must be given to the potential impacts on biodiversity, including –

- (a) long and short-term impacts; and
- (b) beneficial and detrimental impacts; and
- (c) direct and indirect impacts; and
- (d) cumulative impacts; and
- (e) the impacts of potentially threatening processes".

Under section 4A(d) of the FFGA²¹, FFMV & VicForests must also give proper consideration to the Precautionary Principle: "such that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation".

Due to the reasons discussed in this report, the proposed log removal operations within and surrounding the known populations of endangered *Correa reflexa* var. *lobata* do not give proper consideration to the instruments of the FFGA, and if these actions were to occur, would threaten the persistence of a listed endangered species under the FFGA. Under section 4C(1) of the FFGA²², the Minister may request information from FFMV & VicForests regarding these proposed operations to ensure that proper considerations have been given to the instruments of the Act, and to ensure that the proposed actions don't threaten the persistence of this listed taxon. We note that the Secretary of DEECA has similar powers under section 7(2) of the FFGA. In accordance with these instruments of the FFGA, there must be no logging operations at the Olinda - Bartlett Track Site and the Kalorama – Track 13 Site which contain significant populations of the endangered *Correa reflexa* var. *lobata*.

Considerations under the National Parks Act 1975 & National Parks Regulations 2013

The *National Parks Act 1975* (NP Act) is very clear in its objectives about the protection of native Flora and Fauna within areas under the Act.

The Objectives are below-

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²⁰ Flora and Fauna Guarantee Act 1988, pp17-18. < Flora and Fauna Guarantee Act 1988 (legislation.vic.gov.au)>.

²¹ Flora and Fauna Guarantee Act 1988, pp16-17. < Flora and Fauna Guarantee Act 1988 (legislation.vic.gov.au)>.

²² Flora and Fauna Guarantee Act 1988, pp18. < Flora and Fauna Guarantee Act 1988 (legislation.vic.gov.au)>.

4 Objects of Act

The objects of this Act are—

- (a) to make provision, in respect of national parks, State parks, marine national parks and marine sanctuaries—
 - (i) for the preservation and protection of the natural environment including wilderness areas and remote and natural areas in those parks;
 - (ii) for the protection and preservation of indigenous flora and fauna and of features of scenic or archaeological, ecological, geological, historic or other scientific interest in those parks; and
 - (iii) for the study of ecology, geology, botany, zoology and other sciences relating to the conservation of the natural environment in those parks; and
 - (iv) for the responsible management of the land in those parks;

The Chief Fire Officer has indicated that the proposed operations will "comply with all regulatory and legislative obligations"²³, yet survey work by FFMV did not detect these significant populations of a FFG Act listed species within the proposed log extraction areas - where machinery would cause direct mortality of an endangered species and damage indigenous flora and fauna.

No plans have been made public as to how FFMV have reduced the impact of the proposed log removal operations on indigenous flora and fauna and other environmental values within the operational areas.

No evidence or modelling has been produced publicly or during meetings with FFMV that fallen trees have increased fire severity or risk. In fact, multitudes of evidence-based literature and examples show that post disturbance log extraction with heavy and large machinery increases fire severity and has an exponential impact on biodiversity values^{24,25}.

The effects of log removal from disturbed landscapes are known to increase the severity of bushfire²⁶.

²³ Endangered plant at risk from debris removal plan in the Dandenong Ranges National Park, conservationists say, Ranges Trader. 04/09/2023. https://rangestrader.mailcommunity.com.au/news/2023-09-04/endangered-plant-at-risk-from-debris-removal-plan-in-the-dandenong-ranges-national-park-conservationists-say/.

²⁴ Lindenmayer, D. B., Zylstra, P., Kooyman, R., Taylor, C., Ward, M., & Watson, J. E. (2022). Logging elevated the probability of high-severity fire in the 2019–20 Australian forest fires. Nature Ecology & Evolution, 6(5), 533-535.

²⁵ Salvage logging effects on regulating ecosystem services and fuel loads, Leverkus et.al, Frontiers in Ecology and the Environment Volume 18. Issue 7 p. 391-400 (2020).

²⁶ Lindenmayer, D. B., Zylstra, P., Kooyman, R., Taylor, C., Ward, M., & Watson, J. E. (2022). Logging elevated the probability of high-severity fire in the 2019–20 Australian forest fires. Nature Ecology & Evolution, 6(5), 533-535.

A review of 90 publications on salvage logging after large disturbance events, such as wind throw, insect attack and fire events, found that the effects of operations can have a perverse impact on fuel loads. Regrowth stimulated by the ground disturbance may reach high levels within several years of the operation, while damaging regulation of ecosystem services.

As Leverkus et.al concludes: "The overall negative impact of salvage logging on the provision of regulating ecosystem services calls for careful consideration of alternative management strategies, at least in areas dedicated to nature conservation. This in turn requires explicit consideration of natural disturbances in natural resource management policies to avoid hasty and unplanned decision making." ²⁷ Our emphasis added.

Suggestions made by conservation and Landcare groups to remove fallen trees using smaller machinery with rubber wheels - to reduce the impacts on standing trees and native flora and fauna - have been rejected by FFMV as this would make the operation "unfeasible economically". The suggestion of a fauna handler and ecologist being on site to monitor operations was also dismissed by FFMV, despite this being standard practice for tree removal operations across the state outside of national parks and protected areas.

This reiterates that the commercial element of the operations is superior to the regulatory and legislative obligations under which the National Park is managed, and obligations on FFMV and Parks Victoria in managing the park.

Extraction and the commercial sale of fallen trees from the National Park is likely unaligned with NP Act and National Parks Regulations 2013.

This includes Part 6-Protection of natural features, Division 1-Vegetation 48;

48 Interference with vegetation prohibited

<u>A person must not cut, fell, pick, remove, take, damage or destroy any vegetation in a park.</u>

Penalty: 20 penalty units.

And within the *NP Act* Section Part V—Offences and proceedings;

44A Offence to cut or take away fallen or felled trees

- (1) A person must not, in a park, cut or take away 2 cubic metres or less of fallen or felled trees.

 Penalty: 20 penalty units.
- (2) A person must not, in a park, cut or take away more than 2 cubic metres of fallen or felled trees. Penalty: 50 penalty units or imprisonment for 1 year or both.

Commercial log extraction and logging has never been allowed within national parks in Victoria, be it for firewood, sawlog and post production²⁸.

Although claims by FFMV that the proposed log removal operations from the Dandenong Ranges National Park are not logging operations they meet the definition of timber harvesting operations as defined in the *Sustainable Forests (Timber) Act 2004*, which states the following;

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²⁷ Salvage logging effects on regulating ecosystem services and fuel loads, Leverkus et.al, Frontiers in Ecology and the Environment Volume 18. Issue 7 p. 391-400 (2020).

²⁸ Statewide Assessment of Public Land INTERIM REPORT ON PUBLIC LAND CLASSIFICATION. Appendix 8. Example of a summary of permitted activities in major land use categories. Victorian Environmental Assessment Council, 2015.

Timber harvesting operations means any of the following kinds of activities carried out by VicForests or by any other person or body—

- (a) for the primary purpose of the sale, or the processing and sale—
- (i) felling or cutting trees or parts of trees;
- (ii) taking or removing timber;
- (iii) delivering timber to a buyer or transporting to a place for collection by a buyer or sale to a buyer;
- (iv) any works, including road works, ancillary to any of the activities referred to in subparagraphs (i)to (iii);

Former Environment Minister D'Ambrosio strengthened this commitment in 2018 stating that "The Andrews Labor Government has no intention to log in National Parks" ²⁹.

If the proposed operations are to remain compliant with all regulatory and legislative obligations as committed to and required of the Chief Fire Officer through FFMV, fallen trees cannot be removed from the park and greater emphasis must be put on the protection of indigenous flora and fauna within the park, not on the commercial viability of the operations.

Undertaking of log extraction activities with commercial incentives will also be against long-standing global commitments within the Convention on Biological Diversity (1992) - of which Australia is a signatory - and meets these commitments through the EPBC Act and the National Reserve System agreements with state and territory governments.

As made clear in the document Australia's Strategy for the National Reserve System 2009–2030: "The National Reserve System is the system of formally recognised parks, reserves and protected areas primarily dedicated to the longterm protection of Australia's biodiversity. The protected areas occur on public, private and Indigenous land and are formally protected through legal or other effective means and managed in perpetuity³⁰

This is done through minimum standards with legal guarantee agreed to by State and Territory governments, including Victoria.

One of these standards is that;

The land must be managed to protect and maintain biological diversity according to one of six international classes developed by the International Union for Conservation of Nature (IUCN). The six-level system classifies protected areas according to their management objectives, which range from strict nature conservation to multi-use reserves (objectives must not be inconsistent with the primary purpose which is biodiversity conservation)³¹

The Dandenong Ranges National Park is recognised by the Commonwealth as part of its National Reserve system in meeting its commitment to the Convention on Biological Diversity (1992).

The Dandenong Ranges National Park has been assigned the International Union for the Conservation of Nature and Natural Resources (IUCNs) Category II (National Parks) of the United Nations List of National Basis 4, Dandenong Ranges National Park, Parks and Protected Areas. <u>Category II areas are managed primarily for conservation and appropriate recreation.</u>

²⁹ Twitter post from Lily D'Ambrosio MP, Mar 28, 2018. https://twitter.com/LilyDAmbrosioMP/status/978839813171298304?s=20&t=QUkg71puwMIMttdJfdVMnQ

³⁰ Australia's Strategy for the National Reserve System 2009–2030, Commonwealth of Australia and each of its States and Territories 2010.

³¹ National Reserve System protected area requirements, Department of Climate Change, Energy, the Environment and Waterhttps://www.dcceew.gov.au/environment/land/nrs/about-

These values are managed through the *Dandenong Ranges National Park Management Plan, March 2006. Amended October 2017.*

<u>Dandenong Ranges National Park Management Plan</u>

National Parks in Victoria are managed under the NP Act through Management Plans (The management Plan) to meet the legal obligations in managing the National Park and its natural and cultural values under the objectives of the Act.

The Dandenong Ranges National Park is managed under the *Dandenong Ranges National Park Management Plan March 2006 (Amended October 2017), Parks Victoria*.

The Management Plan highlights the significance of the park for the protection of local flora stating in Section 2.1 Regional context that: "protected areas act as core areas for nature conservation and conserve large areas of native flora and associated wildlife"³², and further reiterates the Legislative requirements to protect FFG Act listed species stating in section 2.5 Legislation and LCC recommendations;

The Flora and Fauna Guarantee Act 1998 (Vic.) protects all indigenous flora and fauna within the park.

Any planned log extraction operations must be excluded from all *Correa reflexa* var. *lobata* (Powelltown Correa) populations to remain compliant with legal requirements under the FFG Act and NP Act.

Under section 4.6 - Fire Management of the Management Plan (aims), the following aims are not met by the planned log extraction operations within the park;

- Protect life and property from damage, and the park from injury, by wildfire.
- Minimise the adverse environmental impact of fires and fire suppression.
- Identify fire regimes appropriate to the conservation of flora and fauna.

Points 2 and 3 have not been met by the planned log removal operations so far in the planning process.

Conclusion & Recommendations:

The VNPA, VFA & SDLG have identified significant populations of the endangered Powelltown Correa (*Correa reflexa* var. *lobata*) within two sites proposed for log removal operations by FFMV & VicForests, in the Dandenong Ranges National Park. The population(s) are estimated to exceed 1000 endangered plants across the two sites within the areas proposed for logging operations. Over 500 plant locations have been recorded by GPS waypoints, many of which were also photographed, during various flora surveys between July and September this year. The proposed usage of heavy logging machinery off-track threatens these populations of Powelltown Correa, which is endangered under the state's Flora and Fauna Guarantee Act 1988. The proposed operations threaten populations through soil compaction, direct mortality, damage to resprouting organs and a changed microclimate,

 $^{^{\}rm 32}$ Dandenong Ranges National Park, Management Plan.

to name a few impacts. Planned burning in rapid succession also threatens the persistence of these populations, as FFMV is planning to burn these vegetation communities outside of their Tolerable Fire Intervals. At the Kalorama Site, FFMV is planning to burn the majority of the Powelltown Correa population just three years since they last conducted a planned burn, which is thought to lead to population declines for this species. The proposed log removal operations do not sit in accordance with the Flora and Fauna Guarantee Act 1988 or the National Parks Act 1975, and must be abandoned to allow for the protection and conservation of the endangered *Correa reflexa var. lobata*.

Recommendations:

- FFMV & VicForests must produce planning and documentation of planning that shows operations have been planned in accordance with the FFG Act and NP Act.
- FFMV and VicForests must produce evidence that the planned operations will reduce the severity and risk of bushfire.
- Survey work from FFMV & VicForests must be undertaken at appropriate times of the plants life cycles to capture all FFG and EPBC listed species to ensure these species are not impacted by the proposed operations.
- Experienced botanists must be engaged to undertake further comprehensive surveys for *Correa reflexa var. lobata* and other threatened plants at the Olinda and Kalorama Sites, and recommended protections must be adjusted based on any additional findings.
- As a minimum, FFMV & VicForests must establish machinery exclusion zones around the minimum population extents as mapped with blue shading in Maps 1 and 4 of this report.
- To adequately protect and allow for the growth of the populations, the machinery exclusion zones must extend 200m from the boundary of the minimum population extents, as mapped with blue hashing in Maps 2 and 5 of this report.
- In accordance with the relevant legislation (FFG Act & NP Act), the proposed log removal operations must be abandoned at the Olinda and Kalorama Sites.
- In accordance with the Tolerable Fire Intervals for the vegetation communities across the two sites, the Olinda site must not be subject to a planned burn until 2043 at the earliest, and the Kalorama site must not be subject to a planned burn until 2031 at the earliest, and long-unburnt forest across the two sites must be protected from fire and encouraged in the landscape.

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