Dr Helen Haines, MP helen.haines.mp@aph.gov.au

Call for Commonwealth Audit of Logging in Victoria

Dear Helen,

Congratulations on the whopping increase in your vote at the May election and your continued championing of a Federal Integrity Commission with real power. Although perhaps not within the remit of the proposed Commission, it is a question of integrity - in this case the Victorian Government's disregard for the Central Highlands RFA - that we now write.

Our tour of the Rubicon State Forest last year will have left you in no doubt about the seriousness of threats facing the forests of the Central Highlands from continued unsustainable logging. While the State Government has promised to end logging across Victoria by 2030, and 'phase down' from 2024, these timelines are based not on any ecological considerations, but on the need to continue the supply of pulpwood to the Maryvale Mill until 2030.

For reasons summarised in the box below (and elaborated in the Attachment) we contend that the State of Victoria has materially failed to comply with its obligations under the Central Highlands Regional Forest Agreement (RFA) as renewed in 2020. Like the other 'modernised' RFAs, the revised Central Highlands Agreement followed a 2 year public consultation and scientific assessment process. The Commonwealth will have signed this RFA in good faith and for Victoria to have breached so many of its provisions, while perhaps not corrupt, is certainly outrageous.

In relation to Listed Species and Communities, Victoria has breached its commitments under Cl.25G for its forest management system to:

- 'provide for the conservation and recovery of Listed Species and Communities' by failing to arrest the precipitous decline in many tree-dependent threatened species, including Greater Glider, Powerful Owl and Sooty Owl.
- 'be based on the best available science and give consideration to the advice of, or any
 determinations made by relevant scientific bodies or committees' by continuing to log ash
 forests the habitat of many Listed Species despite the <u>red-listing by the IUCN of the
 mountain ash ecosystem;</u>
- 'provide for active management of Native Forests in order to build their resilience and diversity' by continuing to log ash forests - the habitat of many Listed Species - despite a dire age profile as outlined in <u>RFPG's submission to the Major Event Review;</u>

Victoria has breached several commitments which specifically underpin Commonwealth accreditation of its Forest Management System under Cl.46 and Cl.47 by:

- ignoring key provisions of the Flora and Fauna Guarantee Act, especially s.4B relating to cumulative impacts, long-term impacts and indirect impacts, contrary to Cl.47;
- failing to disclose to the public (and presumably the Commonwealth) in the <u>2018 Review of the</u> <u>Allocation of Timber Resources</u>, and in the following <u>revised Allocation Order</u>, that it was shifting harvest level compliance from a gross to net coupe area, thereby almost doubling the area VicForests is permitted to harvest compared to the previous rules
- weakening a provision of the 2014 Code of Practice for Timber Production designed to help limit the impact of bushfires in so-called Bushfire Moderation Zones, thereby breaching Cl.47, and ignoring the Code of Practice for Bushfire Management on Public Land also breaching Cl.47;
- deleting provisions of the 2014 Code of Practice for Timber Production requiring VicForests to consider certain long-term impacts in setting its Timber Release Plan

 Other weakenings of the 2014 Code of Practice for Timber Production in 2021 and 2022 under the guise of clarification, were adopted despite clear evidence (see RFPG's <u>first</u> and <u>second</u> submissions to these 'reviews') that the amendments not only changed the original intent but were specifically designed to enable logging to continue unimpeded by legal action (see <u>2020</u> and <u>2021</u> Victorian Government Media Releases), thereby breaching Cl. 46.

Victoria has breached numerous other commitments in the Central Highlands RFA which, along with the above, amount to abrogation of the Agreement. These include:

- failing to review the 'comprehensiveness, adequacy and representativeness of the CAR Reserve System by December 2021' as promised in 66G(b);
- failing to ensure that the Major Event Review had access to information needed for it to assess two key elements of its charter (see Cl.38F-I): harvest levels and the CAR reserve system;
- failing to report on the annual and cumulative harvest volume (including sawlog, pulp wood and commercial firewood) since 1 July 2019 (Cl. 69K);
- failing to abide by its Statement of Regulatory Intent, implicitly breaching Cl.44.
- failing to update the main indicator system which guides biodiversity and ecosystem monitoring in Victoria's native forests (as promised in Cl.48-50); shortfalls in the indicator system render meaningless the commitment to continuous improvement in Cl.40B and Cl.46; and
- ignoring widespread regeneration failure, as documented in a 2021 Report, <u>After The Logging</u>, and failing to increase the protection of treeferns (in breach of Cl.62C(b)) thereby breaching Cl.39 by not "ensuring that harvested areas of Native Forest on Public Land are successfully regenerated, maintaining the natural floristic composition";

The same breaches of differently numbered clauses will have occurred in the other four Victorian RFAs.

As you know, our Group has tried for years to work with VicForests and DELWP to ensure existing laws, policies and regulatory codes are enforced to protect what is left of the already severely compromised, once magnificent, forest ecosystems. But since the formation of our group in 2015, our pleas and dozens of Code breach reports have been ignored or brushed aside.

We now turn to you, Helen, to ask that you urge the Commonwealth Minister for the Environment to use her powers to initiate an audit of Victorian compliance with the terms of the Central Highlands RFA in line with Sections 45A to 45J of that Agreement.

We would be very happy to brief you in more detail regarding this submission which has been authored by RFPG members, Dr David Legge and Dr Nick Legge.

Warm regards,

Kon Dearcon

Ken Deacon Convenor, Rubicon Forest Protection Group

Bev Dick Vice President Rubicon Forest Protection Group



ATTACHMENT. VICTORIA HAS FAILED TO COMPLY WITH ITS COMMITMENTS UNDER THE CENTRAL HIGHLANDS REGIONAL FOREST AGREEMENT

Cont	tents
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Context: the Samuel Review
Breach of commitments under Cl.25G relating to Listed Species and Communities4
Failure to 'provide for the conservation and recovery of Listed Species and Communities' under Cl. 25G(a)4
Failure of its Forest Management System to 'be based on the best available science and give consideration to the advice of, or any determinations made by relevant scientific bodies or committees' under C. 25G(b)
Failure to comply with its commitment 'to provide for active management of Native Forests in order to build their resilience and diversity' under Cl.25G(d).
Failed regeneration and floristic simplification7
Victoria has breached the conditions under which (in Cl.47) the Commonwealth agreed to accredit Victoria's Forest Management System9
Cumulative impact provisions of the FFG Act9
Code 'reforms' breach the continuous improvement commitment9
Numerous other commitments in the Central Highlands RFA breached which, along with the above, amount to abrogation of the Agreement
Review of the CAR Reserve Scheme12
Major Event Review access to information15
Transparency regarding harvest volumes15
Climate change ignored15
Statement of Regulatory Intent
Failure to update Victoria's indicator systems for monitoring ecosystem stability
Summary

Context: the Samuel Review

The 2020 <u>Samuel Review</u> of the EPBC Act (Samuel, 2020) found fundamental shortcomings in the interactions between RFAs and the EPBC Act.

The Review has low confidence that the environmental considerations under the RFA Act are equivalent to those imposed by the EPBC Act, but recognises that some RFAs afford environmental protections that exceed the requirements of the RFA Act. RFAs rely on the States to undertake monitoring, compliance and enforcement, with little Commonwealth oversight.

Samuel also commented

In May 2020 the Federal Court found that a forestry operator had breached the terms of an RFA and should therefore be subject to the ordinary controlling provisions of the EPBC Act. Legal ambiguities in the relationship between the EPBC Act and the RFA Act should be clarified. This should be achieved by requiring that RFAs demonstrate consistency with the National Environmental Standards to avoid the need for an EPBC Act assessment and approval. Adopting the accreditation model would support greater Commonwealth oversight of the RFAs, including the effectiveness of the State-based compliance and enforcement regimes.

Breach of commitments under Cl.25G relating to Listed Species and Communities

Failure to 'provide for the conservation and recovery of Listed Species and Communities' under Cl. 25G(a)

Since March 2020 when the 'modernised' RFAs came into force, Victoria has failed to take steps to materially arrest declining populations of large forest owls, especially Powerful Owl and Sooty Owl, other tree-dwelling threatened species, especially the Greater Glider, and other threatened species which have had their populations impacted by ongoing unsustainable logging and megafires, including the Black Summer fires.

In relation to the Greater Glider, two experts – Dr Andrew Smith and Professor Craig Nitschke - who represent opposing sides in a current case in the Victorian Supreme Court (S ECI 2020 00373) about the impact of the Black Summer fires, were asked to prepare a <u>report examining their differing positions</u>. They summarised these positions as follows:

We agree that current harvesting practices are not ecologically sustainable, cause severe declines in GG populations at coupe scales and require significant modification. While both of us have come to very similar conclusions about the fine-scale impacts of the proposed timber harvesting on GG we have reached different conclusions about the broad-scale (landscape, regional, state) impacts of logging. We attribute this primarily to differences in methods of risk assessment. Smith used an approach (Third report Part 2, para 11) which takes into account the cumulative effects of past as well as current and future logging, including the likelihood that any surviving glider populations will continue to decline over the next 40-80 years (and fail to recover) due to the effects of fragmentation and isolation, ongoing habitat tree decline, and the possibility of ongoing future logging. Nitschke used an approach (Part 2 Report, page 5-7) which considered broadscale impacts in terms of the immediate extent of habitat loss on the 64 coupes relative to the extent of habitat remaining at state and national scales based on an assumption that harvesting would continue to 2030 then halt.

The Victorian Government may claim that the Interim Protection Areas (IPAs) it announced in November 2019 amount to an effective response to this particular RFA obligation however this is not the case. Most of the area set aside was either already reserved in a Special Protection Zone, or had already been logged in recent years, or contained forest unsuitable for logging. Indeed an examination of the boundaries of the IPAs within the Central Highlands shows that they were drawn in such a way as to exclude as many scheduled coupes as possible.

Failure of its Forest Management System to 'be based on the best available science and give consideration to the advice of, or any determinations made by relevant scientific bodies or committees' under C. 25G(b)

Burns and colleagues in 2014 (2014) undertook a systematic ecosystem assessment of the mountain ash forests of the Central Highlands of Victoria for the IUCN and concluded that they are critically endangered. Burns and colleague concluded that the ash forests of the Central Highlands may have already entered a phase of ecosystem collapse. Their work resulted in the IUCN placing the mountain ash ecosystem on its 'red list' of endangered ecosystems. Lindenmayer and Sato (2018) talk about 'hidden ecosystem collapse'; it is happening while we watch. The processes underlying tipping points may be underway while the forest still looks healthy and maintains biodiversity. Declining biodiversity and species decline may be a late indicator of ecosystem decline.

Yet the Victorian Government has chosen to ignore this evidence and continues to log mountain ash forests without pause, except where Court injunctions prevent it doing so. The multiple megafires this century (2003, 2006-7, 2009, 2014 and 2019-20) mean that alpine ash ecosystems face the same dire situation

And in March 2020 the Goongerah Environment Centre in Gippsland wrote to Monique Dawson, VicForests' CEO, about fire salvage logging citing two research papers by Professor Lindenmayer. Ms Dawson reply included a statement 'We do not accept the published opinions of Professor David Lindenmayer as reflective of evidence and do not consider him to be an authority in these matters.

Failure to comply with its commitment 'to provide for active management of Native Forests in order to build their resilience and diversity' under Cl.25G(d).

RFPG's submission to the Major Event Review analysed age profile data for Victoria's ash forests from published sources and from VicForests, updated to account for the Black Summer fires. The results are shocking. Only around half the total ash forest estate is only 20 years old or younger and for species that have normal life-spans measured in centuries this is ecologically unsustainable. The biggest single age cohort is 1939 regrowth ash, which comprises 27 per cent of the total ash forest area outside National Parks, however much of this will be small fragmented areas associated with logged coupes. Only 7.4 per of the ash forest estate is over 120 years old, and a far smaller fraction – estimated by DELWP at around 1 per cent – is considered to be oldgrowth.

The Major Event Review under Victoria's RFAs (MER) (Sparkes, Mullett, & Bartlett, 2022) refers to a decline in long term ecosystem 'stability':

The report's analysis also shows that over the past 20 years more than five per cent of Victoria's public land has been burnt multiple times by large bushfires, and all of this is in eastern Victoria. About 276,000 ha (6.3 per cent) of the public land in eastern Victoria has been burnt multiple times within 20 years.

Given the reported research on the impacts of major bushfires on forest stability in Victoria and the increasing proportion of the public forests that have been impacted multiple times by major bushfires within 20 years, the Panel considers that it is likely that the 2019–20 bushfires have resulted in a decline in the long-term stability of some forests within the East Gippsland, Gippsland

and North East RFA regions. With climate change, the extent, frequency and intensity of bushfires is increasing. This has implications for the stability of Victoria's forests, most notably the ash forests, rainforests, alpine forests and a number of ecological vegetation classes that have limited natural distribution.

The frequent exposure to intense bushfires is presenting a major and increasing threat to the effective operation of Victoria's RFAs, to the stability of the forests and the achievement of ecologically sustainable forest management. There is ongoing loss of old growth forests and ongoing decline of forest-dependent threatened species and communities.

The <u>2018 State of the Forests</u> report (Commissioner for Environmental Sustainability, 2018) rates 31 (out of 52) indicators as fair or poor. Twenty indicators (out of 51) were rated as stable or deteriorating (cf 13 improving and 18 unclear).

Of 12 sub indicators under Criterion 1 ('Conservation of biodiversity'), 8 were 'fair' or 'poor' and only one was 'good'. Of 4 indicators under Criterion 3 ('Maintain of ecosystem health and vitality') 3 were rated as 'fair'; none were 'good' or 'improving'. Data quality was 'fair' or 'poor' in 2/4.

Criterion 1.2a ('The status of forest-dependent species at risk of not maintaining viable breeding populations, as determined by legislation or scientific assessment') is recorded as 'fair' and 'deteriorating' with data quality 'good'.

Victoria's Minister for the Environment, Ms Lily D'Ambrosio, in her introduction to <u>Biodiversity 2037</u> (D'Ambrosio, 2017) notes that 'Despite understanding the importance of our natural environment, not enough has been done to protect it from harm. Victoria's biodiversity is in decline.'

"Ecologically Sustainable Forest Management" or "ESFM" is defined in the RFA as meaning forest management and use in accordance with the specific objectives and policies for ecologically sustainable development as detailed in the National Forest Policy Statement. The glossary to the <u>NFPS</u> recognises three requirements for ecologically sustainable forest use:

- maintaining the ecological processes within forests (the formation of soil, energy flows, and the carbon, nutrient and water cycles);
- maintaining the biological diversity of forests; and
- optimising the benefits to the community from all uses of forests within ecological constraints.

In the forests of the Central Highlands these standards are not being achieved. The ash forest ecosystem is close to collapse; it has been listed as vulnerable by the IUCN. The biological diversity of the forests of the Central Highlands is diminishing. The industrial scale logging has deeply prejudiced other uses of the forest, in particular, tourism and recreation.

The <u>EPBC Act</u> articulates the following five principles of ecologically sustainable development:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- (b) 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;
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- (e) improved valuation, pricing and incentive mechanisms should be promoted.

These principles are all breached in the Victorian Forest Management System.

Failed regeneration and floristic simplification

Ensuring that harvested areas of Native Forest on Public Land are successfully regenerated, maintaining the natural floristic composition is identified (in Cl.39) as a key element of Victoria's Forest Management System. Failed regeneration following harvesting is widespread.

Ecologically sustainable forest management as required by the RFAs also includes ensuring that harvested areas are successfully regenerated, a requirement which has been widely ignored as comprehensively demonstrated by Margaret Blakers in her seminal report, <u>After The Logging</u>. The Victorian Government has <u>reluctantly acknowledged this</u> (DELWP 2021) but taken no action against VicForests on this account.

And the obligation to maintain the natural floristic composition has certainly not been met. It has long been known through research in the 1990s under Victoria's Silvicultural Systems Project that Few vegetatively resprouting species are recorded after clearfelling, despite resprouting species among the structurally dominant species in surrounding vegetation (Murphy and Ough, 1997).

Such research led to the incorporation of a provision in the Code that long-lived understorey species must be protected during logging bu that provisions has been almost universally ignored by VicForests. The situation as it applies to treeferns is especially dire (see box below)

Even areas reported as successfully regenerated are not growing into forests. The report by Margaret Blakers, <u>After The Logging</u>, documented areas that were magnificent forests a decade ago but have been turned into blackberry patches, weed-infested wastelands or thickets of bracken and wattles instead of eucalypts. RFPG has also lodged multiple breach reports alleging the same thing but OCR has summarily dismissed these like most of our other breach allegations.

Failure to protect tree ferns

Clause 62C(b) of the modernised CH RFA states:

Victoria will use its best endeavours to conserve and protect all EVCs, with a particular focus on vulnerable, rare and endangered EVCs, both within the CAR Reserve System and off reserve (non-CAR Reserve components of State Forests and Private Land), by: [...] increasing the protection of hollow bearing trees and tree ferns in relevant EVCs to maintain ecological processes.

Treeferns are a keystone species with a critical ecological and ecosystem role. Former DELWP researchers Keely Ough and Anna Murphy (1999) have shown that clearfell logging has a profound impact on treefern distribution, unlike megafires. The 1997 <u>Central Highlands Comprehensive Regional Assessment</u> (Officials, 1997) states:

The potentially threatening processes indirectly associated with harvesting operation include habitat modification, specifically the removal of one or more forest strata and the loss of opportunity to develop habitat elements characteristic of mature and senescent forests (eg tall treefern trunks, decaying logs) on the coupe. This threatening process is considered to be strongly associated with timber harvesting and of moderate overall significance.

To the extent that tree-ferns attenuate fire spread by reducing ground-level fuel loads, flammability and windspeed, their loss post logging is exacerbating Victoria's growing bushfire risk profile.

Not only are treeferns themselves fire resistant due to their apical meristem being well shielded, but by allowing a shaded and moist understorey they foster speedy litter decomposition and so attenuate fire spread. They help create rich habitat for insects, worms, copepods, millipedes and other invertebrates on the forest floor that provides food for lyrebirds. Their shade nurtures germination and growth of rainforest species, and their trunks that are often rich in epiphytes can be an ecosystem in themselves.

The Central Highlands CRA goes on to say:

On the coupe itself, the microclimatic changes following harvesting are radical. While these changes may be similar to the impacts of wildfire in some circumstances, the impact of wildfire may be less extreme in some cases where some vegetation remains after the fire, including burnt or scorched leaves and branches in the canopy or understorey. Furthermore, it is postulated that the dense treefern layer (which is present in most ash forests) responds rapidly (ie. within a few weeks) following wildfire to produce a new frond canopy, which has the effect of reducing wind and light, increasing humidity and attenuating temperature extremes at the soil surface and beneath the layer of fronds. [There is] a significant increase in treefern mortality following harvesting, when compared to areas burnt by wildfire. Other groundferns and shrubs also resprout more quickly and completely following wildfire than following timber harvesting, hastening the re-establishment of more moderate microclimates.

In addition to the microclimatic amelioration, treeferns may also play a role in the germination and establishment of other forest species, including Pittosporum bicolor, Coprosma quadrifida, Tasmannia lanceolata and Olearia argophylla. Treefern trunks are also the substrate for a suite of epiphytic ferns (eg. Hymenophyllum spp., Tmesipteris spp.) and other epiphytes (eg. Fieldia australis). Other understorey shrubs and trees also provide substrate for epiphytes such as Microsorum pustulatum, as well as a wide variety of non-vascular plants such as mosses and liverworts.

The CRA comments that trials of "understorey islands", areas within coupes in which machinery is excluded to minimise physical damage to long-lived understorey species, were being undertaken in the Central Highlands at that time. However, since understorey islands impede the kind of industrial-scale logging operation that VicForests conducts, nothing has been done about implementing understorey islands into routine operations, despite their adoption being a recommendation of the Victorian Silviculture Systems Project (Squire, Dexter, Eddy, Fagg, & Campbell, 1991), a research program established to find ways of reducing the environmental harm cause by clearfell logging.

While the slender treefern (*Cyathea cunninghamii*) is the only treefern listed as threatened, this is likely due to listing being based on outdated information. The Major Event Review observed that:

While DELWP's Advisory List of Rare or Threatened Plants was updated in 2014, most of the information was based on 2005 data. Further data has been collected providing a better picture of the status of species and in many cases, conditions may have changed in the intervening years. Consideration of climate effects was not properly considered in the older lists. Climate change-induced drying, warming and more frequent bushfires pose significant threats for many species.

In addition, since the Comprehensive Regional Assessments for the RFAs were conducted 25 years ago, logging will have taken a significant tool on treeferns, especially the rough treefern (*Cyathea australis*) which unlike the smooth treefern (*Dicksonia antarctica*) does not resprout when pushed over. Across Victoria more than 100,000 ha has been logged since 1997 and except for individuals in streamside buffers, treeferns will have largely gone, or else exist in much reduced numbers, from these logged areas.

Victoria has breached the conditions under which (in Cl.47) the Commonwealth agreed to accredit Victoria's Forest Management System

Cumulative impact provisions of the FFG Act

The FFG Act is listed as a key element of Victoria's Forest Management System. The FFG Act at the time of the CH RFA in 2020 include cumulative impact provisions which Victoria has failed to implement.

The objectives of the Flora Fauna Guarantee Act 1988 (S4) are:

(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 threatened taxa and communities so their conservation status improves; and

(c) to protect, conserve, restore and enhance biodiversity, including: flora and fauna and their habitats; genetic diversity; ecological communities; and 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 requires that Ministers and public authorities to give proper consideration:

(1) In performing any of their functions that may reasonably be expected to impact on biodiversity in Victoria, including a function under this Act or any other Act, a Minister and a public authority must give proper consideration to the objectives of this Act, so far as is consistent with the proper exercising of their functions.

(3) Consideration must be given to the potential impacts on biodiversity, including: long and shortterm impacts; beneficial and detrimental impacts; direct and indirect impacts; cumulative impacts; and the impacts of potentially threatening processes.

Code 'reforms' breach the continuous improvement commitment

Contrary to the continuous improvement commitment in Cl.40B and Cl.46, Victoria, in "minor amendments" to the Code of Forest Practice, has; gutted the landscape level regulatory capacity of the Code and has relaxed a provision designed to help limit the impact of bushfires in so-called Bushfire Moderation Zones (contrary to Cl.62C(c)).

Landscape level regulation is one of the most contested issues in Victorian native forestry regulation. Issues here include biodiversity and ecological resilience, the preservation of tourist assets, streamflows and water quality and bushfire mitigation.

Biodiversity and ecological resilience

Critical to the perpetuation of biodiversity and ecological resilience is the preservation not just of 'oldgrowth' as narrowly defined by DELWP, but sufficient areas of mature forest to become old-growth and sufficient areas of younger forest to reach maturity (as provided for in para 2.2.2.9 of the Code).

As a result of fires and logging, Victoria's ash forests, have a highly skewed age class profile, including limited old growth forest stands with exceptionally high conservation values (discussed above). However, further fires over the next 20 years (which are highly likely) will likely kill more old growth stands and exacerbate the existing skewed age profile with seriously consequences in terms of species biodiversity and ecosystem stability/collapse.

The VEAC report on <u>Conservation Values of State Forests (2017)</u> also confirms the youthfulness of the ash forests of the Central Highlands.

The principles of ESFM, the precautionary principle and the commitment to regulating cumulative impact will all be breached if VicForests continues to log the remaining ash forests at anything approaching the extent envisaged under the Victorian Forestry Plan.

Yet since the 'modernised' RFAs were adopted in 2020, the Code has been explicitly weakened to exempt VicForests from the previous long term planning provisions.

Another critical threat to biodiversity and ecological resilience (especially regarding fauna) is the existence of adequate wildlife corridors (para 2.2.2.8 of the Code), According to the Central Highlands Forest Management Plan, these should average 200m wide but desirably be at least 400m wide.

The RFAs require the CAR reserve system to have regard to 'habitat connectivity'. (This reference to habitat connectivity replaces a previous reference to an 'inter-connected network of protected areas'.)

The lack of any obligation on VicForests to have regard to connectivity in timber harvest planning, and the refusal of the OCR to enforce coupe size and connectivity restrictions, have contributed to severe fragmentation and biodiversity loss in the forests of the Central Highlands.

Since the RFAs were first signed, the Victorian Government has totally neglected its long-term planning function. It was told about this from a key conclusion from research it funded over 25 years ago:

An important need is to spread the risk spatially by maintaining populations of all species by using a mixture of management strategies (various refs) that maintain a perpetual supply of old trees and other habitat requirements across the entire forest landscape.

(van der Ree and Loyn, 2002)

Landscape-level planning and the degradation of tourism assets

All of the high level policy statements reviewed above recognise the competing claims with respect to forest uses, including the need to protect tourism values. The need to restrict adverse visual impact is a core issue in terms of the tensions between different uses of the forests and different stakeholders.

When the FMPs were first formulated, before the RFAs were first signed late 1990s, a number of named tourist assets and defined scenic vistas were identified as requiring restrictions on logging to protect tourist values. These named tourism assets were included in the Code in 2014 but the Code also included mandatory actions required for the protection of tourism values in generic terms (walking tracks, scenic vistas and roadside buffers).

Since 2015 the RFPG has alleged repeated breaches of relevant Code restrictions to the OCR and watched in frustration as critical tourism assets have been degraded. However, the OCR has insisted that the generic restrictions in the Code only applied to named locations, vistas and vantage points which were explicitly named in the MSPs, notwithstanding the clear wording of the Code itself at that time. The Code revision of 2021 (designed to remove 'certain ambiguities') narrowed the requirement to protect tourism assets to areas named in an Appendix.

This is another instance of a material weakening of the regulatory regime since the Commonwealth agreed to the 'modernised' RFAs in 2020.

Progressive changes to the Code have removed any accountability on the part of VicForests for ensuring that the TRP is consistent with the long term planning provisions of the Code of Forest Practice (notwithstanding the provisions of S37(3) of the SFT Act, cited above). In the 2021 review of the Code the long term planning provisions were formally made non obligatory.

Landscape level regulation deals with a level of scale beyond coupe level regulation which is the focus of the OCR. However, without effective landscape level regulation the policy commitments (in the NFPS, the EPBC Act, the RFAs, the FFG Act, the Code, Biodiversity 2037, Sustainability Charter, etc) to ecologically sustainable forest management and attention to cumulative impact (in the FFG Act) are unenforceable.

The specific coupe level prescriptions and protections provided for in the Code have both a local and an aggregate significance. Unless the aggregate dimension is addressed the commitments to biodiversity and ecosystem stability are unenforced.

The three principal regulatory tools which are, or could be, part of landscape level enforcement are VicForests' timber release plan (TRP), the Code, and the Forest management zoning scheme.

In the following subsections we review the deregulation of the TRP (ensuring that it is not bound by landscape level regulatory standards) and we review the limitations of the Zoning Scheme as a tool for landscape level regulation.

We have mentioned the 2021 revisions of the Code which clarified that VicForests is not bound by the long term planning provisions of the Code. The role of the OCR has accordingly been reduced to monitoring coupe level compliance although even here it is hobbled in its ability to require compliance. We return to consider the Code more broadly and the role of the OCR in its enforcement in the subsequent section.

The timber release plan (TRP)

In its <u>overview</u> of timber harvesting regulation DELWP explains that *"The TRP is VicForests' key planning mechanism for outlining future timber harvesting operations and associated management activities."*

Section 37 of the <u>Sustainable Forests (Timber) Act</u> requires that VicForests prepare a plan:

- (1) VicForests must prepare a plan in respect of an area to which an allocation order applies for the purposes of—
 - (a) harvesting and selling, or harvesting or selling, timber resources; and
 - (b) undertaking associated management activities in relation to those timber resources.
- (3) VicForests must ensure that a plan prepared under this section is consistent with—
 - (c) the allocation order to which the plan relates, including any condition, limitation, matter or specification in the order; and
 - (d) any relevant Code of Practice relating to timber harvesting.

However, while the TRP 'must' be consistent with the Code there is no enforcement mechanism directed to holding VicForests accountable for this obligation. Prior to 2013, S40 of the Sustainable Forests (Timber) Act required the Secretary of the environment department to approve TRP [legislation.vic.gov.au]. While this requirement was removed in 2013 the minister of the day, Peter Walsh on 8 May 2013 in his 2nd reading Speech stated that

While the timber release plans will not play a role in vesting timber resources, they will remain a key planning, auditing and consultation tool for VicForests. [parliament.vic.gov.au/hansard]

The 2014 Code – which was merely a consolidation of existing rules according to the RIS exemption certificate he signed – did not exclude the TRP from being subject to the LT planning provisions of the Code. The Victorian Government's 2021 amendments to the 2014 Code should be considered a material breach of the RFAs.

Bushfire moderation zones

One of the changes to the Code earlier this year under the guise of clarification will lead to various areas close to communities becoming more fire prone and directly counter to the expectations in the <u>Code of</u> <u>Practice for Bushfire Management on Public Land</u> (Department of Sustainability and Environment, 2012). Instead of logging in areas designated as bushfire moderation zones (BMZs) being dispersed and spread over time, the change will allow intensive logging in these areas. The 2022 Code revisions now provide for 'aggregate management units', which aggregate various disconnected BMZs, for the purpose of limiting logging in higher risk areas. Such units are not mentioned in the Code of Bushfire Management or in any other legislative instrument and were developed exclusively to avoid restrictions on harvesting that would otherwise be required. Their adoption was never subject to public consultation.

The logic of the 2014 Code of Practice for Timber Production restricting logging in BMZs was based on young forest being more fire-susceptible and so constraining fuel reduction burning for 20 years or so. But even if fuel reduction burning can be done, the best protection for nearby communities is to leave BMZs unlogged or only lightly logged so they may eventually become old-growth and less fire susceptible.

Communities close to forests already face a higher bushfire risk, but this is especially so in the Central Highlands, where the Black Saturday fires and intensive logging since have already made the broader landscape more fire prone. The Government's own 'risk reduction' mantra should have prevented such a move to allow intensive logging near communities.

Numerous other commitments in the Central Highlands RFA breached which, along with the above, amount to abrogation of the Agreement.

Review of the CAR Reserve Scheme

Victoria has failed to review the 'comprehensiveness, adequacy and representativeness of the CAR Reserve System by December 2021' as promised in 66G(b).

Under the <u>NFPS</u> (1995) the Commonwealth and States commit to ecologically sustainable management of Australia's forests. The NFPS identifies three requirements as the basis for ecologically sustainable development: (i) maintaining the ecological processes within forests (the formation of soil, energy flows, and the carbon, nutrient and water cycles); (ii) maintaining the biological diversity of forests; and (iii) optimising the benefits to the community from all uses of forests within ecological constraints.

Under the <u>RFAs</u> the Commonwealth and Victoria agree that ecologically sustainable forest management (ESFM) 'is an objective which requires a long term commitment to continuous improvement and that the key elements for achieving it [include] the establishment and maintenance of a CAR Reserve System'.

Underlying the CAR reserve system is the principle that forest conservation should ensure protection from logging of a sufficient portion of forest estate which is:

- Comprehensive inclusion of the full range of forest communities recognised by an agreed national scientific classification at appropriate hierarchical levels
- Adequate maintenance of ecological viability and integrity of populations, species and communities
- Representative inclusion of sample areas of forest that reasonably reflect the biotic diversity of the communities they represent.

The CAR reserve system in Victoria is based on bioregions and ecological vegetation communities within those regions. BioEVCs define floristic communities associated with particular environmental niches.

In the lead up to the negotiation of the first regional forest agreements (RFAs), management plans (FMPs) for each of the defined forest management areas (FMAs) were developed. These FMPs were incorporated

into the RFAs as Attachment 1 to each of the RFAs. The FMPs sets out in detail how all of the BioEVCs are to be protected through 'dedicated reserves' (national parks) or through 'informal reserves' or other Code prescriptions. These 'informal reserves' form the basis of Victoria's Forest Management Zoning Scheme (FMZS) and are also incorporated into the Management Standards and Procedures (MSPs) which are part of the Code of Forest Practice, now Appendix 1 of the Code.

However, they do not cast light on the ecological relationships which stabilise such communities nor do they provide any advance warning that such communities might be facing ecosystem collapse. If EVCs were being mapped periodically and followed across time they might provide late evidence of ecosystem collapse as defined by the IUCN but they are not currently being followed across time.

There are two aspects to the monitoring of the CAR reserve system. The first is whether the prescriptions and proscriptions arising from the CAR reserve framework are being complied with. The second aspect to monitoring is whether the parameters of the system itself are being monitored in terms of their alignment with the over-arching policy objectives, especially the (JANIS criteria, having regard to changing circumstances (accelerated extensive logging, megafires and climate change) and with the accumulated experience of implementation. We discuss this under 'monitoring' below.

The CAR reserve system is central to the commitment in the NFPS to ecologically sustainable management of Australia's forests. However, it is very complex in terms of the relationships between the Janis criteria, the FMPs, the RFAs, the Zoning Scheme and the MSPs/Appendix 1.

Ongoing evaluation against its relevance to the broad policy objectives (ESFM) is necessary having regard to changing circumstances (accelerated logging, megafires and climate change) and with the accumulated experience of implementation.

The Major Event Review cast doubt on the efficacy of the CAR system observing that:

Prior to the 2019–20 fires, the Victorian Regional Forest Agreements Scientific Advisory Panel, appointed to provide science-based advice to inform the modernised Victorian RFAs, advised the Victorian Government that the reserve system was not adequate (Page 7 of the report). As the adequacy of existing strategies for listed species and communities protection was not assessed during RFA renewal, it is difficult to know whether the current CAR reserve system provides adequate protection for listed species and communities, taking account of the likely impacts resulting from these significant bushfires. Meanwhile, declines in species have continued.

The JANIS criteria (Joint Australian and New Zealand Environment and Conservation Council (ANZECC) / Ministerial Council on Forestry Fisheries and Aquaculture (MCFFA) National Forest Policy Statement Implementation Sub-committee, 1997) for determining how much of the forest estate should be conserved in reserves, and where these should be, were adopted in 1997 and have not been reviewed since then, despite 2½ decades of biodiversity research, despite multiple megafires, despite accelerating climate change and despite around 120,000 ha in Victoria alone having been logged and 1.39m ha being burned in the 'Black Summer' fires of 2019-20 (Sparkes, et al., 2022).

The <u>Bioregions and EVC benchmarks</u> upon which the CAR Reserve System in Victoria is based have not been reviewed (in most cases) since 2004 Moreover EVCs are at best a proxy for ecosystems but have been implemented via the reserve system as if they were. The Central Highlands Comprehensive Regional Assessment (officials, 1997) placed an important caveat on their role stating:

Ecological Vegetation Classes have been accepted as robust and appropriate units for assessing forest ecosystem diversity and conservation at the landscape scale, <u>provided that the variability</u> <u>within widely distributed EVCs is also considered as part of the assessment</u>

How well this critical caveat is reflected in terms of the comprehensiveness, adequacy and representativeness of the current reserve system in Victoria is unknown. For example, in the Central

Highlands RFA region commercial logging occurs in just five EVCs: montane wet forest, montane damp forest, wet forest, damp forest and herb-rich foothill forest. However, the Central Highlands Comprehensive Regional Assessment (officials, 1997) found these 5 EVCs spanned 11 very different geographic areas and encompassed 19 different floristic communities. Moreover, the two largest and most widely distributed, damp forest and herb-rich foothill forest, had the least of their pre-1750 extent in the reserve system, 21 per cent and 15 per cent respectively.

Until their revision in 2020, Victoria's RFAs specified that research would be undertaken into, 'the *effectiveness of Ecological Vegetation Classes as surrogates of biodiversity*'. However as far as we are aware this did not proceed, and the 2020 RFAs no longer mention it. While 'communities' that are threatened can be given some level of protection via listing in the Flora and Fauna Guarantee Act, ecosystems are not a category eligible for listing.

Forest Management Plans (DELWP, 2021) which are made under the Forest Act, are another possible way the diversity of ecosystems in each RFA region might be better protected, but these have not been reviewed or revised since the 1990s.

Despite the catastrophic impacts, especially on ash forest ecosystems, of the megafires of 2003, 2006-07, 2009 and 2019-20, there have been no systematic review of the CAR reserve system, so breaching the very basis of the RFAs (Cl 7b).

Successive State Governments from 1998-2020 failed to follow through on various RFA biodiversity commitments, for example:

Parties agree that the current forest management system could be enhanced by further developing appropriate mechanisms to monitor and review the sustainability of forest management practices [. . .] consistent with the Montreal Process Criteria (eg. Cl 48 Central Highlands RFA)

Limits of the CAR reserve system

Victoria's biodiversity loss has accelerated over the last three decades; the CAR reserve scheme is clearly inadequate or insufficient to achieve 'ecologically sustainable forest management'.

All SAP members agreed that the CAR reserve system has not adequately protected biodiversity, and under current management arrangements, will not provide adequate protection in the future. There were divergent views amongst SAP members regarding the measures required to improve the adequacy of the CAR reserve system. All SAP members agreed that there is a need for improved management of forests within the CAR reserve system. Some re-configuration of the CAR reserve system may also be required.

Regional Forest Agreements Scientific Advisory Panel (SAP) <u>Scientific Advice</u> to Support Regional Forest Agreement Negotiations, 2019

The EVC based CAR reserve system has not been reviewed for over two decades. It is not clear that the theoretical criteria for identifying the 'ecological niches' underpinning the definition of EVCs remain sound. It is not clear that the 'ecological niches' themselves have not changed over the three decades since they were first formulated. It is not clear that the 15% of pre-1750 coverage standard is adequate and appropriate for all EVCs.

The criterion for areal extent in the JANIS criteria assumes that the areal coverage of the various forest ecosystems will remain static. However, impacts from increasing wildfires mean the areal coverage of various forest ecosystems in the CAR reserve systems, and the habitat value they provide for forest-associated species, have not remained constant through time.

<u>SAP</u> 2019

Crucially, mountain ash and alpine ash trees are much more likely to be killed in high intensity fires than other 'mixed species' eucalypts (e.g. messmate). The latter may lose all their foliage in such fires but often survive and resprout the foliage from epicormic buds along the trunk and branches so that after a few years the key old tree characteristics have more or less returned. The ash forests must regenerate from seed and it will be very many decades before the old tree characteristics return, other than those provided by the dead trees (which reduce over time due to loss of dead trees).

VEAC 2017 (Victorian Environmental Assessment Council, 2017)

The 'long term commitment to continuous improvement' referred to in the RFAs has not been evident in the management of the FMZS and the CAR reserve system.

Increased role for VEAC in reviewing reserve system

In implementing this Plan, the government will give due recognition to the increased importance of the Victorian Environmental Assessment Council in regularly reviewing the extent and adequacy of the terrestrial reserve system in the context of a changing climate, habitat shifts and decisions about appropriate land uses.

Biodiversity 2037 (page 49)

There is no reference to any such recognition on the <u>VEAC website</u> notwithstanding five years since Biodiversity 2037.

Major Event Review access to information

Victoria failed to ensure that the Major Event Review had access to information needed for it to assess two key elements of its charter (see Cl.38F-I): harvest levels and the CAR reserve system.

Surprisingly, the *Major Event Review* itself (see elsewhere ref) which was released in July this year was not even provided with the data on which the *harvest level review* was based, contrary to RFA commitments.

Transparency regarding harvest volumes

Victoria has failed to report on the annual and cumulative harvest volume (including sawlog, pulp wood and commercial firewood) since 1 July 2019 (as promised in 69K).

In 2020 RFA S69F provides that: 'Victoria will forecast and make publicly available the Harvest Level from State Forests in the RFA Region'. 'Harvest level' is defined as 'the volume of Timber Resources that can be harvested from Native Forests in the RFA Region in any financial year, consistent with ESFM [...]'.

The <u>2021 Harvest Level</u> was published by the Department of Jobs, Precincts and Regions in November 2021. The harvest levels proposed are produced using VicForests' wood supply model and VicForests' data.

The harvest level determination notes the requirement to have regard to ESFM and threatened species and communities but this requirement is discharged simply by recognising the existing regulatory framework as a constraint. However, while conforming to existing regulatory requirements is necessary it is not sufficient.

Issues of 'forest structure and condition' are effectively ignored in the harvest level determination and there is no reference to the cumulative impact requirement of S4B of FFG Act which is not implemented anywhere else in the regulatory framework.

Climate change ignored

Clause 66F obliges Victoria to use 'best endeavours to improve Climate Change resilience', which it has failed to do

While the succeeding clause (66G) specifies certain things Victoria will do to improve climate change resilience, it must be recognised that the Black Summer fires have made matters far more urgent. More adaptive forest management, as recommended by the Major Event Review, includes better fuel reduction management which in turn means ensuring that forests are not put at elevated fire risk by silvicultural methods that leave extensive areas of juvenile forest which are at an elevated risk of loss in bushfires.

For example there is evidence that young ash forests, from age about 10 to about 40 years are more prone to high intensity burn in the event of fire (Taylor, McCarthy, & Lindenmayer, 2014), and so more likely to propagate the fire and/or increase its overall severity (Zylstra, Wardell-Johnson, Watson, & Ward, 2021).

And if maximising carbon sequestration is considered part of climate change resilience, then the best strategy is to leave forests unlogged (Mackey, Keith, Berry, & Lindenmayer, 2008).

Statement of Regulatory Intent

Victoria had produced a Statement of Regulatory Intent well before CI.44 was agreed to in 2020 but has failed to fulfil its commitments.

The OCR is largely restricted to coupe level regulation and even here, only where breaches are egregious and unchallengeable in court.

The section on <u>regulating timber harvesting</u> in the OCR's Year in Review (2020/21) highlights:

- Proactive coupe inspections;
- Assessment and investigation of reports;
- Assessment and investigation of reports of non-compliance (62 reports, 4 investigated);
- Assessment and investigation of reports of threatened species detections (70 reports, 28 'underwent verification'), and three letters of advice, three formal written warnings and one direction for remediation issued.

RFPG Breach report experience

Since 2016 the RFPG has made over 50 reports to the THCU alleging breaches of laws or regulations governing logging in native forests.

Several of the allegations we submitted from 2016 to 2018 were substantiated by THCU, although they were very limited in scale and led to no serious consequences for VicForests.

Since the Office of the Conservation Regulator (OCR) was established in March 2019, none of our allegations have been substantiated and only three cases have gone beyond 'assessment' to 'investigation' (2021-0027, 2020-0086, 2020-0055), two of which were listed as 'open' in the December 2021 THCU Investigations report.

We have experienced some very problematic determinations. For example:

Case 2018-0080 where THCU found that retained vegetation, in this instance forested buffers between coupes, that was killed in a post-logging regeneration burn was deemed to have been retained. This was particularly significant because without a buffer of 'retained vegetation' between coupes, a megacoupe far in excess of 120 ha would have been created in breach of MSPs cl. 2.4.1.2

Case 2019-0060 where THCU denied it was obliged to enforce Code cl. 2.1.1.1.vi, citing as a reason MSPs cl. 1.2.1.1 which the DELWP Secretary had previously indicated was invalid! When we wrote to the Secretary protesting about this, his reply ignored the issue of the invalidity of MSPs cl. 1.2.1.1 and he let the THCU decision stand.

Case 2020-0086 involving gully erosion on the access road to the coupe Gnu in the Snobs Creek headwaters. In this case THCU found that because VicForests had since repaired the damage with crushed

rock it should be excused, notwithstanding that its repairs were undertaken only because of the alleged breach we reported.

Case 2019-0052 alleging that the visibility of the Torbreck Range coupes, K2 and Everest, from a variety of lookouts demanded its protection for scenic reasons in line with Code Cl. 2.1.1.1.vi. We have made numerous claims about breaches of this clause which may explain why the clause was deleted in the December 2021 revision of the Code. The very act of its deletion implies that our arguments that it had previously been repeatedly breached were in fact valid, despite THCU finding otherwise.

Case 2021-0075 which alleged that the gaps between 'retained vegetation' in the coupe, Point Plomer, exceeded the 150m allowed by MSPs cl. 4.1.4.4. The argument used by THCU in dismissing our allegation – that a single retained tree was sufficient to be regarded 'retained vegetation' – had been refuted in our initiating report. On 1 September we protested the decision to the Chief Conservation Regulator, Ms Kate Gavens, and asked that it subject to an independent review. Ms Gavens asked a colleague in her office – hardly independent - to review our protest and not surprisingly he supported the closure decision without engaging with our arguments.

The Code requires that FMPs include provision for wildlife corridors (of 'appropriate width') and includes limits on coupe size and aggregation but these limits have been disregarded in several instances including where absurdly narrow buffers between coupes have been burned or blown over with megacoupes created as a consequence. The OCR has uniformly refused to investigate breach allegations brought forward by the RFPG in such instances.

Other failures to enforce

These include:

- the obligation to regenerate forests after logging (e.g. Case 2021-0046)
- the obligation to prevent the exacerbation of weed infestations (e.g. Case 2020-0001)
- the prohibition on logging oldgrowth forest (e.g. Case 2020-0063)
- gaps in retained vegetation > 150m where no trees surviving on coupe (e.g. Case 2018-0063)
- 120ha contiguous logging (e.g. Case 2018-0080, Case 2016-0068, Case 2017-0036)
- no effective wildlife corridors (e.g. Case 2019-0055)
- the need to preserve decent forest as a tourism asset (e.g. Case 2018-0052, Case 2021-0010).

2020 onwards Office of Conservation Regulator refuses to publish reasons for its decisions and actions taken despite Statement of Regulatory Intent

Interpreting the precautionary principle

S 5 of the <u>Sustainable Forests (Timber) Act</u> defines the precautionary principle as one of the guiding principles of ecologically sustainable development. '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'.

The <u>FFG Act</u> uses the same definition and further requires that ministers and public authorities, in the performance of their functions, give proper consideration to potential impacts on biodiversity, including: long and short-term impacts; beneficial and detrimental impacts; direct and indirect impacts; cumulative impacts; and the impacts of potentially threatening processes.

<u>Biodiversity 2037</u> describes the precautionary principle as requiring that decisions to prevent significant impacts are not avoided because of a lack of scientific certainty.

However, notwithstanding widely recognised decline in biodiversity, the massive loss of forests from recent bushfires, the increased risks of bushfires associated with logging, and the threat that global warming poses to forest ecosystems, the OCR has consistently refused to allow that the precautionary

principle has been breached by VicForests' saturation logging in the Rubicon State Forest and elsewhere in the Central Highlands.

It is our experience that the forest regulators in DELWP are unable to acknowledge the threats of serious and irreversible harm to the forest ecosystems of the Central Highlands, despite the documented declines in biodiversity. These threats include: saturation logging and a precipitous decline in the age profile of the forests, global warming, and recurring megafires.

It appears that the threat of ecosystem collapse, as elaborated by the IUCN scientists, is completely disregarded by the regulators including in relation to mandated assessment indicators, official monitoring systems and enforcement.

Precautionary principle as defined in the Intergovernmental Agreement on the Environment and in the NFPS and the FFG Act: where 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. In the application of the precautionary principle, public and private decisions should be guided by: (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment (ii) an assessment of the risk-weighted consequences of various options

Lack of accountability

Since its establishment, RFPG has experienced an absolute refusal on the part of DELWP to engage with any challenges we might offer to their determinations.

OCR determinations are not independently reviewable except through the Supreme Court. Forest conservation organisations such as RFPG have no appeal mechanism to move to when facing absurd determinations such as those listed above. There is no provision for transparent independent expert review of THCU determinations.

The OCR has on several occasions refused to expedite assessments when reporters warn of an impending breach where logging is scheduled to proceed soon.

On many occasions the OCR has refused to assess a breach report on the grounds that the reporter had not supplied sufficient evidence, even where the 'evidence' was already contained in DELWP files.

Far from strengthening OCR accountability the recent amendments to the Code were explicitly directed to restricting access by conservation organisations to the courts, notwithstanding the lack of any other appeal mechanism. DELWP has instituted the Forest audit program (DELWP, 2022a) to audit the work of the OCR: "Each year, we commission an independent environmental audit to measure compliance of commercial timber harvesting operations against the requirements set out in the Code." A sample of coupes is audited but there is no review of allegations of non-compliance.

Key commitments in <u>DELWP's response to the Independent Review of Timber Harvesting Regulation</u> (DELWP, 2019b) or <u>OCR's Statement of Regulatory Intent for Regulating Timber Harvesting</u> (DELWP, 2019a) that would open the OCR up to greater scrutiny (and potential public criticism) have not been implemented. Those that have <u>not been implemented</u> include commitments to:

- engage with stakeholders to develop a common understanding of the Code of Practice for Timber Production 2014; [w]here there is any disagreement on interpretation, DELWP should engage expert and/or legal advice to develop guidance (*DELWP IR response* to recommendation 10);
- facilitate the creation of a system of shared data between government agencies, environmental non-government organisations and VicForests to improve the environmental and community outcomes for forests and better direct regulatory efforts; DELWP will work with other government agencies, environmental non-government organisation and VicForests to scope and create a system of shared data; [t]his will be completed by 31 December 2019. (*DELWP IR response* to recommendation 13);

- prioritise the development of standards and guidance on parts of the regulatory framework that are ambiguous or where there is disagreement on interpretation (*SoRI*); and
- publish information on the outcomes of completed investigations (including regulatory actions and reasons for decisions) on its website (*SoRI*).

The fact that recent changes to the Code and the MSPs were targeted at removing many of the clauses that had formed the basis of previous allegations suggests that such clauses did in fact create obligations that may have been sustained by the courts, despite past denials by both VicForests and THCU. The removal of Code Cl. 2.1.1.1 is the principal example.

Conversely, the 2021 changes failed to amend certain bits where ambiguity had been relied upon by THCU to exonerate VicForests and where 'clarification' would inevitably have exposed past errors. The failure to include a definition of 'retained vegetation', a problem to which DELWP had been alerted several times, is one example.

The Government's determination not to give the timber harvesting regulation function to an independent statutory entity, like the Tasmanian Forest Practice Authority, or to create an easy way to appealing decisions, such as a division of VCAT, suggests a determination to keeping decision-making within departmental, and hence Ministerial, oversight.

Failure to update Victoria's indicator systems for monitoring ecosystem stability

Victoria has failed to update the main indicator system which guides biodiversity and ecosystem monitoring in Victoria's native forests (as promised in Cl.48-50); shortfalls in the indicator system render meaningless the commitment to continuous improvement in Cl.40B and Cl.46.

In sum, the indicator systems which frame the official assessment of the health of native forest ecosystems in Victoria are not fit for purpose. They provide a reasonable framework for assessing biodiversity understood as encompassing the mix and status of named species. However, in comparison to the IUCN protocols, it provides an extremely limited base for assessing the health of the native forest ecosystems, understood in terms of the ecological relationships which give stability and resilience to a healthy forest.

The State of the Environment Report 2021 (<u>SoE 2021</u>) concluded that: '... biodiversity overall is monitored very poorly in Australia, and we cannot assess the state and trend of most species with any confidence'.

The SOE 2021 reports, in relation to the monitoring of threatened ecological communities, that most of the monitoring programs surveyed have key limitations, such as poor coverage across the threatened ecological communities' range, poor design (constraining the potential for detecting trends or diagnosing causes of change), no links to management, and poor data coordination, availability and reporting. It concludes:

The current level of monitoring of threatened species and communities is inadequate to inform their management and track state and trends. Although some species are monitored better than others (e.g. birds), many threatened species and communities are not monitored at all, and most are not monitored well across a range of metrics. There are very few examples of consolidated and coordinated national monitoring data for even the best-known species. Citizen science and remote monitoring technology are contributing to better data for some species.

In assessing progress with the implementation of Victoria's flagship biodiversity policy, *Biodiversity 2037*, the Victorian Auditor General noted that:

• DELWP [Victorian Department of Environment, Land, Water and Planning] cannot demonstrate if, or how well, it is halting further decline in Victoria's threatened species populations.

- DELWP aims to choose cost effective protection actions that benefit the greatest number of threatened species. To this end, it uses modelling tools to support its decisions. These tools are better practice by design.
- However, much of the data used in the models is old and likely outdated and has some critical gaps. This raises questions about the reliability of the modelled outputs and the decisions they support.
- DELWP's cost-benefit approach can also miss endangered threatened species at extreme risk of extinction. DELWP has no transparent, risk-based process to prioritise these species for management.
- Further, DELWP continues to make limited use of available legislative tools to protect threatened species.
- Funding available to DELWP to protect species falls significantly short of what it predicts is needed. However, DELWP has not provided detailed, evidence-based advice to the government about the cost and benefits of protecting and monitoring threatened species to support further investment.
- DELWP also lacks performance indicators and reporting to demonstrate the impact of its management interventions on halting the decline of threatened species.

(Victorian Auditor-General's Office, 2021)

Criteria and indicators

The main indicator system which guides biodiversity and ecosystem monitoring in Victoria's native forest is that set out in <u>Criteria and Indicators</u> for Sustainable Forest Management Guidance Document, published by DSE in 2007 (as adapted in the five yearly State of the Forests report produced by the Commissioner for Environmental Sustainability, 2018). [SOF, 2018]

The central weakness of this indicator system is its failure to properly encompass ecosystem relationships in contrast to its coverage of threatened species. This failure was also identified, albeit at a more general level, in the SOE 2021 Report (<u>Biodiversity</u>) which concluded:

Less investment and attention have been given to understanding the state and trend of threatened ecological communities than to threatened species, and improvements in the recovery of these communities is difficult to assess.

<u>Criterion 3</u> of the Criteria and Indicators ('Maintenance of ecosystem health and vitality') as used for the State of the Forests report, 2018, has only four sub-indicators which collectively provide an inadequate basis for assessing the health of the forest ecosystems. These are:

- Scale and impact of agents and processes affecting forest health and vitality mortality, dieback, canopy health
- Scale and impact of agents and processes affecting forest health and vitality bushfire affected area and climate
- Area and type of human-induced disturbance planned burns
- Area and type of human-induced disturbance grazing

It appears that there has been a widening divorce between a species-specific understanding of biodiversity and an ecosystem-oriented understanding of biodiversity loss. Clearly an indicator framework should encompass ecosystem relationships as well as the prevalence of individual species.

The focus on species-specific conservation appears to have been driven by an interaction between the concern of environmentalists and the provisions for detection-based zoning via the Forest Management Zoning Scheme. This interplay between the action statements (under the FFG Act), volunteer detections, and detection-based zoning has undoubtedly improved the outlook for the species in question.

However, species-specific conservation and species mix interpretations of ecosystem monitoring may have distracted the attention of both the conservationists and the regulators from the more fundamental ecological relationships which stabilise the forest ecosystems.

The distinction between species conservation and ecosystem conservation was recognised by the International Union for the Conservation of Nature (IUCN) in the early 2000s when they recognised that they had a red list for threatened species but did not have a comparable list for threatened ecosystems.

Victorian Forest Monitoring Program

DELWP claims to rely heavily on the Victorian Forest Monitoring Program.

The Victorian Forest Monitoring Program utilises a network of ground plots across public forests and parks. Ground plots are mapped through detailed aerial photography and satellite imagery. The network provides set attributes of forest structure, species and diversity. Plus, attributes of canopy condition and soil characteristics. This derives indicators of sustainability and measure changes in the extent, state and condition of our forests.

Changes in forest structure and composition affect a wide range of resource properties and processes. This may include habitat quality, biodiversity, the hydrological cycle and carbon storage. The program monitors plant species distribution within overstory and understory layers. shifts in tree species distribution at large spatial and slow temporal scales.

The plot network design is based on systematic stratified sampling. The design comprises of the Interim Biogeographic Regionalisation for Australia (IBRA) bioregions with Crown land categories (parks, reserves and State forest).

The complete VFMP ground plot network comprises a total of 786 field plots. Ground plots are installed by trained forest measurement specialists and botanists.

DELWP 2022

See also <u>detailed description</u> in State of the Forests 2018.

The VFMP clearly provides very useful, rigorously sampled, time-series data on Victorian forests, however, while 786 field plots may seem a lot, it amounts to only a few plots for each of the forest management areas and the hundreds of BioEVCs in each FMA which form the basis for the CAR reserve system.

To provide an appropriate database for ongoing monitoring of ecosystem health in accordance with the IUCN protocol the VFMP would need some significant enhancements. The application of the IUCN protocol to the Central Highlands forests by <u>Burns and colleagues</u> in 2014 would provide a useful pilot for further development of the VFMP.

IUCN Protocols

The landmark report of <u>Keith et al</u> for the IUCN in 2013 (Keith et al., 2013) was conceptually based on four essential elements of an ecosystem: (i) a biotic complex or assemblage of species; (ii) an associated abiotic environment or complex; (iii) the interactions within and between those complexes; and (iv) a physical space in which these operate.

Keith et al proposed a risk assessment model for analysing the impact of threatening processes on the ecosystem distribution (declining distribution or restricted distribution) and the ecosystem processes (degradation of the abiotic environment or altered biotic processes and interactions). A fifth, summative element of their model was quantitative risk analysis; projecting possible scenarios building on the four earlier elements of the model.

Keith et al commented that while the endpoint of species decline was extinction, the endpoint of ecosystem decline was better understood as a transition to a new ecosystem configuration which they

termed ecosystem collapse (transition beyond a bounded threshold in one or more variables that define the identity of the ecosystem). The protocol for ecosystem assessment proposed by Keith et al required a structured consideration of time scales: past, current and future.

The IUCN model suggests that six broad sets of indicators of ecosystem status:

- Ecosystem distribution, looking for;
 - Declining distribution (reduced carrying capacity, reduced niche diversity); and
 - Restricted distribution (susceptibility to spatially explicit threats and catastrophes);
- Ecosystem processes, looking for:
 - Degradation of abiotic environment (reduced carrying capacity, reduced niche diversity); and
 - Altered biotic processes and interactions (reduced vital rates and mutualisms, increased interference);
- Quantitative risk analysis (that estimates the probability of ecosystem collapse); and
- Threatening processes.

The IUCN has adopted a protocol for assessing ecosystem health based on these variables with a strong temporal dimension as well, requiring assessments of past, current and future.

Burns and colleagues in 2014 undertook a systematic ecosystem assessment of the <u>mountain ash forests</u> of the Central Highlands of Victoria for the IUCN and concluded that they are *critically endangered*.

The Criteria and Indicators used for the SoF reports cover some of the indicators suggested by the IUCN model. However, the framework does not include the temporal dimension as elaborated by Keith et al and does not involve the quantitative analysis which is a key part of the IUCN model.

Failure to monitor microbial, invertebrate and fungal species in forest ecosystems

The role of fungi in the ash forest ecosystem illustrate how important these 'interactions within and between those complexes' could be in preventing or precipitating ecosystem collapse in forests.

Fungi play an important role in plant nutrition and hydration including Eucalypts. This is of particular importance in the context of poor quality soils, especially soils lacking in phosphorous. Logging and fire both compromise the role of fungi in forest nutrition and hydration.

SOE 2021 (<u>Biodiversity</u>) comments:

- Fungi provide critical ecosystem services by decomposing the complex cellulose and lignin molecules in wood. They also provide food to a wide range of vertebrates and invertebrates. At least 30 species of Australian mammals have been found to eat fungal fruiting bodies in habitats ranging from rainforest to deserts.
- Despite the very important roles that fungi and other microorganisms play in ecosystems and ecological processes, the overall level of knowledge about their taxonomy, biology and ecology is very limited.
- Although very little information is available, it is likely that fungi and other microorganisms that
 persist in highly modified ecosystems are in relatively poor condition. Pressures on fungi and
 other microorganisms in these areas are likely to be increasing, including the pressure from
 changing fire regimes, extreme fires and human activities resulting in disturbance to vegetation
 and soils. Very little is understood about population state and trends for the vast majority of
 organisms.

Fungal fruiting bodies play a role in the diet of small mammals, birds, and lizards which help to disseminate the spores. Loss of animals, consequent upon logging and/or fire, will reduce the dissemination of spores and may compromise the role of fungi in nutrition and hydration. The symbiosis

between fungi and eucalypts is an important ecological relationship on which ecosystem stability depends but also appears to be the site of critical tipping points.

Logging and fire contribute to drying out of soils, with loss of ferns and loss of upper story shading plus the increasing thirst of the regenerating eucalypts. Global warming is contributing to reduced rainfall in Southern Australia. Logging, fire, and reduced rainfall all point to the significance of fungal support in accessing soil water.

The knowledge base for a full understanding of native forest ecosystems is patchy, particularly in relation to fungal/arboreal relationships. We need much better forward indicators of ecosystem decline, including indicators of the health of fungal/arboreal relationships. Continued and extensive logging in the absence of such indicators is a breach of the Precautionary Principle.

Monitoring ecosystem resilience would require sufficient research to identify the critical ecosystem relationships and feedback loops which currently stabilise the forest ecosystem, including fungal/arboreal relationships; the identification of measures to follow those relationships; ongoing monitoring of such indicators; and appropriate restorative practices.

This is just not happening. DELWP's Forest Protection Survey Program (DELWP, 2022b) does not appear to survey for fungi or lichens. The State Government's <u>Guidelines for Criteria and Indicators</u> (Department of Sustainability and Environment, 2007) and the State of the Forests Report (Commissioner for Environmental Sustainability, 2018) do not include fungi. The <u>2018 State of the Forests report</u> which, out of 52 indicators, has only one which addresses '*Scale and impact of agents and processes affecting forest health and vitality - mortality, dieback, canopy health*' (status fair, trend uncertain, data quality fair) and ignores fungi. The website of the Integrated Forest Ecosystem Research Program (cosponsored by the University of Melbourne and DELWP) makes no mention of fungi. The <u>Victorian Forest Monitoring</u> <u>Program</u> (DELWP, 2022c) makes no mention of fungi.

The SOE 2021 (Biodiversity) comments:

- Fungi and insects ... are very poorly documented (less than 5–10% of Australia's species are likely to have been named) yet they provide critical ecological functions and ecosystem services.
- Below-ground organisms comprise a large fraction of global terrestrial diversity and are responsible for essential ecosystem functions and services, such as plant productivity, nutrient cycling, organic matter decomposition, pollutant degradation and pathogen control.
- Soil microbes are vital for ecosystem health, supporting soil fertility, species diversity and resilience in natural ecosystems. Soil microbial communities and overlying vegetation are closely linked.

The lack of attention to fungi and fungal/soil/arboreal/animal relationships and their significance for the resilience of native forest ecosystems illustrates the failure of the Victorian regulatory system to properly monitor and protect native forest ecosystems.

Summary

There is a serious neglect of the fundamental purpose of regulation, namely the protection of the forest ecosystems, with a lack of focus on ecosystem processes and relationships in both the monitoring and the regulation of timber harvesting;

While Victoria is failing to implement its commitments under the regional forest agreements (RFAs), the Commonwealth is failing to withhold accreditation of Victoria's forests management regime, thereby allowing failure to continue;

There has been a failure to attend to landscape level assessment and protection; associated with the insistence that the Timber Release Plan (<u>TRP</u>) is not a planning tool and that the <u>Zoning Scheme</u> is an adequate and sufficient tool for longer term and area wide planning.

The FMZ schema used as the only regulatory tool directed to long term area wide planning, is not fit for purpose and with a few notable exceptions, such as exclusion zones for Leadbeaters Possum and the Spot-Tailed Quoll, has lain largely untouched by review or revision for over two decades;

The failure to apply the precautionary principle as specified in the <u>NFPS</u>, the Flora and Fauna Guarantee Act (<u>FFG Act</u>) and the Code is evident in the neglect of climate change, in the failure to address the extremely young age profile of the ash forests in the Central Highlands and in the lack of rules, indicators or compliance standards regarding ecosystem processes and relationships. The *State of the Forests 2018* comments: *"There is considerable scientific evidence predicting damage to the vitality and health of Australia's forests due to climate change"*.

The strong new provisions in Section 4B of the FFG Act are ignored by OCR and by VicForests, while VF's owner, the Treasurer, turns his back.

The fact that the regulator is only an administrative unit within DELWP, and so subject to Ministerial control, and that the Government has made it abundantly clear that the Victorian Forestry Plan takes precedence over environmental safeguards (see Media Releases of 27 July 2020 and 30 June 2021) has meant that the OCR has been prevented from acting against VF on all but the most black and white slam dunk issues. Indeed, Minister D'Ambrosio is on the record defending this unacceptable arrangement, being quoted in the latter media release stating:

When we have clear, black and white definitions, we can better ensure that threatened species and habitats are protected.

Victoria, via DELWP, permits VicForests to breach multiple clauses of the *Code of Practice for Timber Production 2014*, as confirmed by Justice Debra Mortimer in her judgement in *The Possums' Case*.

While the State of the Forests report (2018) cites a range of indicators which are only 'fair' and in some cases getting worse, the determinants of this decline are not encompassed by the Code in a form which allows for 'black letter law' policing by the OCR.

The 2020 revised regional forest agreements (see <u>Central Highland RFA</u>) commit the Victorian Government to reviewing relevant provisions of the FFG Act, Sustainable Forests (Timber) Act 2004 (<u>SFT</u> <u>Act</u>) and the <u>Forests Act 1958</u> (Vic) as well as the Code of Practice for Timber Production but there has been no mention of such legislative reviews in the published information regarding the Comprehensive Code Review.

Regulatory constraints on the total area available for timber harvesting and the total volume of timber which may be harvested are arguably the most critical modalities of biodiversity conservation and ecosystem protection. The two main instruments which could provide such protections are the Allocation Order (AO) and the Harvest Level determination.

Both instruments are managed outside the Environment Department (DELWP), in the Department of Jobs, Precincts and Regions which has no environmental protection expertise or capability. The limits imposed in both cases are determined without proper regard to the conservation of biodiversity or ecosystem conservation.

The unsustainable scale and pace of logging (loss of biodiversity, ominously youthful age class, devastation of tourism) constitutes a failure of outcome.

In part this is a failure of long term planning: the long neglect of the FMPs and the Zoning Scheme, the refusal to apply the long term planning provisions of the Code to VicForests, and the removal of the power of the Secretary to approve the TRP.

The cumulative impact provision in the FFG Act, while it certainly applies to VicForest as a 'public authority' has evidently not been noticed by the OCR.

Notwithstanding the rising threat to the forest ecosystem arising from climate change and increasing likelihood of further devastating bushfires, the OCR has refused to adapt the threshold for investigation and for enforcement action in accordance with the precautionary principle.

There is a real risk that this failure may contribute to massive destruction of flora and fauna although there may be some scientific uncertainty about how much, where and when. The refusal to 'trigger' the precautionary principle is a breach in itself.

The status of VF as a commercial corporation, notwithstanding government ownership, gives it the power to threaten OCR with legal intervention if the regulator were to contemplate findings of noncompliance or the imposition of sanctions. The threat of court action (and a judge who will apply the (black) letter of the law) appears to have had the effect of hobbling the regulator and undermining all of the 'lighter touch' regulatory interventions, all of which depend on having a hard option as the ultimate back up. The consequence of this dynamic is that only the clearest and most definite of prescriptive provisions in the Code are given serious weight by the regulator.

We attribute OCR's sometimes bizarre interpretations of the Code and its refusal to engage with conservation organisations as stemming from this fundamental lack of power and OCR's refusal to acknowledge how it has been hobbled.

The regulator has proven to be unable to deal with the core challenge of forest regulation which is about managing the different claims of different stakeholders regarding the uses of the forests. The Code, which supposedly recognises and gives weight to different claims cannot be used as a framework for resolving or at least managing such conflicts. If light touch regulation means anything it means really focusing on the central challenge which is managing the contesting claims.

Not surprisingly the increasingly alienated conservation groups turn to litigation and direct action but the State Government's responses (eviscerate the Code and impose draconian penalties on protesters) only contorts the regulatory system further and increases the sense of alienation of the conservation movement. The end of logging in 2030 is appreciated but for many of our forests, there will be nothing left by 2030.

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