CENTRAL VICTORIAN BIOLINKS ALLIANCE
Community Connected Conservation

21 August 2017

Chair,
Victorian Environmental Assessment Council,
PO Box 500
EAST MELBOURNE VIC 3002

Dear Sir

**Re: VEAC Central West Investigation**

The current and future state of the environment in Victoria provides compelling reasons why we should re-evaluate the significance of the central western forests for biodiversity conservation and improve on the way we manage the natural values of these forests. We strongly welcome the purposes of the Investigation, but would like to ensure that the investigation includes consideration of the ecological processes and resilience of these forests in the context of the surrounding countryside.

The Central Victorian Biolinks Alliance Inc. is an alliance of landcare and conservation management networks across central Victoria. The Alliance is managed by a board elected by the networks and comprising a diversity of people with a wide knowledge of conservation and natural resource management. Our vision is "*people working together to maintain and restore a healthy natural environment from the Grampians to the Victorian Alps and from the Murray River to the Macedon Ranges*" and our broad goal is to "*improve the connectivity, condition and resilience of landscapes and halt the further decline of species*".

Many of CVBA's member networks are involved in activities within the areas covered by this Investigation, and CVBA has three major projects in the area. CVBA assisted Project Platypus in the development of the Grampians to Pyrenees Biolink that includes both Mount Cole and the Pyrenees Range, and is developing the Melbourne Ark Project that that will encompass the forests along the Great Dividing Range and the Central Goldfields Project that will encompass the Wellsford Forest.

Over the past two hundred years, central western Victoria has changed from almost continuous forest and woodlands to a highly fragmented landscape. So the crown lands covered by this Investigation are important as core areas and stepping stones as we try to rebuild connectivity and resilience across central Victoria particularly in a time of climate change. This was recognized in the flagship and biolink zones identified in *Securing our Future. A white paper on land and biodiversity in a time of climate change 2009* and is even more relevant today, as argued in the Government's Biodiversity 2037 Plan.

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## Values of public land in central Victoria

### *Public land as sites of biodiversity*

Despite long histories of disturbance including timber harvesting, mining and some clearing, public forests across central Victoria still retain many of their original values as habitat for a wide diversity of species and ecosystems. In part, the biodiversity of the forests has remained relatively rich because the disturbance regimes have been targeted to particular products such as timber or gold, and impacts to the environment have been severe but brief. In general, time is allowing the natural ecosystems to recover. However, some ongoing harvesting is gradually reducing the values of the forests (see Threats below).

An additional value is the large size of the public forests in central Victoria. These large areas can support large populations of species and viable ecological communities that are threatened and declining in more fragmented areas. The large areas of forest also provide places of refuge and recovery in the face of prolonged dry periods and fires that can destroy smaller and more isolated populations.

As a consequence of their relatively moderate disturbance regime and large size, the forests currently contain several species and ecosystem that are under threat across the wider region.

Many of the smaller patches and corridors along streams and roadsides are also valuable for some species that can tolerate fragmentation. They are remnants of the original forests and woodlands and still retain valuable natural features including many large old trees and a wide diversity of understorey plants. They are often used for seed collection and collectively can provide good source of genetic diversity for many species affected by fragmentation.

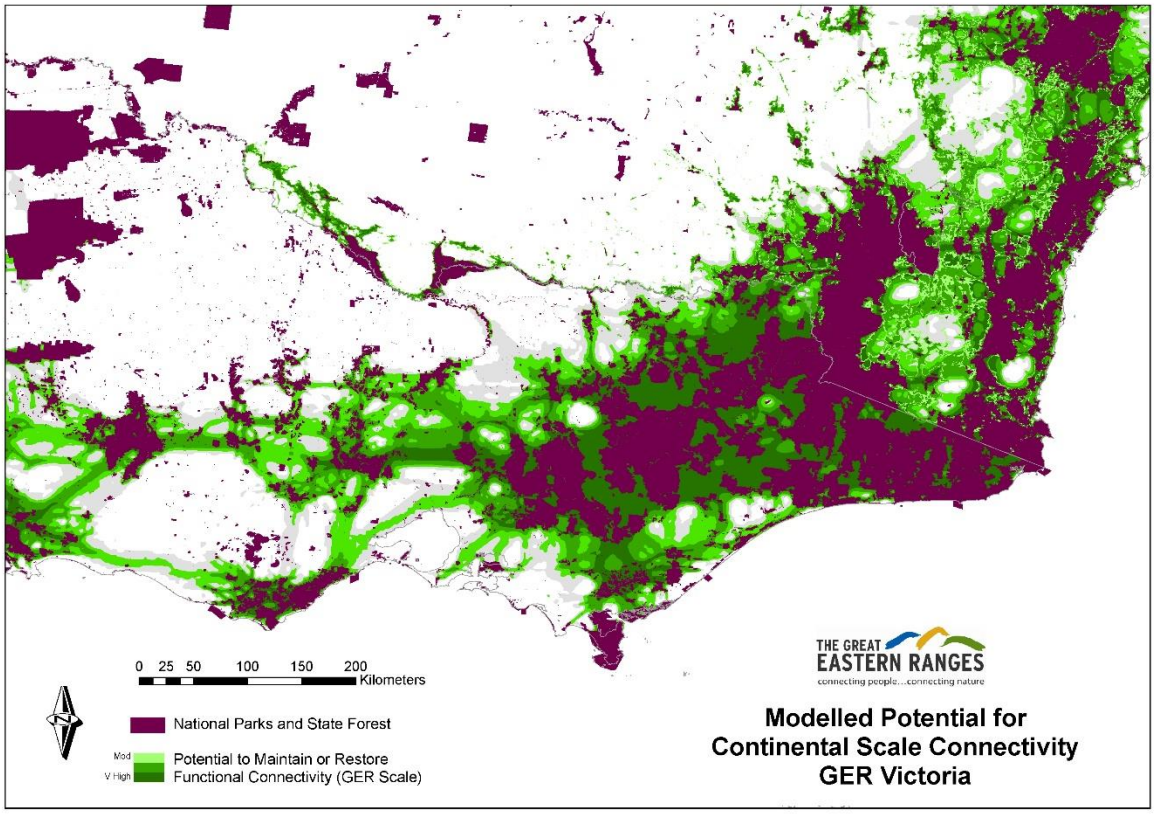
In comparison, most forests on private land have had a more ongoing history of disturbance including grazing and pasture development, more persistent harvesting, and “tidying up” to reduce fire hazards and create a neater parkland appearance. Despite this, private forested land often provides a buffer around crown land, and some landholders and landcare groups are trying to reduce disturbance and improve the quality of this bushland.

### *Role of public land in landscape connectivity*

Public land provides the framework for rebuilding connectivity across central Victoria.

The Great Eastern Ranges Initiative has modelled the potential areas of functional connectivity along the Ranges from Queensland to Victoria. Their model for Victoria (see map below) incorporates the forests and smaller bushland patches of central western Victoria. CVBA is in partnership with GER. CVBA’s major projects cited above fit within this model and form an important part of the CVBA vision for functional connectivity across central Victoria.

At a species level, these projects recognize the importance of the large patches of native vegetation in providing habitat for populations of a wide variety of species including species such as Powerful Owls that need large home ranges. These forest populations are the source populations that can expand into more fragmented areas as they become more habitable and connected through the conservation work being carried out across central Victoria.




In the building of connectivity, we also recognize the value of smaller bushland patches, remnant corridors particularly along waterways and road reserves and scattered paddock trees, both as habitat where some species can live and breed and as stepping stones across fragmented landscapes.

While some of the best corridors and stepping stones are on public land, private landholders and landcare and catchment management groups are helping to protect private bushland and build connectivity and biolinks into their revegetation projects.

Many local corridor projects focus on links to the large forests blocks. Two examples are the Tooborac to Cobaw Forest Link Project of Nulla Vale Pyalong West Landcare Group and the Campaspe - Maribyrnong Headwaters Biolink between Cobaw Forest and Mount Macedon built by Newham and District Landcare Group. Both links were begun more than 15 years ago. The “Piper Biolink” project of South West Goulburn Landcare also connects to Cobaw Forest from the east, incorporating a large Trust for Nature property purchased after lobbying from members of SWGLC. In western Victoria, Project Platypus has developed larger connectivity plans that cross farmland to link the Grampians with Mt Cole and the Pyrenees Range. There are many other similar links planned or built across central Victoria.

***Role of public land in adaptation to climate change***

The forests of central Victoria are at higher elevation along the Great Dividing Range. This means they are generally cooler and wetter than the country further north. Climate change predictions indicate a gradual heating and drying in south-eastern Australia with a shift in vegetation and habitats polewards. This shift has already been demonstrated: studies of Australian birds have

shown a shift in their centres of activity in SE Australia both southwards and to areas of higher elevation (*Focus on poleward shifts in species' distribution underestimates the fingerprint of climate change*. Jeremy VanDerWal *et al*. 2013. Nature Climate Change 3, 239–243). The geographical position of the elevated country along the Divide in central Victoria means that it will become an important refuge area for species as climate changes.

A related role for public forests and reserves is that the large populations and meta-populations of species on public land have wide genetic diversity that will provide the basic building blocks for rapid evolutionary change needed in response climate change.

***Role of forests in stream management and water supplies***

Unlike the Melbourne catchments, most rural towns do not have catchments protected from some of the threats listed below. Central Victoria does not receive the high rainfall of the Central Highlands that provide Melbourne's water. Stream flows are more variable and often cease in dry times. At other times, heavy rainfall events can cause major flooding and disruption of towns and farms along the Campaspe, Loddon, Avoca, Wimmera and other streams. These extremes are in part related to climate but also in part related to the management of the upper catchments where clearing, roads and other disturbances have exacerbated the extremes of flows into the river systems.

Streams are also ecologically important both for the aquatic flora and fauna, and for the riparian vegetation and the species that use this habitat. Streamside vegetation is valuable for connectivity and as a refuge in dry times.

Some of the public land covered by this Investigation are Declared Water Supply Catchments under the CaLP Act 1994 but many (perhaps all) of the declared catchments are associated with reservoirs. There is also strong imperative to protect the watersheds of <u>all</u> the streams running north and south from the Great Divide in central Victoria. The investigation needs to examine the types of protection and ongoing management provided under the CaLP Act.

***Role of forests for people***

Public land is widely used for recreation, from nature-based activities such as bushwalking and natural history walks through to 4WD and trail biking and mining/fossicking. The larger forest areas provide opportunities to get away from the presence of other people and enjoy more "natural" environments. In the heavily cleared landscapes across central Victoria, the forest areas are valuable places for recreation.

The proximity of these forests to Melbourne and the larger regional centres has created a strong and growing tourism industry. This will provide employment and improve the economies of the local towns during the transition away from many of the traditional forest industries in the area.

In addition to tourism, there are increasing numbers of people moving further into peri-urban areas near the forests as Melbourne expands. The areas adjacent to the forests have high amenity values.

The net result of these changes is an increasing demand for the forests to be protected for their landscape, environmental and recreational values (but see Threats below).

## Threats

### *Peri-urban growth*

Much of the privately-owned bushland across central Victoria is adjacent to the public forests. As part of the growth of Melbourne and the peri-urban fringe, more and more people are building houses and living in these areas. This poses some issues:

- More people and assets are vulnerable to bushfires. Despite the contradiction that people want to live near the bush but without the inherent risks, there is increasing demand to reduce the risks of fire with clearing on private land and fuel-reduction burns on public land (see below).
- More people are using the forests for recreation and fire-wood collection

Action:

- DELWP to provide, and local Councils to distribute, clear information to new and existing residents about caring for and living near the forests.

### *Timber and firewood harvesting*

Logging and firewood collection is still occurring in the State Forests of western Victoria and appears to be expanding under VicForests' Timber Utilisation Plan 2017 (although we note a moratorium on sawlog harvesting in some forests during this investigation). Since the gold rushes of the 1850's, a large proportion of the older forests have undergone selective logging or clear felling. The proportion of mature or old-growth forest is now relatively small; 8% and 17% have been cited for the Wombat and Wellsford Forests, respectively (see reports below). Mature and old growth provides valuable habitat not available in regrowth forests including tree hollows and higher productivity (such as flowers with nectar). These are features of value to many threatened species such as the western population of Greater Gliders and Powerful Owls. In contrast, large areas of re-growth after harvesting have dense stands of saplings that delay the growth of larger trees and reduce or exclude understorey.

Details of the impacts of timber harvesting are addressed in more detail in the VNPA Report Western Forests and Woodlands at Risk and in the reports from local groups – for example, see p3 in Wombat ForestCare Newsletter June 2017 , an article citing members of the Wellsford Forest Conservation Alliance August 2014, and the submission to this investigation on forestry around Mt Cole and Mt Lonarch by CVBA committee member Ann McGregor. Judging from these reports, there is strong concern about the impacts of timber harvesting on the western forests.

Actions:

- Identify areas of mature and old growth forest and remove them from future harvesting.
- Ensure logs are retained on the ground and not used for firewood collection.

### *Fire management*

Fire is a major threat to the forests. When fire is hot and is added to the effects of past and current logging practices in reducing the abundance of old-growth forest, the impact of fire becomes a major issue. Wildfire is likely to occur in the future, particularly with climate change, and will have a big impact on forests. But the forests will recover – as they have in the past – but it is essential that we allow and protect the natural recovery processes.

The big issue for forests is fuel reduction burning. These burns are extensive and often very hot. Some are carried out during Spring when plants are flowering and setting seed, so can be very destructive of the natural life-cycles of species. And fuel reduction burns are carried out at much greater frequency than wildfires. So they lead to changes in the floristic composition of forests, including the loss of some species and the dominance by others (such as bracken).

*Cobaw Ranges Fire 2015*

In October 2015, a fuel reduction burn escaped and a large proportion of the forests was seared by a hot fire. The original burn area was 266ha which is a large area already encompassing a wide range of habitats and ages of forest. The fire escaped and burnt over 3,000 ha of habitat. Many old and hollow trees were lost during the fire and more were felled (often needlessly as they were well within the fire area and posed minimal threat) and put in log dumps (see photos). This hot fire occurred in early Spring while many plants were still flowering and setting seed.

There is growing evidence that fires are reducing the number of habitat trees in forests. Fire helps in the creation of tree hollows, but this takes time. Local observations of the Cobaw Forest and work by Strathbogie Sustainable Forest group (a sub-committee of Strathbogie Ranges CMN, a member of CVBA) on the impact of fuel reduction burns on old growth forest is supported by DELWP research (Lucas Bluff. 2016. Reducing the effect of planned burns on hollow-bearing trees. Fire and adaptive management report no. 95, Forest Fire Management Victoria).

These reports show a dramatic net decline in old trees with hollows due to fuel reduction burning. This is due to:

- hollow trees catching fire. Hollow trees are particularly vulnerable and many burn and fall after hot fires. This also applies to logs on the ground (another important habitat structure).
- the over-zealous felling of 'hazardous' hollow-bearing trees, both prior to fuel reduction burning (along tracks and burn boundaries) and after the fire has passed through leaving trees that may or may not be compromised by the fire or trees that are still burning but surrounded by burnt country and hence low risk.

Note that loss of hollow-bearing trees has been listed as a Potentially Threatening Process under the Flora and Fauna Guarantee Act.

Actions to minimise the impact of fires:

- fuel reduction fires need to be much less frequent, much cooler than at present, cover smaller areas, and be planned for seasons where fires do not affect flowering and seed production. Alternative burning practices following ideas from Aboriginal fire management need to be considered.
- Trees should be protected from fire with reduced fire intensity and direct action. eg. by rake-hoeing around the base of older trees.
- Trees should NOT be felled in burnt areas unless they present a real risk to people (such as along tracks used by vehicles) and ground disturbance should be minimized. Risks should be assessed by trained arborists before any trees are felled.
- Ground disturbance by machinery should be minimized and any disturbance should be rehabilitated including closure of dozer lines to vehicles.

***Roads and recreational vehicles***

Many of the forest areas have a network of roads and tracks often created just for timber harvesting. The central western forests are close to Melbourne and are very accessible and heavily used by recreational vehicles particularly in weekends. Only a few of these roads and tracks are maintained, but recreational vehicles are using the tracks often in ways and at times of the year that are very damaging. This creates issues:

- tracks that are marked on maps and might be considered for management and fire emergencies are becoming impassable due to creation of ruts and holes and subsequent erosion.
- erosion adds to the sediment loads entering local streams.

An additional issue is that recreational “off-road” vehicles are a major intrusion into natural areas; they travel on all roads and tracks through the forests, at speeds that are dangerous to other users, and they are very noisy. From comments we have heard, they reduce the values for many users and deter people who are seeking a natural history or other recreational experience

Actions:

- Develop a plan of roads for access and emergencies and shut down and rehabilitate all other tracks.
- Close the more vulnerable roads in winter.
- Allocate zones where recreational vehicles are and are not permitted.
- Maintain an enforcement presence in forests particularly in weekends.

***Hunting***

This is also an intrusive and potentially dangerous activity in forests that are open to the public. While shooting may have a role in pest animal management, it needs to be tightly controlled.

Actions:

- Restrict hunting to designated areas at designated times
- Maintain an enforcement presence

***Pest animals***

Environmental threats from a range of species need to be assessed including the status and impact of feral goats, deer and pigs (with the additional threat of Swine Brucellosis).

Kangaroos are also an issue, mostly around the interface between bushland and pasture where they have access to both cover and abundant grass. Large populations have built up and are affecting the vegetation particularly in smaller reserves. Kangaroos are also a traffic risk on roads in the study area including the busy Bacchus Marsh – Gisborne Road.

Actions:

- Identify, develop and resource strategies to reduce the impact of animals in forests and surrounding areas.

***Weeds***

Weeds are generally not a major issue inside some forests but can be an issue in the richer and wetter country, particularly near the interface with private land. Weeds are also an issue where there has been disturbance – in the past due to mining and now due to forestry, burning and recreation. All vehicles but particularly earth-moving equipment can carry weed seed into disturbed areas.

There is a growing recognition that some weeds provide cover for small birds (and presumably a variety of other species) and that their removal should be part of a larger staged program to replace weed species with native species providing similar habitat.

Actions

- Identify, develop and resource strategies to reduce the introduction and impact of weeds while ensuring on-going habitat for native species

**Status of Public Land in Central Victoria**

Although CVBA is working to encourage and support private landholders to protect and enhance the bushland on their properties, there is no guarantee that this will happen and continue to happen as ownership changes. Even land covenanted by Trust for Nature can be affected by tidying up, firewood collection and other practices that reduce the quality of habitat. So public land has an essential role in ensuring that the natural values and processes referred to above will continue into the future.

More details on the status and management of most of the larger forests are available in Better Protection for Special Places (VNPA May 2010).

Actions

- Re-classify the forests and the smaller patches of public land of central western Victoria to protect their values and ensure they are primarily managed for biodiversity conservation.

Yours Sincerely

Peter Mitchell

Secretary

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