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Comments on draft Fire Operation Plans 2008-2011

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GENERAL

We are disappointed that we again have to make extensive comment on the draft Fire Operations Plans (FOPs). The VNPA put in considerable effort during the development and review of the Code of Practice for Fire Management on Public Land and have also commented on many of the individual regional fire protection/management plans. With these documents in place, it should not be necessary for us to go down to the next level as compliance with these key documents should mean that the FOPs give reasonable protection to the environment while improving fire protection. However, the reaction to the 2003 and 2006-7 fires and more recently the parliamentary inquiry by the Environment and Natural Resources Committee (ENRC) means that unrealistic burning 'targets' are being set with the FOPs failing to follow key principles in the Code and often in direct conflict with the Regional Fire Protection Plans and with National Park management plans.

The conclusion of the ENRC report that 5% of public land should be burnt each year appears to be based at least in part on flawed information provided to the Inquiry on overseas and interstate research and by the use of out-dated estimates of the fire tolerances of vegetation communities. We attach our critique of the conclusion by ENRC about the level of burning for your information. Future levels of prescribed burning should be calculated using all the information now available of the ecological tolerances of vegetation communities and the known needs of fauna. Each year the calculations must be adjusted to take into account recent wildfire and the actual extent of prescribed burning. More research, especially on the needs of fauna, including the age, extent and pattern of habitat needed post-fire, is essential to fine tune this, with regular review of ecological and fire protection aspects of the whole prescribed burning program.

We are most concerned about the current FOPs because:

- In some areas, especially in East Gippsland, extremely large contiguous areas are planned to be burnt within 3-7 years of each other (including recent wildfires and prescribed burns) thus severely compromising flora and fauna conservation. Many fauna species, even those dependant on fire, require unburnt refuge areas from which to recolonise at the right post-fire stage, and these areas appear grossly inadequate in these plans. Species such as bandicoots, potoroos and Glossy Black Cockatoos may be seriously disadvantaged by extensive areas burnt within a few years. The ecological problems of large-scale landscape fire experienced in the recent wildfires are being replicated in these plans for some areas.

- No age class distributions for key Ecological Vegetation Classes (EVCs) are given in any FOPs, as far as we are aware, to show the impact of the planned FRBs and recent wildfires on the vegetation. Under the Code of Practice, Fire Protection Plans are required to indicate the known preferred range of fire frequency and intensity compatible with ecological management objectives for each major vegetation type together with an estimate of the recent fire history (age structure) for each of these vegetation types (Code of Practice, paragraphs 154, 178-181). This requirement has been in the Code since it originated in 1995. Why is this not flowing through to the FOPs?
- Very large proportions of some National Parks and Nature Conservation Reserves will be treated in this way including Croajingalong, Snowy River, Coopracambra, Martins Creek Flora and Fauna Reserve, Brisbane Ranges and the Grampians
- Eight Reference Areas in East Gippsland are within planned FRB areas. While some of these are within 'mosaic landscape burns' there is no clear indication that reference areas will be avoided. Deliberate burning of reference areas appears to breach the Land Conservation Council recommendations as accepted by parliament that "these areas must not be tampered with, and natural processes must be able to continue undisturbed". Exacerbating this is the close proximity of FRBs to some reference areas. A reference area in Upper Murray fire district was almost entirely burnt last year due to an FRB escape and 4 other references area in this district have immediately adjacent burns planned.
- Significant areas of wet and damp forest are to be burnt totaling over 125,000 ha. Apart from the possible ecological damage and questionable (and fairly short-term) fire prevention benefits of many of these planned burns, this treatment will tend to result in more flammable understorey in future and actually increase the fire risk in the intermediate term. Controversial areas include Martins Creek Flora and Fauna Reserve the Yarra Ranges National Park and Bunyip State Park.
- Seven Wilderness Areas have proposed burns within them. While this can be justified to some extent in the Mallee, due to the large size of these areas, the extent of burning in the remaining four in East Gippsland is unwarranted in terms of their ecology or strategic position.
- Many sizable burns are planned within the 2003 fire area, totaling about 115,000ha. Most if not all of these will seriously compromise the ecology of the areas affected. Few appear to be strategic for asset protection with most being on very remote areas. There are also repeated FRBs within 2-3 years in some districts, including in zone 3. Burning of zones 3 and 4 within a period that is less than the ecological inter-fire tolerance of the vegetation is in direct conflict with the Code and all such burns must be removed.
- Some of these 2003 fire areas to be reburnt are in National Parks and also include 2 Wilderness areas. This will severely damage the parks' and wilderness areas' values contrary to the National Parks Act.
- Many burns extend the area burnt by recent wildfires, reducing the area available for fauna that is unable to yet reoccupy the burnt area. This reduction of refuge areas, especially where these are limited pockets, can have a serious effect on biodiversity and species survival in areas that have had extensive fires. The benefit of these FRBs to additional wild fire protection is in most cases marginal, especially where large recently burnt areas are close by.
- Some islands of bushland are proposed to be entirely burnt, such as in the north-east. Even if these are meant to be 'mosiac burns', the exact extent of burning

cannot always be well controlled in many habitats. Covering of the entire area with proposed burns 'mosaic' or otherwise puts fauna species at risk of being totally eliminated from these isolated areas, especially if they require more than a few unburnt patches to survive.

- In some regions there have been problems with animal deaths during fires, especially when patches have been burn out entirely, or when techniques are used that involve multiple fires from different directions. Converging fires that increase intensity and trap animals between them must be avoided and sufficient resources must be provided to enable slow, safe fires.
- Zone 5 areas (Prescribed Burning Exclusion Zone) are included in proposed prescribed burns in 12 of the 21 fire Districts including in East Gippsland, the North-East, the Central Highlands and the Otways. In many cases this includes wet forest and rainforest species, not well adapted to fire, as well as the above Reference Areas. This is in breach of the Fire Protection Plans and the Code (clause 173) and makes a mockery of the fire planning process.

The above concerns breach the Code of Practice which requires:

57 The planning and conduct of prescribed burning must incorporate the principles of environmental management and community partnership (see below), and be in accordance with approved standards prescriptions and guidelines.

64 • principles of environmental management must guide all preparedness and suppression activities;

66 Fire management must be planned and conducted in an environmentally responsible manner according to the following principles:

67 • fire regimes* and fire management activities to be appropriate for maintaining and enhancing the vigour and diversity in populations of species and communities of the State's Indigenous terrestrial and aquatic flora and fauna;

154 Planning must consider variation in the season, frequency and intensity of burning to provide appropriate diversity in the fire regime* within each vegetation class.

173 The Prescribed Burning Exclusion Zone will provide for the exclusion of prescribed burning for at least the period of the Fire Management Plan* from areas of vegetation in which high potential exists for economic, ecological or cultural loss if subjected to prescribed burning.

We are well aware of the importance of fire management for both fire protection and the ecological health of many ecosystems. We are far from anti-burning. Indeed we welcome some of the proposed prescribed burns in these FOPs for ecological reasons including in Kinglake National Park¹ and Providence Ponds Flora and Fauna Reserve. If much of the comment on individual FOPs below seems anti-burning, this is a reflection of the current over-reaction to recent fires and the ENRC inquiry resulting in excessive proposed burns producing extensive areas of single age classes, burns which are too early for the ecological health of the vegetation, burns in ecosystems which are damp or wet and generally unsuitable and burns in zone 5 where this activity is prohibited.

We also understand that in some cases, changes to plans need to be made in light of altered circumstances including the recent major fires. However this needs to involve

¹ However in the Kinglake National Park, we note that the burns are clumped together, rather than being a scattered mosaic. This clumping of burns is a general problem in many places across the State. More should be done to space burns in time and space to avoid the development of large contiguous burnt areas and to better facilitate the recolonization of these areas by fauna from adjacent unburnt refuges. This may also be more effective for fire prevention, by having burns distributed over a wider area.

changes to the Regional Fire Protection plans, involving the normal public comment procedures, not by the FOPs over-riding these in an improper and effectively illegal process.

We also continue to have great concerns with the processes involved with the construction of firebreaks in the Central Highlands and Otways with respect to the adequacy of assessment before approval, and to the subsequent poor following of procedures before and during construction. Although fire breaks are apparently not part of the FOP public comment, we make brief comment below on the Otways and attach our comments on the recent construction process in the Central Highlands. The less than careful attitude to the environment with respect to the fire breaks seems similar to that shown (in at least some fire districts) to the short and long-term environmental impact of imposed fire regimes. In conclusion, the use of 'targets' based on inadequate and incorrect data, the ignoring of the extent to which bushland is already burnt in some regions, and an over-emphasis of asset protection is over-riding biodiversity protection, even in our conservation reserves.

Lastly we cannot over-emphasise the importance of monitoring , before and after prescribed burning, so that we can carry out sound fire management with confidence.

Presentation of Information

The provision of maps for each fire district on the web (reducing the time needed to find areas and download from 'Fireweb') together with tables for each listing the burns, their allocated number, size, location, fire management zone and main EVC affected was a great help

However the tables should be further improved by adding 'time since last fire' for each proposed burn and the land status. Giving the Land Manager is a poor substitute for the latter. The time since last fire information, when combined with the EVCs (or the more recently developed Ecological Vegetation Divisions - EVDs) involved is vital information for understanding the possible impact of the proposed burns. The maps should show fire for the previous 10 years, perhaps with a different shading from the past 5 years fires. Limiting this to the last five years has removed the 2003 fires from the maps and significantly under- represented the impact of fire in many regions including the extent of burning in the Little Desert. It also perhaps indicates this exercise is more about fire protection than looking after biodiversity when both needs must be considered.

In many cases, two or more EVCs (or EVDs) for individual burns should be given in the table, especially for larger areas, to better describe them. Note that the (apparently) computer generated EVC estimate produced in several cases in these tables resulted in an EVC of 'open water' or 'water- ocean' (e.g. burn 11A07 near Wulgulmerang) suggesting that the present EVC assignment is less than accurate!

COMMENT ON INDIVIDUAL AREAS

Time does not allow us to comment in sufficient detail on all areas. Absence of comment should therefore not be taken as agreement on our part. Further detailed analysis may be made in some areas in the near future by us or by other groups. In addition, it is important that the comments of local environment and Naturalist groups with more detailed site knowledge must be listened to, and given due weight. In order to make comments on individual districts more or less self-contained, the following narrative is somewhat repetitive about some issues such as the effects of too frequent burning or burning of wetter habitats.

Gippsland Region

As a result of the 2003 and 2006-7 fires, about 70% of the largest contiguous forested area in the State, on and around the Great Diving Range, has been burnt - much of it severely, and is still in an early stage of recovery. Therefore the ecological health of the remaining forest, mainly found at either end in the Central Highlands and East Gippsland, is of greatly increased importance for the survival of many species. Much concern has been expressed about the recent landscape sized wildfires and their impact on flora and fauna - especially fauna that are dependant on particular age classes of vegetation. In spite of this concern, the proposed prescribed burning in East Gippsland is effectively landscape in extent, compounding the impact of recent fires and endangering some specialist species within the region and reducing the populations of many others. The pattern of burning in East Gippsland is such that one could be forgiven for thinking that the conservation reserve estate is being burnt over a short rotation in order to protect production regrowth forests.

With substantial areas recently prescribed burnt around Mallacoota, Cann River, Bemm River and Cape Conran along with some other more remote large strips and patches, we see little need to undertake more burning in this area in the immediate future. Furthermore, undertaking such extensive burning in a short period removes options for strategic burns in a few years without causing significant ecological damage through reburning too soon. A return to the mosaic burning as recommended in the heathland fire management plan (Avis 1993) is essential.

Cann River District

Burns in this district are excessively large with National Parks particularly targeted. The small Alfred National Park is the only park that remains unburnt with all others to be largely burnt (up to 90%) in less than an 8 year period. Outside of parks there are seven substantial burns in Wet or Damp Forest covering some 25,000 ha (09C10, 11A, 11B, 14, 17, 18, 10C05, 11C01) and a 5,500 ha burn in swampy riparian vegetation (09C06). Burns in these areas could do ecological damage, especially if they become severe or are repeated and will result the encouragement of more flammable understory.

There are at least 5 proposed burns within this district that are partly or largely zone 5 (i.e. not to be prescribed burnt) and yet for four of these, the table of burns gives another zone, even where zone 5 is the major zone (11C01, 11C05). Seven of the 8 reference areas in this fire district are within proposed burns.

Overall, at least 50% of the whole fire district has been, or will be burnt within 8 years and about 90% of that outside of production forests. This exceeds even the ENRC parliamentary target of 5%/annum.

Croajingolong National Park and adjacent areas

When combined with recent wildfires and burns undertaken from 2004, about 90% of Croajingolong National Park and 90% of the adjacent state forest south of Princess Highway will be burnt within a few years. Only the far eastern part of Croajingolong National Park beyond Mallacoota and a few patches of state forest will remain unburnt

These proposed burns also cover four Reference Areas in zone 5 (prescribed burning exclusion) together with some other areas zoned 5 along the coast. This renders the zoning system in the Fire Protection Plan meaningless. Even if some of the burns are intended to be 'mosaic' there may be few large unburnt areas remaining. The whole of the Sandpatch Wilderness Area in Croajingolong is covered by proposed FRBs in 2011.

While much of the coastal vegetation is fire adapted, to maintain biodiversity it should not be effectively single-aged. The coastal and heathy vegetation communities involved

generally have minimum tolerable fire intervals of 10-15 years or longer. Virtually all of the vegetation in this area will be reduced to a juvenile or adolescent post-fire stage in breach of the Code of Practice which requires a range of ages to be maintained. Even fire dependant fauna require vegetation to be within a certain range of age classes and a mosaic of age classes is required. Few fauna species thrive in very recently burnt areas and all others will be severely disadvantaged.

If the burns are undertaken as indicated in these draft plans, including those covering virtually 100 % of the Cape Conran Coastal Park in the adjacent Orbost fire district, there is a very real possibility that Ground Parrots will be greatly reduced or eliminated as they will not recolonise burnt coastal heathland vegetation for least 2-3 years with populations highest 10 years post-fire. In addition, the fire sensitive casuarinas in the coastal feeding areas of Glossy Black Cockatoos may be affected for most or all of their whole range within Victoria. Smokey Mouse, Short and Long-nosed Bandicoots, Long-nosed Potoroos and Spot-tailed Quoll are some of the other species that may have little suitable habitat for some years. Unless greatly modified, to provide a range of post-fire vegetation ages including long-unburnt, the proposed FOP will be in contravention of the Flora and Fauna Guarantee and the Environment Protection and Biodiversity Conservation Acts.

In 1993, a fire management plan was drawn up for the heathlands of coastal East Gippsland (Avis 1993). Why is this not being followed?

Coopracambra National Park

Over two-thirds of this National Park will be burnt within 4 years if the proposed burns 10C08 and 11C05 are undertaken on top of the prescribed burn conducted in 2007 of over 9000ha. 11C05 is almost all zone 5 (prescribed burning exclusion) and includes two Reference Areas. This area is very remote (indeed most of it is within the Genoa Wilderness Area under the National Parks Act) and is not strategic. This burn must be dropped. 10C08 is zone 3 and 5 and is far too large considering existing burnt areas and the National Park Status of the area.

Orbost and Bendoc Districts

Most proposed burns in these two districts are either too large, in wet or damp forests or in National Parks and reserves. Many are a combination of these. Wet and Damp Forests (19 burns covering 35,000 ha) are poorly suited for such burns, with subsequent ecological effects including drying of the forest understorey with flammable shrubs replacing moister vegetation. The extent of burning should be much reduced and made more strategic. In addition, ten burns in the north are re-burns of the 2003 fire area (covering 10,000 ha) and the inter-fire period (7-9 years) is less than the absolute minimum fire tolerance period for the vegetation types involved (10-15 years). Much ecological damage will be done by these fires and all those in zone 3 and 4 should be dropped as this will be in direct conflict with the criteria for these zones under the Code of Practice. In Orbost district some burns are zone 5 and are prohibited under the Code. Even those in zone two should be reconsidered if they are Damp/Wet Forest and/or in Parks in light of just how strategic they currently are in this remote part of Victoria.

Coastal Parks

Over half of Ewings Marsh Wildlife Reserve and the adjoining state forest are covered by large proposed burns during 2009 and 2010. The entire Cape Conran Coastal Park, save for a narrow coastal strip, is covered by recent burns plus more proposed in 2009 and 2010. We question the extent of additional burns in these areas. We also ask what the results of the Southern Ark project surveys show in the more recently burnt areas with respect to the response of bandicoots and potoroos? This area is the furthest west for regular feeding of the Glossy Black Cockatoo in Victoria and the casuarinas that the birds depend on are fire sensitive.

Martin Creek Flora and Fauna Reserve

This reserve, set aside under the National Parks Act for the catchment-wide protection of a national site of rainforest significance is about 80% covered by two extensive proposed burn areas – 10O04 and 11O13A, B and C. The area is dominated by Damp and Wet Forest which surrounds the Warm Temperate Rainforest in the gullies. Fire, even if low intensity and ‘mosiac’, will tend to dry out the understorey of these forests which act as buffers for the rainforest, stimulating increased germination of flammable shrubs and making the area and its enclosed rainforest more vulnerable to fire in the medium-term. It seems extraordinary to reserve this area to protect rainforest, its associated rare fauna such as Long-footed Potoroo, and then to burn significant parts of it.

There are extensive 2006-8 burns already present immediately adjacent to the east and west of the reserve and burns to the south on the edge of the public land which should provide the required reduced fuel areas. The placing of large parts of this reserve in zone 2 is hard to understand and certainly cannot be justified strategically at present.

Snowy River National Park

Over 50% of this large National Park has already been burnt in the 2003 fires, in recent prescribed burns since 2006. The current proposed prescribed burns 11A13, 09D09 and 11O05 together with 11A13 in neighbouring Nowa Nowa District will increase this to about 75% of the Park burnt within 7 years - unacceptable in a National Park reserved for protection of flora and fauna and for unspoilt stretches of forest ecosystems including wetter ecosystems. The proposed large burn along the Rodger River 09D09 consists of Damp and Wet Forest and is also entirely within the Snowy River Wilderness Area. Proposed burn 11O05 is also Damp Forest and includes a Reference Area (which is of course Zone 5). None of these burns appear particularly strategic (except perhaps for timber harvesting areas!).

This Park is important for the protection for the Spot-tailed Quoll and the proposed treatments will be detrimental overall for this and other values such as damp and wet forests. Almost all of the mature forest within the Park will be affected by fire within a short period. None of the burns in the Snowy River National Park appear justified at this point in time.

Cobberas-Tingaringy section of Alpine National Park

Here there are several proposed burns in spite of the fact that this Park was almost entirely burnt out in 2003. This includes a series near the NSW border that include parts of the Tingaringy Wilderness Area. These largely affect high altitude vegetation not well adapted to repeated fires. At 6-9 years after the 2003 fire these reburns are well below the minimum reburn period that the vegetation can tolerate. There are also two proposed burns near Deddick in one of the few areas to escape the 2003 fires and which represent important refuge areas for flora and fauna. These burns will result in serious ecological impacts in a National Park that currently is recovering slowly from widespread fire with few refuge areas.

Erinundra

We are astonished to see 1300ha burn planned in Erinundra. This area is Damp Forest and is zone 4. We fail to see what ecological reason could warrant this burn. See also our comments on Martin Creek Flora and Fauna Reserve above.

Other Areas

Burns 10O18 A and C (Orbost) and are in Damp Forest and 10D05, 11D01 and 11D02 (Bendoc) are in Wet Forest. All these should be reconsidered, especially as all but 10O18 are zone 3.

Nowa Nowa District

The burns proposed on the edge of public land near Wulgulmerang (11A07, 10A16, 09A15) are a great improvement on those proposed in the middle of the Buchan Headwaters Wilderness Area last year and we are pleased to see this change. Nonetheless they still mean re-burning nearly 5000 ha of the 2003 fire area before the vegetation concerned is mature enough, including some Montane Damp Forest and Montane Dry Woodland – neither of which can tolerate repeated fire. We suggest that much smaller parts of these three areas, be burnt at the minimum intensity required to produce the desired fuel reduction, with private landowners encouraged to take complimentary actions.

Proposed burns 10A07 and 10A10 extend the area affected by the 2003 fires with 10A10 being zone 3 and a Parks Victoria Natural Features Reserve (Mount Stewart). We question both burns, especially the second.

Proposed burn 11A13 adds to the recently burnt area in Snowy River National Park (see above) and is a reburn of a 1997 FRB. Although 14 years is marginally above the minimum tolerable fire interval required, the extent of nearby recently burnt areas, and the fact that it is not zone 1 or 2 means a longer period before reburning would be preferable.

There are a number of burns in Damp Forest totaling over 9000 ha, some over 2000ha and/or in zone 3. Again we question the wisdom of burning in this forest type both for ecological reasons and because of increasing the fire risk in this forest type when flammable shrubs regenerate from the fires. The forest at Timbarra (09A16, zone 3) is especially rich in arboreal fauna with high numbers of Yellow-bellied Gliders and Greater Gliders and the burn could put at risk the hollows important for these possums.

Overall this district is extensively covered by past and proposed burns and appears to well exceed even the unrealistic 5%/year ENRC target, to the detriment of the biodiversity and the conservation reserve system.

Bairnsdale District

We are pleased to see that there are no proposed burns of zone 5 or of Damp/Wet Forest in this district, with a relatively modest extent of burns overall. However, a number of burns extend the area already affected by the 2006 burn (which covers over 50% of the district), thus reducing areas available as fauna refuges. We question the real need for burns at or near the edge of the 2006-7 fire area, with the fire protection provided by the large burn area only 2 years old. We suggest these burns be reconsidered, especially those to the east where little public land remains unburnt.

In addition there are two burns (09B13 and 11B03) which cover areas burnt to some extent in 2003 and it is too soon to reburn without some ecological damage. We also understand there are koala populations in some of the areas to the north and west of Bairnsdale which will pose potential problems and any burning must be constrained to low intensity.

Lastly, we understand from locals that there is some concern about the number of repeated burns in Mitchell River National Park but there is insufficient detail available for us to make specific comment. We refer you to local submissions as to burns that should be removed or delayed.

Swifts Creek District

This fire district is over 80% affected by the 2003 fires (with a small amount of the 2006-7 fire to the south), a fact masked by limiting the past fires on the map to only 5 years. In spite of this extensive coverage, there are a number of proposed burns covering some 30,000 ha which will re-burn vegetation well below the minimum tolerable inter-fire interval. With the exception of 11K07 near Omeo, there appears to be little strategic justification for these. Although some parts are in zone 2, there are also sections within zones 3,4 and 5 which under the Code of Practice should not be burnt at this stage (or, in the case of zone 5, at all).

The largest burns include 09K06, 10K01 and 11K02 covering 25,000 which is mostly in the 2003 fire area, plus the removal of a few pockets of unburnt potential fauna refuge areas. In addition there is 4,461 ha of reburn listed in the table of the 2003 fire area at Mt Tambo (a Parks Victoria Scenic Reserve) which appears not to be on the map provided, and which consists of sub-alpine woodland which takes decades to recover from fire.

In the far south-east, a large proposed burn 09K02 straddles previous prescribed burns in 2002 and 2005. The area is in zone 5 and zone 3 which respectively requires no burning and burning within ecological tolerances. And yet this whole area is to be treated with much of it reburnt within 4 and 7 years – affecting its ecological integrity and in direct conflict with the Code.

Of the 35 proposed burns, 11 are in zone 5 and 13 are in Damp/Wet Forests (9 of these are zone 5), which will alter the ecology and could render these areas more flammable with the regeneration of shrubs. At least many of these proposed burns are small, but one is over 2,600 ha. Another 3 burns are in high-altitude woodland that is slow to recover from fire. Combined with the reburns in zones 3, 4 and 5, the fire planning process under the Code and the Regional Fire Protection Plan is meaningless in this district (as in several other districts) – perhaps a reflection of trying to impose a 5% target of burning in a area that is already largely burnt.

The table contains obvious gross errors including proposed burn 11K02 of 10,000 ha described as ‘cleared freehold’ when it is vegetated public land burnt in 2003, while 09K02 is listed as 228 ha when it is obviously about 6000ha. At least two of the proposed burns appear not to be mapped.

On the positive side, we are pleased to see the removal of the previously proposed burns 10K05 and 10 K06 which straddled the Alpine National Park and a reference area in the 2003 fire area.

Heyfield District

With almost all of the public land in this district bunt in the 2006-7 fire, the proposed burns are relatively limited. However along with other fire districts, many of those proposed or conducted recently, extend the affected fire area taking out some of the last of the unburnt bushland on the southern fringes of the fire area. This is likely to be highly detrimental to fauna which are dependant on surviving in these areas until the adjacent burnt areas again become mature enough to support the various species. These burns will add little to the overall fire security of the area, considering the presence of such a large recent fire area next to them, and should be seriously reconsidered.

In addition, Holey Plains State Park already has a substantial proportion burnt since 2003 by wildfire and FRBs and we question the need for more at this stage.

In contrast, we encourage the conduct of the burns in Providence Ponds Flora and Fauna Reserve to regenerate habitat for New Holland Mouse, especially in the south where burns have been promised for some years but have not eventuated.

Erica District

With some 60% of the fire district burnt in 2006-7, again most proposed burns extend the fire affected area with little additional fire protection to that provided by the 2006-7 fire. Burns in isolated unburnt areas such as 09E05 and 10E02 should particularly be reconsidered as they reduce faunal refuge areas.

There are 5 burns in this district affecting Damp Forest, covering about 2,900 ha, of which 4 are in zone 3. Burning of this forest will tend to produce a drier more fire-prone forest with the stimulation of flammable shrubs. They may well, in the medium-term, render areas such as the Thompson Catchment more, not less likely to burn, as well as having detrimental ecological impact, especially if repeated.

The numbers given to fires in the table do not always correspond to those on the map, at least for the 2010 burns.

Noojee District

In this district there are 7 proposed burns affecting Wet or Damp Forest, covering about 2,600 ha, of which 3 are in zone 3. The worst and largest of these is at Jordan River (11N05) which is in a remote area. Again we point out that these burns are likely to render the forest drier and more fire-prone forest in the medium term with the stimulation of flammable shrubs. They will not necessarily increase the protection of catchments and townships.

Yarram District

Proposed burns in this district are mostly non-controversial and we are supportive of burns in Wilsons Promontory aimed at restoring habitat. (However we are not supportive of proposals to clear vegetation along the road to Tidal River.) Two small burns in the largely cleared northern part of the district are of Damp Forest (09Y11 and 11Y02) and we question the need for these, especially in the tiny isolated block at Boolaara, unless there is an underlying reason such as weed control.

North East Region

Except for Murrundindi district, the vast majority of forest and woodland in this region has been affected by the 2003 and 2006-7 fires making the remaining unburnt areas of particular importance for biodiversity conservation. A recent mapping of post-fire seral groups shows the vegetation 'EVDs' in these fire areas to be in either the 'juvenility' and 'adolescence' stage, meaning that re-burns at this stage will be damaging and will alter the vegetation with loss of some species.

Upper Murray District

About two-thirds of the public land in this district was affected by the 2003 fire. Now recent and proposed burns are increasing the area affected with implications for biodiversity conservation particularly fauna.

A number of extensive burns totaling some 60,000 ha are proposed within the 2003 area with environmental consequences including some in the Alpine National Park. Re-burn areas include N85, N91, N89, MM008, MM009, M92 and M96 which cover over 29,000 ha in a range of vegetation from dry to damp and from low to high altitudes, none of which would yet be ecologically tolerant of a re-burn. They also include a further 15,000 ha proposed burn in N87 that is not marked on the map (together with N86, and several other unnumbered burns covering some 13,000 ha also somewhere in the 2003 fire area?) These would appear to include high altitude vegetation in zones 3 and 5 that would certainly not be tolerant of a repeat burn after 7-9 years. Another 22,000 ha in MM002, MM003, MM007 and P150 are partly in and/or extend the area recently affected by fire.

All these burns should be rationalized to a few smaller strategic areas for the protection of Mitta Mitta and the north-west side of the Dartmouth catchment.

There are 10 reference areas in this fire district. Two of these were burnt in the 2003 fire and one in Burrowa-Pine Mountain National Park was almost all burnt in a prescribed burn escape in autumn 2007. Four of the remaining seven reference areas have proposed burns immediately adjacent to them, as has one of the two 2003 burnt reference areas (adjacent to N91) putting them at risk from similar incidents. Burns should not be planned so close to these areas.

Ovens District

About 90% of this fire district has been affected by either the 2003 or 2006-7 fire (about 75% and 50% respectively) with about a third burnt by both. Much of the remaining unburnt vegetation is in fragmented public land parcels to the north of the district or in patches along the north of the main public land block. Because so much has been severely affected, unburnt areas are extremely important refuges for fauna, including some more (previously) common and widespread species.

However, unfortunately this essential principal is not being followed. Recent and proposed burns are either within the already burnt areas or are extending the area affected. Proposed burns T128, T104 and part of T129 will reburn about 10,000 ha within only 7 years with the vegetation in an 'adolescent stage' and unable to tolerate fire without before 10-15 years. Even if some of these areas were only lightly burnt, the fires will still have a detrimental effect including reducing unburnt patches within the burnt areas servicing as fauna refuges. We also question the reason for burning 5 ha of already fire damaged treeless sub-alpine vegetation at Mt Buffalo Depot. Why is this necessary so soon and why not some another method and/or a smaller area? Other burns such as T086, T099 and T127, together with other burns conducted since 2005, reduce the area left unburnt at the fringes of the 2003 and 2006-7 fires. T127 (and some other burns) reburn FRB areas conducted in only 2005. Why is this necessary?

Even more disturbing is the burning of isolated, or near-isolated islands of bush further north including all of the bush area south-east of Yackadandah (next to Glen Creek) – again including a re-burn of a 2005 FRB. In the large bush block to the south of this, burns in 2007-8 exceed that shown in last years FOP and now more burns are proposed burning out the entire island (with reburning of an 2006 FRB) and including its sole tenuous connection to bushland further south. This burning and reburning of isolated

blocks of forest has the potential to make fauna including common mammal species such as *Antechinus flavipes* and reptile species permanently locally extinct. Proposed burn T120 covers the remainder of a public land island just north of Eurobin with the rest burnt by a FRB in 2006 – only a tenuous connection via a narrow strip of private land bush will remain.

Prescribed burning in this district for the next decade must be restricted to limited and targeted strategic burns aimed at the protection of townships and other key assets. Burning of isolated islands should not occur unless these are very strategic and limited to only a fraction of the island.

Goulburn District

Again the majority of public land in this district was burnt in 2006-7. The remaining public land is fragmented by agriculture and great care is needed to not over or under-burn these areas as return of lost fire sensitive or fire dependant species is unlikely.

We are concerned that some of the proposed burns in the Strathbogies Ranges and in Mt Samaria State Park cover too extensive an area in a short period and suggest that burns should be more limited and staggered in time. The largest proposed burn in the Strathbogies (2,150 ha at Barjag Road) is in Damp forest in zone 3 and we question this from both the ecological and fire protection point of view. This forest type is very infrequently burnt and fires, including low intensity fire, will result in an increase in flammable shrubs.

Some of the burns around the 2006-7 burn area extend the area affected and reduce the limited areas available for fauna refuges, but add little to the fire protection already provided by the fire area. These areas should not be burnt until the adjacent vegetation has recovered sufficiently to support fire-intolerant fauna species.

One of these burns is a block to the south of Merrijig (1M08/08 – Dungeon Gully - unnumbered on the map) most of which has already been burnt in a 2004 prescribed burn and again in the 2006 fire. Why is this zone 3 area being burnt 3 times in 5 years? Note that the area of this block is about 5 times that shown in the table.

Of concern also is the burning of some of the limited remaining vegetation near Mt Buller. This vegetation will take many decades to recover from fire which will favour shrub regeneration over herbs according to the draft description of the fire reaction of the “High Altitude Shrubland /Woodland EVD”. Although this proposal is an understandable reaction to the 2006 fires, in practice this burn will be detrimental to the subalpine ecology – but may not achieve better fire protection because of increased shrubs.

Murrindindi District

Most proposed burns in this district along with those in the northern part of Eastern Port Phillip, are, along with the fire breaks (see separate attached paper), a reaction to the 2006/7 fires and a desire to protect the catchments. Last year, it was stated to us that burning would only be undertaken in the drier forests in the catchments rather than having a total no-burn policy. Ecologically this could make sense, provided it is not overdone in extent or frequency. However, the fire history maps now show that extensive areas were burnt in the Upper Yarra Catchment last year, apparently including areas of wet forest and we are concerned that restriction of the fires to only drier areas is not happening in practice.

In this district there are 26 proposed burns in Wet or Damp Forest and two in Riparian Forest totaling some 25,000 ha. Riparian vegetation will take decades to recover from fire and will dry out in the interim, while flammable shrubs will be stimulated in the Wet/Damp Forest. There are also areas of Cool-temperate Rainforest in at least a few including MFA1199 and MFA0910. On no account should rainforest be burnt or the surrounding wet forest. Twenty-two burns are in zone 5, in conflict with the Code and the Regional Fire Protection Plan. The largest 'landscape' burn proposed (MFA1199 - 17,431 ha) contains Alpine Ash, Mountain Ash, Mountain Grey Gum along with Mannah Gum and mixed species. It will be difficult to find drier forest to burn in the southern half of this area and it may be difficult to not damage patches of wetter areas in the rest.

Many of the proposed burns contain sites of significance identified as Special Protection Zones (SPZs) in the Central Highland Forest Management Plan. Consideration is needed as to whether all these burns are justified at this time and as to how these will be undertaken so as to not damage the SPZ values. Many of the sites including the major MFA1199 burn are also Spotted Tree Frog Catchment Zone in which the Action Statement for this species requires "*managing the extent and frequency of fuel reduction burning in Spotted Tree Frog catchments to ensure the risk of adverse impacts on water quality or yield is minimal*". With most (if not all) other Spotted Tree Frog sites in Victoria affected by the 2003 and 2006-7 fires with subsequent siltation of streams and hence possible elimination of the frogs from these sites, it is most important to not affect the very few (only?) remaining sites in Victoria where this EPBC and FFG listed species is found. We therefore question the extent of burning in these areas.

Port Phillip Region

East Port Phillip District

As in Murrumbidgee District, most proposed burns in the north are a reaction to the 2006/7 fires and a desire to protect the catchments. Last year, it was stated that burning would only be undertaken in the drier forests in the catchments rather than having a total no-burn policy. Ecologically this could make sense, provided it is not overdone in extent or frequency. However, the fire history maps now show that extensive areas were burnt in the Upper Yarra Catchment last year, apparently including areas of wet forest and we are concerned that restriction of the fires to only drier areas is not happening in practice.

In this district there are 31 proposed burns in Wet or Damp Forest including Montane Wet and Damp Forest totaling over 7,500 ha. Burning of these forests will result in the rapid regeneration of shrubs which will make them more, not less flammable. Eleven burns are in zone 5, in conflict with the Code and the Regional Fire Protection Plan.

The overall extent of burning in the Upper Yarra Catchment and Yarra Ranges National Park is most concerning as are two large burns in Bunyip State Park in Wet and Damp Forest and Riparian Scrub (G60 and G46). These areas in the National/State Parks are all either zone 3 or zone 5 and the burning of these wet areas does not seem to be in keeping with protection of park values.

We are also perplexed by the burning of a small zone 5 area in Yellingbo Nature Conservation Reserve (WY10), unless there is some sound ecological reason for this, or why the narrow strip of remaining unburnt forest on Mount Riddle (P37) needs to be burnt when this is zone 5, in a National Park, with very recent burns either side.

South-West Region

Midlands District

We question the extent of proposed burns in the Brisbane Ranges when the National Park and surrounding forest has been over 50% burnt in 2005 and 2006. A longer period should elapse before extending the affected area and we suggest that burns, if any, be restricted to zone 2 areas.

Similarly, the whole of Enfield State Park and surrounding forest to the north was burnt in 1999 and there are already several substantial re-burns from FRBs within this, including about 25% of the Park. The proposed burns would mean some 40% or more of the Park would be re-burnt within 8-12 years. The forest would generally require a minimum of 10 years between fires and should on average be much longer. Repeated burns over an extensive proportion of the area at this frequency are unacceptable in a State Park. Most of the areas proposed for burning are zone 3 and again we suggest that burns, if any in this park and surrounding forest, be restricted to zone 2 areas until a longer time has elapsed.

We also question the large proportion of proposed burns around the Trentham, Blackwood Bullengarook and Daylesford areas and suggest a greater spread in time would be desirable. In Lerderderg State Park, proposed burn 09BM01 is partly in zone 5 which should be excluded from fire.

Otway District

Proposed burns in zone 5

Proposed burns OS2, OS4 and OS609/10, that are part of a 'Strategic Wildfire Moderation Area', are partly or wholly zone 5. This forest was placed in this zone for the very good reason that much of it is wet forest with rainforest in the gullies and a moist understorey elsewhere. It is not well adapted to fire, does not burn readily, is remote from any man-made assets, and is unlikely to pose a danger except in those extreme conditions when little or nothing will halt a fire. Indeed if the forest is dry enough to back-burn or to prescribe burn to any great extent, it could be too dangerous to do so.

Burn OS1 (another zone 5 area with Wet/Damp Forest), which was treated last year, did not burn over much of the area that is marked on the maps – particularly in the south, but covered a much lesser area, often penetrating only a hundred metres or less from the road. However those areas which did burn will now regenerate with a larger number of flammable shrubs, make the area and the roadsides a greater fire risk in the medium term than the relatively fire-resistant vegetation present before. Proposed burn OS03, although in zone 3, also has large areas of Wet Forest and pockets of Cool-temperate Rainforest. Altogether there are 10,000 ha of Damp and Wet Forest EVCs marked for prescribed burning in this district which could have their ecology detrimentally affected and subsequently become more flammable.

The Ash Wednesday fires mainly involved drier forests to the north with only the top end of the wet forest block affected. 'Strategic Wildfire Moderation areas', if required, should be placed in areas of drier forests by a review of the Fire Protection Plan. This drier forest is generally found in zones 1-3 at present. However note that much of the zone 3 in the higher areas south of Benwerrin consists of extensive areas of wet forest with rainforest gullies and understorey which is not suitable for such treatment and the strategic burns should be north of this. Planning for 'Strategic Wildfire Moderation Zones' is an exercise that requires proper analysis of the vegetation types, topography and location of assets.

Another smaller proposed burn A03 should be dropped as it is in zone 5 and involves wet forest near Apollo Bay. In addition, proposed burn A01, although largely in zone 4 and 3, also includes zone 5 riparian vegetation along the Parker River. We trust that this will not be burnt.

One of the other large blocks marked for proposed burning in the 'Strategic Wildfire Moderation area' (OS5) apparently has a dense koala population. This and any other areas with koalas will present an animal welfare problem unless the burn is kept very low intensity indeed. In general for fauna protection, intense burns should be avoided and/or burns kept small. Converging fires that increase intensity and trap animals between them must be avoided.

Fire breaks

Treatment of areas alongside residential areas remains excessive in places. It has been stated to us by DSE staff that the excessive width was due to a misinterpretation of the "House Ignition Likelihood Index" (Tolhurst and Howlett, 2003). And yet the recent mulching of heathland that has occurred in the National Park where it is adjacent or close to houses such as at Aireys Inlet continues to exceed the treatment that private land owners are allowed to do at the same distances from their houses. The planning regulations and CFA guidelines allow for the removal of no more than 50% of the shrub cover with native grasses cut no shorter than 10 cm for 30-95 m from a house (depending on forest type and topography). Instead in our National Park 100% of the understorey, grasses, sedges and in some areas grass trees continue to be slashed to ground level. Instead slashing should be at 10 cm within 30 m of the houses or 5 m of the road with this increasing to 20-30 cm further away allowing orchids, and the basic heath species to survive. Some patches should be allowed to regrow as per the CFA guidelines. The present treatment will eventually reduce the adjacent National Park to exotic weeds.

On revisiting the Mt Cowley Track-Delaney's Road area recently, we were disappointed to find that firebreak construction has been continuing near the middle and northern end of Delaney's Road adding to some pre-existing roadside breaks there. This is in spite of the fact that there has apparently been no environmental assessment – including referral to the EPBC unit of Environment Australia. In the northern-most area, existing breaks were made even wider taking them to 40 or more metres on both sides of the road. This is in spite of the statement in the 'Victorian Overview to District Fire Operations Planning' (August 2008) that strategic fuelbreaks will be generally 15-20m wide including the road and an absolute maximum of 40m. What happens in the field appears to be somewhat different.

Portland District

As many blocks of public land in this district are isolated, they are sensitive to loss of species through either being burnt too much at once, or by being left too long without fire if fire dependant species are involved. These blocks therefore require very careful planning and implementation of appropriate fire regimes to maintain the right range of age classes within each.

For example, we support the burning of heathlands within Dergholm State Park to maintain fire dependant species such as the Silky Mouse (the southern-most occurrence is here) provided that burns are relatively small, are scattered in time and space and do not form large contiguous areas. However, we are most concerned that in many areas, including forests to the south, north and west of Casterton, and around Heywood, the public land blocks are at least 50% covered with recent and proposed burns, with too much being converted to immature vegetation at one time. In some cases individual blocks are

being largely burnt over in a short period, risking local extinction of flora and fauna species.

There is at least one proposed burn (P07-487) where part has already been burnt in 2002. As the EVC involved (Damp Heathy Woodland) should not be burnt within 15 years, we ask why this zone 3 area is being reburnt within 9 years?

For more detailed comment in this district we defer to the submission from people with good local knowledge such as Geraldine Ryan and regional Field Naturalists groups.

Wimmera District

As in the Portland region, there are many small blocks of public land in this district that are isolated and sensitive to loss of species through either being burnt too much at once, or by being left too long without fire and which require very careful planning and implementation of appropriate fire regimes to maintain the right range of age classes within each. Compared with Portland region, the small blocks appear to be treated more conservatively with less danger of over-burning and we support this. However in contrast, both the Grampians and the Little Desert are experiencing too much fire.

Grampians

Here the problem is one of the total extent of burning in a short period, especially in the south. The huge 2006-7 fires, and prescribed burns before and afterwards, mean that over 56% of the park has been burnt. Many of the vegetation types and their associated flora and fauna are now less than 6 years old. The Park is now highly fragmented by recent fire history and yet significant prescribed burns have been undertaken without a clear understanding on what effect this is having on the biodiversity. In particular key fauna such as the Heath Mouse, Smokey Mouse, Short and Long-nosed Bandicoots and Long-nosed Potoroos have been eliminated from the burnt areas, but little is known about if and where they might still be surviving outside of this.

In spite of the fact that the vegetation in the burnt areas is still too young to re-support these species, significant areas of prescribed burning are taking place without knowing whether these are vital refuges for remaining fauna. A certain post-fire age is required before burnt areas become habitat and a mosaic of age classes is needed. For these reasons, last year's prescribed burns were controversial as will be the present proposals. The Grampians is essentially an island, making recolonization by non-flying displaced species difficult.

For these reasons prescribed burns in the Grampians should cease, except where very small and very strategic, until the location of key fauna is determined by adequate surveys (and those found to contain these species reserved from burning) and until re-occupation of burnt areas is starting to take place. Certainly no burns should take place in zones 3, 4, or 5 until this assessment is made. Proposed burn 09G06 would seem particularly unnecessary with recent parallel burns nearby while burn 08G11 is a reburn of an area burnt only 2 years ago. To reburn this area because it is only 'part complete' will be to remove the mosaic of unburnt patches within it that are so important for retaining many species.

In addition, as noted above, the Code of Practice (paragraphs 154, 178-181) requires accounting for the existing range of age classes when planning burns. There is also the problem that having extensive areas burnt within a short period removes options for strategic burns a few years later without causing significant ecological damage – a problem that is already starting to emerge.

Lastly we ask that comments from the Hamilton Field Naturalists Club be carefully considered because of their good local knowledge.

Little Desert

Burns proposed next year (2947 ha) are over four times that undertaken last year (755 ha) and are proposed to continue at this level for at least the life of the FOP (2011). The eastern and western sections of the Little Desert are particularly heavily burnt with 60-70% burnt since 1999. The minimum inter-fire period that the vegetation can tolerate without damage is generally 10 to 15 years for heaths and 20 years for mallee. Already there is some reburning of vegetation that is less than this (e.g. part of 09N06).

The Little Desert supports a population of Mallee Fowl, a species that requires long-unburnt mallee. Clearly this habitat is rapidly reducing in this area and we understand that there is conflict between some of the proposed burns and this species. It would be disastrous for this Park to lose this iconic species. We refer you to the Mallee Fowl Recovery Group for more detailed comment on this.

The extent of burning in the Little Desert needs to be wound back for a few years at least, with only burns that are very small and very strategic taking place.

North West Region

Bendigo District

We are pleased to see that most proposed burns in this district are scattered and limited in size. This principle is important because of the very fragmented nature of the public land in this region. In Box-ironbark and similar forest, we note that the need for prescribed burning is disputed by many. For this reason, burns must be of low intensity and be patchy. The effects must be closely monitored before and afterwards so that a better understanding can be developed of the relationship of these forests with fire.

For detailed comment on individual areas we defer to local groups such as the Bendigo Field Naturalists.

Mildura District

Murray-Sunset

The proposed burns in this area appear to be in agreement with the Mildura District fire protection plan. Provided they can be conducted as intended without escapes, there is limited controversy.

Hattah-Kulkyne

Here there are two large burns marked on the map – WDR02 and an unnumbered area adjoining 236, both covering thousands of hectares. However in the table only WDR02 is listed - as covering only 5 ha. What is intended here? Both areas appear to be mainly the EVDs 23 and 25 - Alluvial Plains Woodland and Riverine Woodland. Neither of these EVDs require fire for regeneration – so fires in these areas which are in Ecological Management Zone would appear to be in conflict with the new fire plan.

Big Desert

We are alarmed to see two large proposed burns marked on the map in the Big Desert. This undermines the strategy that has been recently followed here and in the Sunset, of burning strategic breaks in order to protect larger blocks of unburnt mallee. As such, it appears to be in conflict with the recently revised Mildura District fire protection plan.

These long-unburnt areas have been identified as being of great importance to a number of mallee birds, including Mallee Fowl, and also to some other mallee fauna. Is this region succumbing to the 5%/year target philosophy stemming from the ENRC report, regardless of whether this is appropriate for the vegetation, its recent fire history and the needs of the dependant fauna?

The two burns combined would take out much of the larger areas of very old growth (40 years or more) left in the Big Desert. The proposed "Gulf Landscape Burn" 315 covers 11,400ha. However proposed burn(s) 332/333/WDR01 is listed in the table as only occupying a total of about 200ha. However, as for the burn above in Hattah-Kulkyne, there is conflicting information with the burn mapped as a hundred times bigger than this. This area would appear to be at least partly EVDs 23 and 25 - Alluvial Plains Woodland and Riverine Woodland where fire is not required. It is not at all clear what is intended in this area, but any burns in this area should be very small and for good ecological reasons such as weed control.

Lastly, a series of narrow areas are marked along the edge of the Big Desert (210, 223, 245). If any of these (or any others unmarked) involve chaining and rolling, then we object to this most strongly. Strip burning should be used instead on all boundaries, including state forest; however this should avoid sites of importance for species such as Mallee Fowl.

We also refer you to the Mallee Fowl Recovery Group for more detailed comment on some of the burns in this fire district.

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