



FRIENDS OF HODDLES CREEK Inc.

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27th June 2013

TO:-

Brad Battin MP,
Parliamentary Secretary for the Environment,
Member for Gembrook, Victorian Legislative Assembly,
5/6-8 Langmore Lane, Berwick, Victoria,
Australia 3806

RE:- Request for Ministerial Enquiry into Ecological Planned Burn, GB0004, Kurth Kiln Regional Park, Shire of Yarra Ranges.

Dear Brad

The purpose of this letter from the Friends of Hoddles Creek Inc. (FOHC) is to request a full investigation by the Minister for the Environment and Climate change into the purpose, planning, execution and outcomes from the Ecological Planned Burn No. GB0004 undertaken in March 2013, within the Kurth Kiln Regional Park (KKRP) at Hoddles Creek.

(A) The FOHC's reasons for requesting this Investigation.

1. This Ecological Burn was lit (25th March 2013) with the full knowledge of BOM weather forecasts predicting high temperatures and fire danger ahead. Instead of producing the ecological desired patchy mosaic of burnt & unburnt areas the burn **predictably** resulted in 100% of the area being burnt. A total fire ban was declared on Wednesday 27th March 2013. This Ecological Burn in a Regional Park zoned for Ecological Fire Management (Zone 3) has resulted in higher than intended intensity fire that has burnt through non target gullies/drainage lines and & fire sensitive mountain ash trees. The DEPI/Parks Victoria Ecological Burn Coverage Objective was 50% to 70%. In contravention of Ecological Burn Best Practice for remnant & ecologically isolated bushland the area was burnt in its entirety.

2. This Ecological Burn was undertaken in the context of data from the closest BOM weather station (086358, Gladysdale) indicating that the previous 6 Months (Sept. 2012 - Feb. 2013) were the driest (lowest rainfall) on record from that station. Ecological Burn best practice recommends that ecological burning be postponed under these extreme types of environmental conditions as plants and animals will already be under stress.

3. The majority of this Burn Area was not a candidate for Ecological Burning according to the current Yarra Ranges Fire Ecology Strategy. The DEPI's Fire Ecology Status Mapping shows that for over 95% of the Burn Area, Planned Burning was ecologically undesirable at this time within the fire cycle.

4. The only Ecological Objective provided by DSE/PV for this burn lacks credibility. The DEPI's Land Management Objective for the Burn was "*to bring the fire age class distribution closer to the idealized distribution identified through fire ecology study*". This objective is in direct conflict with DEPI Fire Ecology Study which shows that this stated DEPI objective is in fact achieved by **not** burning.

5. This Burn was undertaken within a declared Water Supply Protection Area (WSPA). A WSPA is declared under Section 27(1) of the Water act 1989 "*where the water supply is under stress*". The negative impact of fire within water catchments (gully & drainage lines in particular) on the quality of Melbourne's drinking water supply is well documented and well understood by Melbourne Water.

6. As a result of previous logging there were few older habitat trees left within the Burn Area. Predictably a disproportionate number of these particularly fire vulnerable remnant Habitat Trees have now been burnt out, killed or fallen over as a direct result of this burn. These destroyed trees were the trees containing the hollows necessary for the survival of our native fauna. Best ecological burn planning & practice that would see these trees protected by prior raking of flammable material away from logs & old large trees - or by preventing fire from reaching them in the first place - appears not have been undertaken. Instead of extinguishing the fires smouldering in these large old trees immediately after the fire front had passed they were left unattended, enabling them to flare up again during the subsequent hot weather and in many cases be totally destroyed. (See photo appended below)

7. That prior to the burn there was an ecologically desirable mosaic of different fire age classes (time since fire) for the Vegetation. That is no longer the case being the direct result of DEPI Burn Planning &/or Implementation.

8. This Burn specifically targeted a section of the ecologically strategic wildlife corridor that forms the important Biolink between the Kurth Kiln Regional Park and the nearby Beenak Bushland Reserve. Ecologically isolated and remnant vegetation such as this requires extra care, attention to detail and a precautionary approach to Planned Burning design.

- Best Ecological Burn Practice would recommend that only a portion of the width of the corridor be burned in a single planned burn event so as to better accommodate the landscape connectivity requirements of fauna.

Note:- The Hansen Creek Road itself provided an obvious & effective control line to enable the planned burning across the width of this wildlife corridor to be broken up into two sub units to be burned years apart.

- Best Ecological Burn Practice would recommend that other planned burns adjacent to existing ecological burns should occur after a period of many years. This interval allows some recovery of vegetation structure, the re-accumulation of deep litter (important for invertebrates and ground-foraging/dwelling animals), and re-colonisation of small animals from the unburnt section.

Note:- In direct contravention of Best Practice this Burn was preceded by the adjacent GB0003 Burn in the previous year. Burn G55 also adjacent to this burn was proposed for 2013 but did not proceed.

9. Under "Functions of Parks Victoria" within Section 7(2) of the Parks Victoria Act 1998, it mandates that **"In carrying out its functions, Parks Victoria must not act in a way that is not environmentally sound"**. By engaging/participating in a planned burn that on best knowledge was ecologically inappropriate, it is likely that Parks Victoria has failed to fulfil its Functions under the Act.

10. As Victoria has endorsed the *National Strategy for Ecologically Sustainable Development* (Commonwealth of Australia 1992) which embodies the precautionary principle, it appears implicit that precaution must be applied for activities sanctioned by the State. The precautionary principle is activated when two conditions are satisfied: (i) There is a threat of serious or irreversible environmental damage and (ii) there is a requisite degree of scientific uncertainty. On current knowledge it is apparent that the planned burn of the GB0004 area met both of these conditions. Therefore the evidentiary burden of proof is with the Land Manager, Parks Victoria or the proponent of the planned burn (DEPI) to show that that this threat does not in fact exist or is negligible. To date such evidence has not been provided by the relevant state agencies.

11. In accord with consultative approach outlined in the new 2012 Code of Practice for Bushfire Management on Public Land, the FOHC made repeated requests in 2012 for a multi-agency meeting to discuss this burn. Despite Melbourne Water, Parks Victoria & the Shire of Yarra Ranges all being agreeable the DSE declined to participate. (See FOHC request of the 30th September 2012 to DSE Chief Executive)

(B) Questions to which the FOHC seek answers as part of the requested Investigation:-

1. The inability of this ecological burn to achieve its Land Management Objective was known. The inability of this ecological burn to achieve its Burn Coverage Objective was predictable. Why then did this burn proceed?

2. How did this burn contribute to Melbourne Water's objectives for the Water Supply Protection Area? How does the loss of ground cover, coarse woody debris & soil structure leading to increased runoff, soil erosion, sediment inputs & decreased seasonal water regulation help improve the quality of Melbourne's Drinking Water in accordance with the SEPP (Waters of Victoria) Schedule 7, Waters of the Yarra Catchment (EPA, 1999) Note:- This is a specific objective of the Streamflow Management Plan for this WSPA.

3. Best Practice Ecological Burn Planning & Design is predicated on accurate identification of the candidate vegetation type. On the 12th October **2011** an on-site inspection of the GB0003 & GB0004 Burn Areas occurred. Present were Laurence Gaffney & Keith Jesse representing the FOHC and John van de Paverd (Fire Management Officer, Yarra District) & Jean-Marc Porigineaux, (Ecological Fire Planner) both representing the Department of Sustainability & Environment. All agreed that the Ecological Vegetation Class of an area within the GB0004 Burn Area was not the Shrubby Foothills Forest (EVC 45) that was indicated on current DSE EVC Mapping. It was apparent that the actual EVC was of a wetter class such as Damp Forest (EVC 29) or possibly Wet Forest (EVC 30) In light of that new information it was clear that further on ground survey work was required to enable a reassessment of the Fire Ecology Status for the area. Was this prerequisite additional work undertaken?

4. Historical evidence indicates that much of the Burn Area was heavily disturbed by logging during the late 1960's. Was this readily available DEPI information used by the Burn Planners to determine the actual growth stage/age class of the vegetation as part of the DEPI's ecological fire status determination procedure? What was the assessment of the Burn Planners of the obvious logging history's impact on local habitat attributes at this site? Was this information used to assist in the determination of appropriate post disturbance fire intervals for the specific vegetation at this site?

5. The importance of adequate soil moisture at the time of burning is well documented. Damp soil helps to protect the soil microorganisms & the roots of grasses, forbs and trees from being damaged or killed. In view of rainfall data available prior to the burn indicating the driest previous 6 months period on record (BOM Station No. 086358) ecological burn best practice advocates soil moisture assessment. Was this pre burn analysis of the soil moisture undertaken?

6. What Plans were put in place in order to ensure the DEPI/ Parks Victoria Ecological Burn Coverage Objective of 50% to 70% was achieved but not exceeded under these conditions of low soil moisture & forecast high temperature weather?
Note:- According to DEPI Ecological Burn Best Practice the patchiness of low severity fires is critical in maintaining sensitive species in Shrubby Foothills Forest.

7. What is the ecological rationale supporting the **moderate** (& >50%) Intensity Objective for this burn? This GB00004 Objective was to "*burn at a moderate intensity over greater than 50% of the burn plan area*".
Note:- The adjacent Ecological Burn GB0003 Intensity Objective of the previous year was to "*burn at **low** intensity in appropriate weather conditions and fuel moisture levels 50%-70% in a mosaic pattern*".

8. Why does the Kurth Kiln Regional Park not have its own Fire Ecology Strategy?
DEPI best practice manuals indicate that such a Strategy is necessary, and that a Park like the KKRK is the ideal/appropriate scale for such a Strategy.

9. One of the major aims of the current DEPI approach to Ecological Burning/Landscape Mosaic Burning is to enable a more heterogeneous landscape to develop by creating a mosaic of burnt & unburnt patches that vary both in space & time with particular regard to time since fire & /or vegetative growth (EVC developmental) stage. How did this burn contribute to that aim?

10. The adjacent G55 Burn was also planned for this same year (2013) and the adjacent GB0003 Burn was undertaken the previous year. How is the lack of an interval of many years between these three adjacent burns consistent with our current understanding of biodiversity needs and available fire ecology information? What is the rationale for having three adjacent burns back to back? How do three Burns proposed for two consecutive years in the same area increase diversity in the flora and fauna species and heterogeneity of vegetation structure and habitat across the landscape? This is a stated aim of the Yarra Ranges Fire Ecology Assessment, 2011 (See page 16 within that Assessment).

(C) Information & documentation that the FOHC consider should be appended to the requested Investigations Report:-

1. *"Inappropriate fire regimes causing disruption to sustainable ecosystem process and resultant loss of biodiversity"* is listed as a Potentially Threatening Process under the Victorian Flora and Fauna Guarantee Act (1988). The FOHC request a description of the fire regime/s that the DEPI considers appropriate for the GB0004 burnt area in order to achieve their medium to long term biodiversity objectives.
2. A detailed description of the specific (measurable) objectives & the predicted (measurable) outcomes of this Ecological Burn.
Note:- This is a fundamental component of the DEPI's Adaptive Management and Burn Planning Approach.
3. A copy of the Burn Plan & the Burn Briefing
4. A copy of the Lighting Plan with identification of the areas that should remain unburnt within the Burn Area.
5. Documentation showing the disturbance history (both logging & fire) for the GB0004 Burn Area.
6. Documentation showing the rationale for the decision to burn vegetation inside the Tolerable Fire Interval and also vegetation that was in an under represented growth stage.
7. A copy of the report from the additional Survey work and the resultant revised Fire Ecology Status Mapping as discussed in B3 above.
8. A copy of the Ecological Burning Assessment Burn Planning Report as per Yarra Ranges Fire Ecology Assessment (DSE/PV, 2011)
9. A copy of the Life Stage Assessment for Burn Planning. Note:- According to DEPI best practice this is *"a routine assessment of life-stage for key fire response species"*, which should be undertaken *"in all potential burn areas (or as many as practicable)"*
http://www.dse.vic.gov.au/_data/assets/pdf_file/0008/101312/Research_Report_74_-_Part_3.pdf
10. In addition to the above a description of the pre & post fire monitoring program put in place to enable evaluation of the ecological success of the burn.
11. A copy of the Overall Fuel Hazard Assessment Field Work forms recording the Plot locations (GPS coordinates) and individual Plot results as per Appendix 2 on page 41 of the DSE's Overall Fuel Hazard Assessment Guide 2010.
12. A copy of the Fuel Moisture Content Assessment Field Work Records indicating the Plot Locations (GPS Coordinates), Date, Time of day etc.
13. A copy of the Assessment of the GB0004 Burn by DEPI's Biodiversity Services Section.
14. A copy of the Ecological Burn Plan endorsed by the Land Manager, Parks Victoria.
Note:- This is the mechanism for ensuring appropriate Ecological Burn Standards. (See page 15 of the DSE/Parks Vic Guidelines for Ecological Burning, 2004.

15. Documentation indicating the rationale behind Melbourne Water's support for this Burn.

(D) Further Requests:-

1. As this Burn was an ecological burn rather than a fuel reduction burn the FOHC recommend that the investigation be headed by an independent professional fire ecologist.

2. That a moratorium on planned burning within the KKR (Zone 3) be introduced effective immediately until such time as the EVC growth stage/age class distributions are calculated specifically for this Park. This could be produced very quickly and at very low cost using existing data.

3. That Parks Victoria be requested to set up an independent expert review of the Zone 3 planned burning program within the KKR. This would include:-

- An analysis of the likely ecological impact of the program over the last 20 years. This would involve consideration of the ecological objective for each burn, the predicted ecological outcomes for each burn and the actual ecological outcomes for each burn. An assessment of this type is long overdue.
- Reviewing the appropriateness of the current Yarra Ranges Fire Ecology Strategy as applied to the KKR, particularly in regards to scale, as a basis for informing ecological planned burning given the high concentration of burning in this park over the last 20 years.

Yours sincerely
Laurence Gaffney
Secretary, Friends of Hoddles Creek Inc.
9728 2992



PHOTO:- Kurth Kiln Regional Park, Burn No. GB0004