

Memorandum



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To The Secretary of the Committee (Bushfires)
Steering Committee (SEQFABC)

cc Education Working Group (SEQFABC)

From Cuong Tran, School of EAS

Date Monday, 12 May 2003

Subject Submission on behalf of the Southeast Queensland Fire
and Biodiversity Consortium (SEQFABC) on House
Select Committee Inquiry of the recent bushfires

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Submission No.296

The Secretary,

Please find enclosed a submission written on behalf of the Southeast Queensland Fire and Biodiversity Consortium (SEQFABC) on the inquiry of the recent bushfires in southern Australia.

The SEQFABC is a regionally focussed organisation, driven mainly by local government authorities, to assist with fire management issues and the conservation of biodiversity in southeast Queensland. We also have significant input from the Queensland Rural Fire Service, Queensland Parks & Wildlife Service and the Environmental Protection Agency. During this time, we have developed a number of educational products, training modules and workshops, which have been widely implemented in the region focussing on the balance between property protection and biodiversity conservation values. Our success in the local region shows that both these objectives can be successfully achieved.

Thank you for considering our submission.

Cuong Tran

Cuong Tran
School of Environmental & Applied Sciences
Project Coordinator, SEQFABC



TERMS OF REFERENCE

HOUSE SELECT COMMITTEE ON RECENT BUSHFIRES

(a) the extent and impact of the bushfires on the environment, private and public assets and local communities;

The Australian landscape has evolved to become dependent on fire for the regeneration of many ecosystems. Even though the ecological impact of recent fires can seem quite devastating, in time, plants and animals will once again flourish in these areas. There are some plants and animals which thrive in more recently burnt areas and conversely some plants and animals which will thrive on areas which have been unburnt for much longer periods. It is important to provide habitats and areas which will support the widest array of plants and animals (and therefore maintain biodiversity), and this requires careful management to maintain this balance in fire frequencies.

This is explained in more detail in an additional document that I have appended with this submission. The relevant document that relates to this Term of Reference is a file titled "ecological guidelines.pdf", which explains the concept of the fire regime (consisting of fire frequency, intensity, season and extent) and how different vegetation ecosystems depend upon different fire frequencies. This is an important issue to highlight as alterations to this fire frequency may lead to the decline in some unique ecosystems.

The Southeast Queensland Fire and Biodiversity Consortium (SEQFABC) was formed due to increasing concerns from the local government authorities about fire management in local reserves and conservation areas and its potential impacts on residents and other stakeholders. During the project, which was funded through Bushcare and The Natural Heritage Trust program, it was evident that education and information were vital if the public were to become more knowledgeable on the fire management issues facing the SEQ region. It seems that in the aftermath of the fires in southern Australia, that there is a need for more education and awareness in the community on the bushfire issues.

We also refer to and support the IUCN Resolution – Impacts of Human-Induced Fire Events on Biodiversity Conservation. This Resolution is attached to this submission.

(b) the causes of and risk factors contributing to the impact and severity of the bushfires, including land management practices and policies in national parks, state forests, other Crown land and private property;

It is well known that the factors which can affect the impact and severity of bushfires are: (i) vegetation type (fuel etc.), (ii) weather conditions and (iii) topography.

The SEQFABC includes representatives from national parks (EPA and QPWS) and state forestry, in addition to the Queensland Fire & Rescue Service. There is widespread agreement in the SEQFABC that the current land management policies implemented by the main fire management agencies does require further coordination. This will improve current land management practices.

It is also the SEQFABC's fire belief that current fire management practices in these agencies are ecologically & socially appropriate taking in the proper considerations of protecting people and property whilst preserving the environment. The conditions which contribute to large extensive and severe bushfires is not the lack of land management practices or policies but conditions in the weather that are beyond our control. It is very clear that the most that we as managers of the land can do is *risk minimisation* and not *risk elimination*.

In relation to the fires which impacted on several suburbs of Canberra, it has been popularly believed that hazard reduction was insufficient on the city's edge, where in fact, there were extensive hazard reduction and backburning in Namadgi National Park earlier in the month of February before the fires encroached the city. This is an example where risk minimisation strategies were appropriately implemented but were rendered ineffective due to extreme weather conditions.

In the local region, there have been numerous examples where the edges of national parks and other conservation areas have been used as natural firelines to arrest the movement of wildfires. These areas contain relatively low flammability plant species and other natural firelines which have permitted the use of these areas to conduct fire suppression activities.

(c) the adequacy and economic and environmental impact of hazard reduction and other strategies for bushfire prevention, suppression and control;

Fire management practices, such as prescribed burning, can only *reduce the risk* of bushfires, and not eliminate the risk of bushfires. This is one of the most commonly held beliefs that we encounter at our fire management workshops. To further reduce the risk of bushfires threatening life and property, there must be strong emphasis on preventing continuing development in recognised bushfire prone areas. Empowering the community with information (such as the Individual Property Fire Management Planning Kit, that we at the SEQFABC have produced) will increase their knowledge and awareness of the fire management issues.

Environmentally, there are many research studies which have shown dramatic decreases in the biodiversity of areas which burnt more frequently. These are discussed in the 'Ecological guidelines' which are attached to this submission. In addition to the impact on biodiversity, frequent hazard reduction burning can also increase the rate of weed infestation and a proliferation of fire dependent flora, which increases the chances of more frequent fires.

Hazard reduction has a place in the risk reduction strategies, but it forms only one part of the wider land management strategy.

(d) appropriate land management policies and practices to mitigate the damage caused by bushfires to the environment, property, community facilities and infrastructure and the potential environmental impact of such policies and practices;

A balance here is required. The SEQFABC has always maintained a need for fire management strategies (such as hazard reduction and formation of firelines etc.) in areas where the risk is high, but also to maintain the other areas for biodiversity conservation. The documents that we have produced are now being used by the local government authorities in the SEQ region to formulate their fire management strategies throughout the region.

In these documents, we have always advocated the need to increase the risk reduction strategies where there is considerable risks to lives and properties, but also to maintain other areas for the conservation of biodiversity where ecologically appropriate fire regimes can be applied. The attached document "Individual Property Fire Management Planning Kit" is an example of how we have approached this fire management issue and maintain that balance between protection and conservation. We have conducted numerous workshops, and the landowners who have attended these workshops have unanimously agreed that this approach is achievable and desirable.

(e) any alternative or developmental bushfire mitigation and prevention approaches, and the appropriate direction of research into bushfire mitigation;

Alternative strategies that are recommended include:

- The SEQFABC has always advocated the need for improved educational strategies to inform landowners about the risks of bushfires and the appropriate mitigation strategies that can be implemented.
- Research topics that we have identified as top priority for SEQ are included as an attachment (please refer to "research projects.doc")

(f) the appropriateness of existing planning and building codes, particularly with respect to urban design and land use planning, in protecting life and property from bushfires;

It is imperative that any recommendation from this inquiry highlights the need to limit and exclude proposed developments in areas of high risk to bushfires.

The Australian Standard, AS3959-1999 (Building in Bushfire Prone Areas) is currently under review, and with the new information and research that has been undertaken and included will make this standard a better document. It is highly recommended that the Inquiry recognise the work that has been involved in the review of AS3959-1999.

(g) the adequacy of current response arrangements for firefighting;

(h) the adequacy of deployment of firefighting resources, including an examination of the efficiency and effectiveness of resource sharing between agencies and jurisdictions;

From our local experience in SEQ, it is apparent that the rural fire services get the least resources and yet do the bulk of the work related to fire management. In most cases, the rural fire brigades work on a levy basis and not from direct funding from the state or federal government. We would highly recommend increasing funding availability to the rural fire services and associated brigades.

(i) liability, insurance coverage and related matters;

(j) the roles and contributions of volunteers, including current management practices and future trends, taking into account changing social and economic factors.

1.24 Impacts of Human-Induced Fire Events on Biodiversity Conservation

RECOGNIZING that both protected areas and non-protected natural and modified habitats on public and private lands make a vital contribution to the conservation of biodiversity and ecological integrity;

RECOGNIZING that many ecosystems are highly sensitive to fire, for example wetlands, rainforests and alpine areas, and that their ecological integrity may be destroyed, degraded or significantly altered as a result of inappropriate fire regimes; and that other ecosystems such as prairies are dependent on fire to maintain natural processes;

RECOGNIZING that fire is required to renew or to maintain the natural ecological characteristics and functions of ecosystems such as natural grasslands, brush lands, pine forests and the boreal forest, and can be an appropriate landscape management tool;

NOTING that in many parts of the world the natural vegetation is highly flammable under certain conditions and that where land-use patterns are inappropriate this creates risks to life and property;

NOTING that urbanization (residential, recreational, tourism, etc.) increasingly extends into natural or semi-natural areas of value for biodiversity and that protected areas may receive large numbers of visitors;

NOTING that in many such areas the incidence of human-induced fires is increasingly more common than naturally-caused fires because of arson, accidental fire and planned fire events;

NOTING that in both protected and non-protected areas the optimum strategy is one that utilizes a better balance of techniques including planned fire events and non-fire-based risk reduction strategies;

NOTING that in some protected and non-protected areas the current management focus on the use of planned fire events for fuel reduction is giving rise to an increasing reliance on fire-based techniques at the expense of more ecologically and economically sustainable non-fire-based risk reduction strategies; and in some ecosystems the absence of fire-based management techniques may lead to the irreversible loss of biodiversity;

BELIEVING that all human-induced fire management strategies should place emphasis on ecological sustainability when implementing strategies to reduce risks for life and property;

The World Conservation Congress at its 1st Session in Montreal, Canada, 14-23 October 1996:

1. REQUESTS the Commission on Ecosystem Management to identify the types and extent of ecosystems subject to frequent occurrences of human-induced fire events, and to identify and consider the implications of human-induced changes to natural fire regimes for the biodiversity and ecological integrity of such ecosystems;
2. CALLS upon all governments to have regard for the ecological sustainability of affected ecosystems when implementing bush fire risk management strategies in relation to both public and private lands.