

COAG BUSHFIRE INQUIRY.

Submission by A. Hodgson.

COAG Bushfire Inquiry
Department of the Prime Minister and Cabinet.
3-5 National Circuit
Barton. ACT 2600.

This Submission refers in the main, to the forest fires in the Victorian alpine area last summer. My professional credentials are included with the submission. I can add that I was present in the fire area in the week after the fires started and later during the firefight. I have not addressed all the Inquiry's terms of reference but I would be pleased to meet the Panel to expand on the submission in any area of my expertise.

SCIENTIFIC HERESY

The Terms of Reference require your Inquiry to “*outline the facts on this seasons fires*” and “*to take account of and draw on bushfire inquiries.*” In doing so you should be aware that the Report of the Inquiry into the 2002-2003 Victorian Bushfires (1) conducted by the Victorian Government is seriously flawed. Its terms of reference did not include land management practices (other than hazard reduction) on parks and State forests; it contains gross errors of fact, omits evidence germane to critical issues and contains statements that contradict conclusions. The flaws lend credence to opinion held by many that the Inquiry held behind closed doors within the Victorian Department of Premier and Cabinet was not independent of political overtones and demonstrates considerable bias.

For example:

- **“The coincidence of many lightning ignitions and several to many days of Very High to Extreme fire weather was conducive to very rapid fire spread with reduced likelihood of successful early suppression.”** (Ch.6, par.6.2).

The facts of the January 2003 fires are that most of them started on January 7/8 when the Fire Danger (FFDI) at Corryong was Very High and at Mt. Hotham, Low. The daily maximum FFDI then fell below Very High and it was not until January 16, *eight days later*, that it reached Very High at Corryong . (High at Mt. Hotham). (Ch.6. Fig.6.1) (App.VI. Fig.VI.2).

The coincidence of many lightning ignitions and many days of Very High to Extreme fire weather in January 2003 is a myth when made in the context of *early suppression* of the fires. Your Inquiry should probe what motivated the Victorian Inquiry to include such an erroneous and misleading statement in its Report.

- “ – the fires of 7 and 8 January may well have been unprecedented—at least in terms of the number of lightning strikes causing fires.” (Ch. 17, page 179, par. 17.66.)

The Report ignores history. About 90 lightning strikes from one storm front initiated the “Gippsland fires” in February 1965 (2). And more significantly, in 1985 lightning started 111 forest fires on January 14/15 that burnt 150000 hectares. (50000 ha. in the alpine area).

There are similarities in the number, cause (lightning), location (alpine area) and weather between the 1985 and 2003 fire events that make the 1985 event pivotal to an objective appraisal of the response to the 2003 fires during the first week they burned. The Victorian Inquiry knew of a Departmental Report (3) detailing the 1985 event yet totally ignored those fires in its Report. It is a serious failure of procedure and scholarship that such important information be deliberately ignored. By doing so, the Inquiry denied the Victorian Government and readers of the Report full opportunity to judge whether or not Victoria was in 2002, as well prepared as it was in the past to combat forest fires, especially with regard to early suppression of fires in the alpine area.

Your Inquiry must not be denied that opportunity and should find and examine the evidence.

- “At Corryong the drought of 2002-2003 was the worst on record.” (Ch.6, par.6.16).

The record on which this statement is based is the Keech Byron Drought Index (KBDI) for the period 1974 to 2003. That record shows that the drought became the worst on record in that period on January 20, 2003, *ten days after the fires started*. Other studies show that the 2002/2003 drought in the alpine area was equaled or surpassed several times in living memory. (4). If your Inquiry needs further evidence it should talk to farmers and graziers who worked the land during the 1938/39 drought.

- After considering all aspects of prescribed burning in forests, (Chapters 6, 7, 8, 9, 10 and 11), the Victorian Inquiry concluded: “ **The large area affected by the summer 2002-2003 fires, the calls for increased ecological burning across large areas of the State, the evidence of Tolhurst on rotation times for Zones 1 and 2, and the apparent decline in area subject to prescribed burning per year suggests that the trend, at least, should be for more prescribed burning rather than less.** (Ch. 11, par.11.16.)

The Report does not contain any recommendations in accord with that conclusion. In their letter of transmission of the Report to the Victorian Premier the Panel members disagreed with their own conclusion by saying they “**agreed with an assessment that their interim Report was not necessarily about burning more land but about burning smarter.**”

- **“This Inquiry did not follow a failure.”** (Executive Summary, page xxxv.)

The three member Panel conducting the Inquiry included two ecologists. By some extraordinary hallucination they concluded that a fire event that started with about 80 lightning ignitions and ended 60 days later as one conflagration covering more than a million hectares of alpine forest is something better than a failure.

Science says that burning a large contiguous area in a short time frame reduces biodiversity, (the variety of native organisms from tall tree species to microbes; from genes to ecosystems). And this fire was in many places, very intense. So intense that soils were exposed, made unstable and flowed as mudslides after storms. The mind boggles at what had to happen before the ecologists would call the January 2003 fires a failure.

LESSONS FROM THE PAST

A review of past events can help explain why fire management in regional Victoria is now attracting so much criticism and prompting Inquiries. And it can point to things that must be done to avoid burning 1.12 million hectares of native forest in one conflagration in the near future.

Two Royal Commissions after fire disasters in 1939 and 1944 triggered Government action that gave the Forests Commission (FCV) the statutory duty to carry out *proper and sufficient work for the prevention and suppression of fire in every State forest and national park and protected public land* plus resources to do the job. The Government also established the Country Fire Authority (CFA) to manage fires in the “*country area of Victoria*”, i.e., the rest of the State outside the metropolitan fire district.

These changes gave to regional Victoria, effective programs to reduce hazardous fuels and skilled firefighters to combat fires in forests and grasslands. Those programs and skills were equal to any in the world and the CFA and FCV kept then so over four decades. In that time FCV got high praise in a judicial Inquiry into the fires in western Victoria in 1976 (5) and both agencies performed to community expectations on Ash Wednesday 1983.

In 1985 both agencies faced a fire event with uncanny similarity to the January 2003 fires. (3). Lightning started 111 fires on Jan.14/15, 1985 in a pattern similar to that of Jan.7/8, 2003. Premier John Cain and Ministers Race Mathews and Rod McKenzie presided over a team similar in size and complexity to the one assembled in 2003. The similarities end right there. All members of the 1985 team knew what to do and they confined the alpine fires to 50000 hectares, compared to 1.12 million hectares in the latest fires. And in the aftermath, debriefs were held without rancor or political interference.

Why then did fires caused by lightning escape initial attack and get so big in 2003? It was not due to a “worst ever” or “once in a lifetime” drought and it was not due to severe

weather when the fires started. (1) (4). And it was not due to any difficulty in mapping the origin of the fires as claimed. (1). Victoria's state of the art airborne remote sensor was fully operational and mapped the fires promptly and accurately.

In 2003, firefighting agencies committed the first cardinal sin in firefighting, namely, **failed to make an initial attack with sufficient force**. Time, measured in days rather than hours, passed before ground crews made initial attacks on some fires that ultimately became uncontrollable.

Three things set the 1985 and 2003 scenarios apart and understanding them will help understand what must be done to minimize the occurrence of very large forest fires in the future.

First: The Initial Response.

Initial attack by ground crews was faster and more effective in 1985. At that time a larger number of people earned their daily bread working in the alpine forests. They included people working on hydro-electricity projects; tree fellers, sniggers and log carters employed by the timber industry; graziers; forest workers building fire access tracks, maintaining roads and tracks, and picking seed for forest regeneration and forest officers supervising forest licensees, forest works and planning autumn prescribed burning for forest regeneration and fuel reduction. Those people had the range of skills, experience, tools, transport and machinery needed for prescribed burning and "dry" firefighting. And importantly, they had good access for rapid initial attack on fires where they worked.

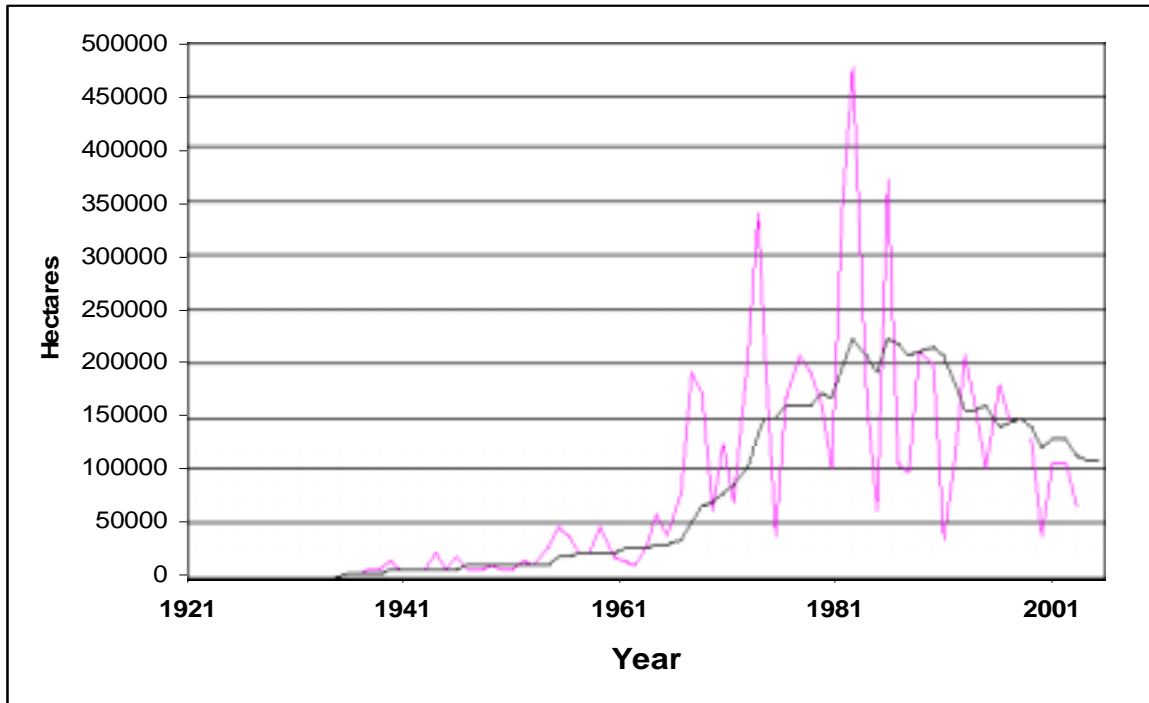
Land-use decisions by successive Governments decimated that workforce and re-deployed some of the remainder to other activities. The Department of Sustainability and Environment alone reports that its permanent field based staff dropped from about 1500 to 2000 in the mid 1980's to 250 in 2003. (1). The same Government decisions caused some fire access roads to be deliberately destroyed and others to become unsafe due to neglect.

If fire management is to regain lost ground and be effective in the future the Government must provide a permanent workforce in parks and State forests do the things that need to be done to maintain forest biodiversity. That workforce must have the numbers, skills, transport, tools and machinery comparable to the one that existed in the mid 1980's. And it must have good access.

It is not necessary to reverse land use decisions to do this but it is necessary to change land management practices. The workforce must have a mission appropriate for the land use. The mission across *all* forested public land must be to plan and conduct fires to reduce fuel loads, maintain a low maintenance access system, re-vegetate damaged sites, catch feral animals and eradicate weeds. Where the land use permits commercial operations such as forest harvesting, the mission must include additional works appropriate to the operation.

Second: Fuel Management.

The quantity of fuel management programs crashed after 1983. This is illustrated in the Figure below, which is adapted from Tolhurst (6) and shows the annual area of public land burnt by prescribed fires for hazard reduction in Victoria. The black line represents the rolling 10-year average.



Fuel reduction burning (FRB) peaked in the early 1980's and then fell. It fell despite the fact that after the 1983 Ash Wednesday fires the Victorian Government doubled the money in the 1983/84 budget for FRB programs.

Australia once led the world in making fire including prescribed fire, an integral part of forest management. That is no longer true. The political agenda changed in the early 1980's when Governments bowed to environmental extremists who said what they liked so long as it supported their cause irrespective of whether it was true. Those people abandon truth when it does not support their ideology and get away with it because the media and the public are bored by facts and thrive on conflict, sensation and disaster. When they found fire to be a natural part of the forest environment and any given fire regime could be shown to benefit some elements of the forest ecosystem and damage others, a fertile ground for their disinformation opened up. When no single plant or animal could be shown to have become extinct due to prescribed burning, science was abandoned. "Threatened and endangered species" became the emotive buzzwords and "more research" the alternative to management by objective.

This influence on successive Governments from the early 1980's to now caused massive structural changes within agencies responsible for managing public land. One consequence

of this is that fire prevention on public land is now relegated to a non-core activity and FRB is not given the highest priority amongst priorities competing for the resources needed to do the work. As evidence of this, in 1992 the Auditor General found that the Department of Conservation and Environment failed to achieve its planned fuel-reduction targets in three consecutive seasons and that those areas the Department identified as warranting the highest level of protection to human life, property and public assets received the lowest level of protection (7). Again, in 2003 the Auditor General found that since 1994, FRB has never met the Department's planning and operational targets. (8). In allowing this, Governments ignored the truism heralded by Judge Stretton (9) and endorsed by Sir Esler Hamilton Barber (5), that fire prevention must be the paramount consideration of the forest manager.

The situation can and must be re-dressed. But it will only happen when political leaders accept that science says eucalypt forests must burn or become extinct. Excluding fire for "ecological reasons" makes no sense and the reality is that we must learn to live with fire in our forests. Part of that lesson must be that unplanned fires be controlled when and wherever they have potential to damage biodiversity and/or lives and community assets.

A practical and successful fire management program involves a mix of suppressing unplanned fires when they are small and prescribe burning large areas under fire regimes appropriate to each forest type. This is necessary to sustain biodiversity over the whole eucalypt forest estate. Some compromise must occur where the dual objectives of protecting environmental values and protecting life and property cannot be achieved. On these areas management must give priority to protecting life and property. The areas are immediately adjacent to private property and comprise a very small fraction of the total eucalypt forest estate.

The current trend in southeastern Australia to suppressing large fires at the forest/ private property interface is the inevitable consequence of failed forest fire management programs. We don't have to learn anything new to reverse the trend. We know the fire regimes appropriate to forest types, we know the skills and technologies required to control and use fire and we know from experience that it can be done. We lack the political leadership that allows it to be done. I strongly recommend your Report say so.

Third. Urbanisation of the Country Fire Authority.

Volunteer firefighters with local knowledge and years of experience of handling fires on their own patch were sidelined during the 2003 fires. (1).

The Country Fire Authority (CFA) was established in 1944 after Judge Leonard B. Stretton sitting as a Royal Commission, reported on fires that burnt more than a million hectares, killed 57 people and set the Yallourn coal mine alight. (The Royal Commissioner had previously reported on the disastrous fires of 1939). It was a "peoples fire service" responsible for managing fires in the "*country area of Victoria*" which in loose terms means the whole of Victoria except the Melbourne metropolitan fire district, national parks, State forests and some other protected public land. CFA brigades were organized in two wings, urban brigades in the larger towns and rural brigades in smaller

towns, hamlets and farmlands. Volunteers were the heart and soul of the system and they were motivated by the need to protect themselves and their neighbours from fires on their own patch.

Demographic and other changes since 1944 altered the face of regional Victoria. The boundaries of the “*country area of Victoria*” did not change in response and the CFA had to provide an effective fire service in rapidly growing cities like Springvale, Dandenong, Geelong, etc. and for refineries, power stations, transport terminals and the like outside the metropolitan fire district. The CFA responded to the challenge by building up its urban wing and it did the job well. I have not seen a better service anywhere and I’ve seen many.

But there is a downside. I was a member of the CFA Board in the 1980’s and even at that time ideological differences between the two wings were appearing. Urban interests including those of the firefighters Union, dominated the internal politics, time and energies of the Board, its staff and field officers. The rural wing felt that the Authority was losing direction and the volunteer system and its needs were suffering. Things have gotten worse since the 1980’s. The CFA now has a very effective urban wing that for all practical purposes is indistinguishable from the metropolitan fire service. Supporters within and without the urban wing are saying that volunteers are barnacles retarding progress towards an elite fire service staffed by fulltime firefighters. (Unions don’t like volunteers and never will.)

The number of CFA volunteers is declining. If those volunteer farmers now threatening to quit because they have little say in how fires are fought on their own patch carry out their threat it will be tragic. A dentist can replace a farmer and keep the numbers up in a volunteer service but the service suffers. A dentist is likely to be skiing in Colorado when a fire starts near Stawell. A farmer will never leave his property unprotected.

Radical surgery is needed right now to hive off from the “*country area of Victoria*” those places including places in regional Victoria, that need and can afford a fulltime fire service and vest it in a re-vamped metropolitan fire service. The CFA can then return to its roots—volunteers helping neighbours on their own patch.

This surgery must not allow the CFA or any other fire service to take over the responsibility for fire management on national parks, State forests and the like. Why? Vegetation on public land is fuel for fire and whoever owns the vegetation owns the fire. Volunteers should not be lumbered with a problem that rightly belongs to a Government agency. Judge Stretton trumpeted this point after the 1939 fires and to its credit the recent Victorian Inquiry agreed.

Yours respectively,

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References Cited.

1. Report of the Inquiry into the 2002-2003 Victorian Bushfires.
2. Murray R and White K. State of Fire. A History of Volunteer Firefighting and the Country Fire Authority in Victoria. 1995.
3. Summary of Significant Events 1984/85 Fire Season. Presented to Australian Association of Rural Fire Authorities by Department of Conservation, Forests and Lands, Victoria 1985.
4. Inquiry into the Recent Australian Bushfires. House of Representatives Select Committee. October 2003.
5. Report of the Board of Inquiry into the Occurrence of Bush and Grass Fires in Victoria. 1977
6. Tolhurst K. Prescribed Burning in Victoria: Policy and Practice. Paper presented to Bushfire Prevention- are we doing enough? Conference. Institute of Public Affairs, March 2003.
7. Fire Protection. Special Report No.16. April 1992. Victorian Auditor- General's Office.
8. Fire prevention and preparedness. May 2003. Auditor General. Victoria.
9. Report of the Royal Commission to Inquire into the Causes of and Measures taken to Prevent the Bush Fires of January 1939 and to protect Life and Property; and The Measures to be taken to Prevent Bushfires in Victoria and to Protect Life and Property in the Event of Further Bush Fires.

CAREER SYNOPSIS.

Athol Hodgson earned a national and international reputation in the fields of fire ecology, fire behaviour and fire management during a professional career spanning four decades.

He trained as a forester at the Victorian School of Forestry and Melbourne University. In 1966 he was awarded one of the first Winston Churchill Fellowships for a twelve-month study of fire management in Canada and USA and was in the top 5% of graduates from the National Advanced Fire Behaviour School, Marana, Arizona.

He worked as a fire researcher for the Forests Commission, Victoria in the 1960's during which time he collaborated with his peers in the Commonwealth Forestry & Timber Bureau, CSIRO, and other States on fire behaviour studies in W.A, ACT and Vic. He initiated the first definitive studies of fire behaviour and the effects of fire on native flora and fauna in Victoria and built results into the operational guidelines currently used by forest fire managers in that State. He worked with volunteer and career firefighters to develop the operational use of rotary and fixed wing aircraft for aerial ignition of prescribed fires and for firefighting.

He lectured full time for four years at the Victorian School of Forestry, Creswick and was a visiting lecturer at Melbourne and Monash Universities.

He held a number of senior posts in the Victorian public service including OiC Forest Environment and Recreation; Chief, Division of Forest Management and Commissioner of Forests in the Forests Commission and Chief Fire Officer in the Department of Conservation Forests and Lands. As a senior manager in the public sector he served on a number of Boards and Committees including the Board of the Country Fire Authority, the State Disaster Committee (Displan), the steering Committee of the National Bushfire Research Unit, CSIRO and the Australian Association of Rural Fire Authorities. He was a member of a Trade Mission to Canada to evaluate the use of aircraft for firefighting, an Advisor to the Commonwealth Government on mass fire behaviour and was seconded to the State Electricity Commission during the Board of Inquiry following wildfires in 1977.

He retired from Government service in 1987 and has since used his fire management expertise in a number of projects including:

- 1987-89. A/G Manager, National Safety Council of Australia (Vic Division) Responsible for NSCA fire services offered to fire agencies and private forest growers in Australia, Canada and Spain.
- 1990. Advisor to Q.C. in NSW Supreme Court in the case *Blanche & Ors. - V - Sutherland Shire Council & Ors.* (subsequent to the tragedy in the Grays Point fire in the Royal National Park 1983.)
- 1991. Consultant to the Fire Review Committee established by the Tasmanian Government to review the role of vegetation-based fire in Tasmania.
- 1994. Consultant to State Forests NSW to review the Fuel Management Program in the Eden Management Area.
- 1995. Consultant to State Forests NSW to review and report on that agency's Fire Management in NSW.
- 1996. The preparation of a Prescribed Burning Manual for the Victorian Department of Natural Resources and Environment
- Current. Consultant to Blake Dawson Waldron acting for NSW Farmers Association re: damages from fire that escaped from the Goobang National Park, December 2001.

PUBLICATIONS.

He has published a number of articles on fire management in Australian and overseas professional journals. A list is available on request.