SUBMISSION FOR

Public Accounts and Public Works Committee
Management of Rural Fire Services in Queensland.
Discussion Paper – November 2009

Contents

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Rural Fire Service and Urban Fire Service operational business service delivery models are based around completely different risk factors that in turn require completely different approaches. The risks are Urban – tar and cement, Rural – trees and grass. There may be some cross over service delivery but for all intent and purpose this is only a minority, each risk is specialised.

Urban

Urban full time and part time stations are **fee for service with a guaranteed response time frame to the levy payers.** The amount paid by an occupant varies dependant on the complexity of structural risk and whether staffed full time or part time fire stations. Water reticulation is the mandatory primary resource. Collection of fees is via the Local Government rates on behalf of QFRS and in turn pays salaries/wages **(90% -source annual reports)** and remainder goes towards housing, equipment and resourcing.

Road accident rescue is also a primary role in designated areas, (SES volunteer groups are primary responders in rural areas) moneys for these services are collected for the emergency service department through levies on vehicle registration.

Resourcing is focused strongly on the correct application, for example, large water pumps capable of high pressure and volume, trucks may only carry 2,500 litres maximum but are also capable of carrying ancillary equipment that is necessary in a structural environment where chemicals and pollutants need specialised equipment.

Staff expertise backgrounds are akin to man made structures evolving from trades such as construction, hydraulics and the like with specialist expertise developed particularly around chemical reaction of substances. Local Government rates provide the reticulated water supply as per specification in building codes and hydrant locations for subdivisions that fall within the specific response timeframes.

Structural fires require fast response, once a fire takes hold it is likely the building will be demolished even though it may look sound from the outside. Fire fighters are highly skilled and are remunerated accordingly for full time and payment is an incentive for part timers to join up. Because rate payers do pay a fee for service there is an expectation for this service.

Fire stations are located within relevant response time frames and are centralised. An Urban risk model looks at fire as a static type risk that may elevate in a man made structure and protection of subsequent exposures in high structural and residential areas.
Prevention strategies are based around an immediate threat depending on quick response to eliminate the possibility of life and property loss, for example evacuation plans, smoke detectors, fire extinguishers etc.

Rural
The discussion paper summary mentions the four brigade classifications of izone, village, rural and primary industry.
The risk factors vary accordingly in type; izone and some village brigades mirror the urban risk type modes' operandi model of buildings and structure clustering. These brigades profile may be better aligned with the fee for service model because of the required resourcing and training needs similarities. Economic wise, a balance of payment meets user pay expectations is better aligned to paid personnel then volunteerism. In recent times I have witnessed this frustration from volunteers at interface zones to the extent that volunteers are fading away and are losing interest. In fact because volunteers refuse to respond urban brigades are obliged to in this izone non fee for service locations and are not reimbursed for the response thus not accounting to the levy payers who pay for the service.

Most village brigades that are a volunteer brigade is due largely to the fact they are not populated enough to make a viable fee for service delivery model. These types would best be left under Rural Fire Service management. Small populated town communities tend to fully understand self determination and the tyranny of distance to help or assistance so do chip in so to speak, helping thy neighbour.
In regional Queensland over 80% of the total of volunteer brigades are Rural and Primary Industry brigade classification, their major risk factor is a vegetation fire that threatens infrastructure, livelihood, environment and cultural. These vegetation type fires are a moving fire and not stationary like a structural fire. The type of equipment, resource and training required is much different, for example appliances need to be four wheel drives, small and manoeuvrable. The best credentials for rural fire fighters are those from a land management or primary producer background with an affiliation of forest and grass types, especially those who use fire with first hand knowledge of the dynamics of how fire behaves with different vegetation species. The Fire Wardens also need to know because industry uses fire for reasons that not only include hazard reduction but for other specific outcomes, for example sugar and grazing industries, biodiversity habitat and weed management.

Over 95 percent of responses to fires by rural brigades are vegetation type fires, structural fires may only happen on extremely rare occasions and in a rural area is not a threat to another building exposure due to space between them. Also there is no

guaranteed response due to tyranny of distance, driveway access, no reticulated water supply and most importantly, a volunteer may not be available.
For all intents and purposes the majority of volunteer rural brigades are based on a decentralised response; equipment may be housed on farms or properties and not in a centralised fire station which in turn enables an initial faster response time. The majority of rural volunteer brigades also may utilise their own private machinery and vehicles that is more suitable to the area then a fire appliance. It would be difficult to levy these brigade types given the good will.
The village or small town brigades including some rural residential lifestyle subdivision locations may require the EQUIPMENT levy because not all can contribute with equipment so a central fire station then becomes necessary.
In the larger populated areas where a rural fire brigade major risk is a structural environment and resourcing and training align with an urban risk model the expectation from residents is the same as those in the city. A fully levied fee for service is warranted and should come under the auspices of an urban modes operandi. Thus an appropriately funded town service delivery expands appropriately and balances the books within the fees for services inappropriately taken from the larger towns raised taxes.

Rural Fire Services in Queensland.

There are two distinct streams of fire management roles mentioned in the discussion paper that come under the Rural Fire Services of Queensland;

- The safe use of fire by land owners and/or occupiers by control through a permit to light fire authorisation through the auspices of the 2,300 volunteer Fire Warden network, and;
- Response to and suppression of wildfire that threatens life, property and the environment. Volunteer Rural Fire Brigades service the non fee for service locations of Queensland and basically are conceptualised into three response models of interface/rural residential, small towns/villages and broad acre.

Role of Fire Wardens:

Fire is a natural part of the Australian landscape given the vegetation type and ecosystems spread across a diverse geography that is shaped and adapted to variable seasonal weather patterns.
Fire is a land management tool, whether occurrence is induced or natural, and, can either be friend or foe depending on how and when it happens. Used responsibly and correctly it is one of the most cost effective and efficient tools known for land managers to achieve the desired outcome. This includes an array of custodian types such as industry, environmental and cultural. For example, the grazing and sugar cane industry, the biodiversity and vegetation habitat type can be lost or maintained through fire or lack of fire, and, healthy country through removal of introduced and native weeds, and, excess fire fuels. (Hazard mitigation is only a small part) It will become more necessary for land managers to use fire more often should climate change progress in the future. Failure to do so will see more catastrophic bushfire events impacting on the landscape. Managing the firing of the landscape through coordination and facilitation will prevent command and control of unstoppable wildfire during extreme fire weather. Proactive management of vegetation is distinctly less expensive on the public purse with a higher chance of success verses a reactive

strategy that is doomed to failure. In contrast, fire can be destructive threatening lives, livelihood, infrastructure and the environment if fire is not treated with the respect it demands or is failed to be utilised at all over a few years culminating into a Victorian type bushfire disaster event. **(NOTE attached papers by renowned botanist Peter Stanton –attachment 1 and scientist Rodger Underwood –attachment 2)**

Fire knows no boundary and the "permit to light fire" system administered by a localised Fire Warden network is by far the proven best method of fire control in Australia. The appointment of a **local who will have local knowledge** of industry or outcome requirement and intimate local knowledge of perplexing community issues plus the added local knowledge of weather dynamics and it's impact. For example, the Bureau of Meteorology may issue a very high fire danger over a specific location but a local warden will be aware the area has been in drought or the area is heavily grazed and there is very little grass with no danger of fire escaping. Computer models or centralised permit issue can never compete with local knowledge.

Volunteer Rural Fire Brigades have also been close community knit ethos types and predominately their reason for volunteering is a sense of ownership and caring for their local area. Contrary to the statement made in the discussion paper that Fire Wardens have been at arms length to Rural Operations, nothing could be further from the truth and is completely wrong. This statement indicates that the "enhancement package" introducing change late 2006 with a service delivery model refocused to a centralised town system has extinguished corporate knowledge of rural fire use as per the reasons that initiated a "Rural Fire Service". The introduction for the first time of a CEO for Rural Operations from a town fire service background model has strongly brought about a change in control and restriction on fire. The knowledge in the dynamics of fire behaviour relevant to the vegetation and the use is rapidly being lost in the implementation of "a square peg in a round hole" scenario whereby imposing a town attitude that all fires are bad will bring about the mega fires of southern states into Queensland and along with it the cost on the taxpayer purse.

Fire Wardens, for the majority, have close working relationships with their respective volunteer Rural Brigades. In fact over 90% of Fire Warden District boundaries align with their relevant Rural Fire Brigade boundaries and the permit indicates to an applicant the requirement to notify.

The permit to light fire system has been the cornerstone of fire management in Queensland since 1946 "Rural Fire Act" introduced the permit system.

RECOMMENDATIONS:

- Substantial public education support is required to ensure that rural land management fire usage practices are not overlooked to appease a town fire service approach.
- The Fire Warden system/network is either placed with a land management advisory Department such as DPI (DEEDI), **or the preferred option,**
- **Rural Operations becomes a separate entity to QFRS becoming known as "Queensland Rural Fire Service" operating under a CEO from a mandatory rural background, managing the volunteer arm within the**

Department of Community Safety, DEEDI or Department of Local Government.

- The permit to light fire system is maintained in its present format of decentralisation of decision. Some minor adjustment is made to the permit form to cater additional comments and addresses of applicants.
- Equipment supplied is appropriate to task in vegetation fire fighting, appliances are manoeuvrable for terrain. Present supply of trucks is urbanised and are increasing in size requiring special licences and not appropriate off road.

Role of Rural Fire Brigades:

The rural organisation is fundamentally a volunteer, unpaid, community based organisation that draws upon the local land owners as the primary source of membership. They provide assistance to communities through:

- Fire suppression in rural areas;
- Community awareness of fire hazards; and
- Training.

Some brigades may assist in

- the management of hazard reduction burns and
- The management of prescribed burning for the relevant outcome.

Primarily, these roles are the responsibility of the land holder and are managed through the volunteer Fire Warden System through a permit to light fire, the land holder engages in the physical application of the burning practice is his/her responsibility.

A Rural Fire Brigade has no powers until such time as a fire is declared a wildfire or uncontrollable wildfire threatening life, property or the environment. The required equipment is suitable to off road and a "running fire" where there are not usually water hydrants. In comparison to town requirements the equipment is relatively inexpensive, and, unlike a paid organisation all funds go to equipment and training, not salaries and wages. The major focus for the small cadre of paid staff in any area is directed at coordination, facilitation, and extension and training volunteer ownership.

Finance

Primary Producer and Rural Brigades:
Primary Industry and environmental ecosystem management are the main owners of risk or loss in rural areas, particularly inaccessible broad acre locations within subdivided farm demographics. (Tourism is indirectly affected in some locations.) In some instances government or tax payer owned lands. Under the "Blueprint for the Bush" "The Blueprint introduces new strategies for rural infrastructure and services, and strengthens existing measures that are working well," and, the "Delbessie Agreement" provides funding for land agreements and preparing for climate change. Are fire management strategies and plans a major component, yes a major component in climate change and risk to life property and the environment. Some of these consolidated revenue dollars should be directed to the Rural Fire Service. (Presently

some Rural Operations Area Offices in regional rural Queensland are closed or are not staffed, which I believe is in contrast to this blueprint.) In fact I would recommend that there is a need for more Rural Operations Offices opened, for example Normanton & Horn Island.
Insurance payment subsidies also should be paid to Rural Fire Service for equipment purchases. For example large tree plantations values are worth millions of dollars, some assistance from a community volunteer brigade is more than likely welcomed. In contrast the potential wildfire threat from these plantations to neighbouring communities is huge if not managed properly.

Village and small Izone:
In the interface some brigades collect the equipment levy through the Local Government rates, this does not suit all brigades but should be allowed to continue where appropriate. The support by Rural Operations through promoting an equipment fund levy only and not a fee for service will halt any expectation and promote continued volunteerism. Importantly any member or potential member of a volunteer brigade should be an owner and or occupier either residing or working within the brigade area.

Izone:
Large populated locations with a majority of structure being the greater risk becomes a fee for service delivery model transferred under the auspices and relevant expertise of an Urban Fire Brigade.

My Background

I have been employed with the Queensland Government since the 8th February, 1971 commencing with the Forestry Department and trained as a surveyor. After 8 years service transferred to the National Parks and Wildlife Service for a further 8 years before spending 4 years working under the Fraser Island Recreation Board. Part of my role during time with National Parks and on Fraser Island was as a Fire Warden.

During March 1990 I joined the Rural Fires Board as a District Inspector and to this day I am still employed in this role albeit under what has transpired into the Rural Operations of Queensland Fire and Rescue Service, Department of Community Safety.

I have been deployed to wildfires in southern states as OIC and have been involved in the research CSIRO Project VESTA with Phil Chaney. In the late 1990's represented the then Commissioner for "Queensland Rural Fire Service," Pam Millican, on the Northern Australian Fire Managers Forum." During 1999 my team of employees and myself hosted the Northern Australian Fire Workshop over 5 days in Cooktown.

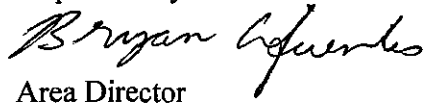
In my Inspector role I have formed numerous volunteer Rural Fire Brigades and appointed many Fire Wardens from the Northern Territory border to the New Guinea border south to the Cardwell Range just north of Ingham. I have also worked in partnership with stakeholder organisations such as Local Governments, Agforce, the Sugar Industry, Mining Groups, Indigenous communities, Environmental groups

such as Landcare, Wilderness Society, Water Catchment Groups, Natural Resource Management, Conservation Council, Universities and other State and Federal Government bodies.

I have a passion for fire management in a holistic approach and have formed strong bonds and a respect for the volunteers, fire managers I have worked alongside and have been involved in fire research in the Rangelands of Queensland.

I would sincerely welcome any further discussion with the Audit Panel and trust that my outlined opinion, are, **my personnel observations** of how best practice can be achieved, and, with all due respect, not that of the Rural Operations Senior Management in Brisbane Central office.

Inspector Bryan Cifuentes



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ATTACHMENT 1

CARE AND CATASTROPHE

A Comment on Fire and the Australian Bush.

by Peter Stanton.

Born and raised in a northern seaside suburb of Brisbane in the 1940's and 1950's I was a child of both the city and the bush. In those fargone simpler days the bush pressed hard on the sprawling outskirts of the city and wilderness was never far away. Not only did the bush almost swallow some suburbs, but the vast sand islands that guard Moreton Bay were unspoiled paradises of forest, swamp, flowering heath, giant sandhills, and seemingly endless surf and still water beaches. Abundant wildlife delighted our senses from the Kookaburra's first cheerful morning chortle until the wail of the curlew lamented the passing light. Vast flocks of lorikeets darkened the morning sky and wallabies were often disturbed from their repose in the noontide shade.

This environment shaped my life, my view of the world, and my passions for evermore, and I cannot view the endless urban sprawl traffic and concrete-rimmed beaches of today's south-east Queensland without an aching heart. It is a pain that could more easily be accommodated if it were possible to accept that the devastation stopped with the suburbs - that in the bush that still abutted the city in places, and sent twining fingers into the suburbs, or remained as islands within them, the heart of nature still beat in a vital way. Alas it does not. The condition of the bush is an environmental catastrophe complementing the total destruction of the natural world that the suburbs represent, and it is a disaster that has afflicted most of the bush throughout the south-east of Queensland. The greatest irony of all is that it is a catastrophe arising indirectly out of the concern of rising urban populations for the fate of the remaining bushland. Care and catastrophe seem to have become inextricably intertwined in the fate of much of the bush of eastern and southern Australia.

Fire and the bush are mingled in my childhood memories. In days of summer when harsh dry leaves crackled under tough bare feet, smoke and the smell of burning eucalyptus filled the air. It was not a matter for concern or alarm. Fires crept at random through the landscape. We played in the bush, following the fires with interest, reacting with glee as tufted grass-trees burst into flame or as gusts of wind caused temporary flare-ups, and flames raced up the trunks of paperbark trees. With some notable exceptions, mainly State Forest areas where they were treated as an enemy to be suppressed at any cost, these fires caused little public concern, beyond the occasional wind-driven grass fire in some vacant urban allotment or unkempt parkland. On the bay islands and in remote areas of coastal heath, fires would burn for days or weeks on end, with occasional periods of billowing smoke heralding intense phases as they swept into long unburnt patches of wallum heath and swampland.

In those early days most of the dominant scribbly gum woodlands of the less hilly areas surrounding Brisbane were picturesque open areas, with a grassy ground cover and an understory largely unimpeded by shrubs except in moister hollows and gullies. Today the picture in the surviving remnants is largely very different. A dense understory of Casuarina shades out the ground cover over large areas, and the noxious weed lantana chokes gullies and watercourses and scrambles up hillslopes. Much diversity of habitat and landscape variety has gone. Fire has also largely gone from the landscape. Some species of wildlife would have benefited, but many more would have suffered. That benign influence that so shaped that long-gone landscape will one day return as a vengeful monster fed by years of exclusion or neglect.

People do care about the bush and its wildlife and they like to know it's there and around them, they love it and the wildlife it brings to their backyards, and fire is seen to be the natural enemy of both. This attitude above all has sown the seeds of destruction of these things they care about.

This summer, fires erupted over large areas of south-eastern Australia, destroying homes and property around Sydney and Canberra and burning for weeks in forested mountains of north-east Victoria, south-eastern New South Wales and the ACT. It seems that rarely, if ever, including during the historic fires of 1939, have such large areas been burnt in single fire events, or has so high a proportion of the forested estate of those areas been affected. The recriminations and debate over who was to blame and what could have been done to prevent these disasters are progressing, just as they have after past events. The arguments from all sides are as predictable as they have ever been. The lessons, whatever they are, do not appear to have been learnt and I fully expect that before too many more years have passed we will have both the fires and the debates again.

Those with a particular view point to push, no matter how extreme, now find in the disasters evidence in support of their views. Land managers and fire authorities have found shelter in a stance that says nothing could have been

done to prevent such events in the face of extreme weather conditions. The firefighters are (deservedly) the heroes of the moment, but budgets for preventive action continue to shrink.

Aboriginal people could not have survived current fire regimes. The livelihood and lives of people who lived in the bush and depended on it for all the resources they needed for survival, would have been extinguished. No people who depended daily on the camp fire and the fire-stick would have tolerated the conditions in which a stray spark could have ignited a fire that burnt with modern day ferocity and speed and consumed the countryside for 100km or more. Undeniably Aboriginal people burnt the bush. They burnt it methodically in ways that ensured the survival of themselves and the resources on which they depended, and in so doing they managed the level of fuel around them.

Arguments about whether to burn or not to burn are about as useful today as arguments about whether or not the earth is flat, yet they continue to surface. The arguments should be about the "how and when", yet it is difficult to see how we can reconcile the opposing points of view in that debate, to arrive at a useful outcome.

It is an unarguable fact that of the complex of factors that affect fire behaviour, the level of fuel accumulation is the most important. This point is often obscured by statements that come in a tediously repetitive way from land managers, fire authorities, and politicians that no amount of burning could have prevented the fires that erupted across southern Australia in the extreme weather conditions of this summer. That statement indicates a lack of understanding of the role of fuel reduction. It is not to ensure that fires will not burn in any circumstance but to increase the chance that they can be controlled and that individual fires can be limited to relatively small areas.

There are ways in which we can be as smart as our Aboriginal predecessors in managing fire in our environment for our own security and the welfare of the bush and its wildlife. We can return fire to its rightful place in our landscape, not as a force of either good or evil, but as one of the factors such as wind and water that have shaped it over the millennia. At the most basic level we have no option but to replace the current regime of widespread fires in single events, with one of numerous smaller fires. It is the mechanics of doing this in the face of all the complexities imposed on the landscape and society by development and modern life that should be occupying our attention. In contrast, the task of the Aboriginal was an easy one.

Let us consider, therefore, the impediments in the way of such an outcome, and, where possible, how they might be overcome.

First there is ignorance - ignorance of both the role of fire in the Australian environment, ignorance of the rules of fire behaviour, and ignorance of the mechanics of using fire in any given situation. The level of this ignorance is immense amongst the general public, land management authorities, and the universities. I do not have a ready answer to this problem of education, but believe that without a large and appropriate effort progress in other areas will be largely neglected.

Secondly, there is a lack of co-ordination of fire management efforts across the landscape. Management strategies must involve co-operation across all boundaries. Fire certainly doesn't recognise land tenure boundaries, and with severe fires spotting burning debris kilometres ahead of the main front there is no practical way of construction of any firebreak that could be guaranteed adequate in a wildfire situation. In some cases it might be possible to exclude some properties from a burning program by simple pre-season strategies. More often it is likely that it is not, and often in such cases, the attitude of one land-owner can completely thwart major fire-management strategies. Unpalatable though it may be to some, I see little alternative to legislation which empowers government to force individual compliance with overall strategies if necessary.

Ecological arguments about such matters as the seasonal timing of burning, the interval between fires, the intensity of fires, and the effects on particular species of fauna and flora often impose complexities of decision making and consequent inertia that result in no decision and a continuation of the prevailing wildfire regime. There is no simple answer to these problems. Whatever strategy is adopted will advantage some species and disadvantage others. It is highly likely, however, that a chance wildfire regime will disadvantage more species and habitats than any other strategy.

Considerable effort has been put into research in some areas to unravel the ecology and life cycles of individual species of animals and plants. However, a mechanistic approach to the use of fire according to precise guidelines derived from knowledge of individual species within the habitat is not only difficult in practice, but in my experience, unnecessary. Concern for the fate of individual animals or species of animal or plant often helps drive

the creation of conditions that lead to their destruction. A system that leaves much to chance, by an annual program of random or gridded ignition points in either one or a number of operations throughout the year can be extremely effective in creating a mosaic of burn patterns, in which fires vary from mild to severe with a wide variation in the interval in terms of years in which fire may affect any particular spot.. Such a process can provide high levels of habitat diversity, and should provide a vastly improved level of community safety above what we have in the present situation.

I do have some sympathy for the problems that managers of State Forests and National Parks face in implementing appropriate burning programs. They have to face the ignorance of the general public referred to earlier in relation to the role of fire in Australian ecosystems. They have nightmarish concerns in relation to public liability, workplace health and safety, air quality regulations, and legislation relating to endangered species or habitats. Instead of actively confronting these issues by pointing out the alternatives to proposed action, agency staff are more inclined to take the easy way out, however, and do nothing ensuring the ultimate disaster for all.

The unglamorous thankless work of pursuing preventive burning strategies in the face of often hostile public opinion and low budgets, can be contrasted with the lot of those who fight fires. They are seen as heroes, risking their lives in the only action possible to protect the public from the scourge of wildfire. As politicians scramble to be seen in the thick of such high-risk action and lack of money no longer inhibits any action, the chances of the main emphasis ever being placed on preventive action seem less and less. On the environmental side hastily constructed containment lines proliferate as bulldozers spring into action with every wildfire event, arguably doing far more long-term environmental damage in some areas than any wildfire could.

Out of the ashes of disaster arise inevitably those who see the opportunity to pursue their own utilitarian agendas. Mostly these produce arguments that logging and grazing reduce or eliminate the risk of wildfire and improve the health of the forest. It should be easily demonstrable, however, that some of the most devastating and widespread wildfire in our history occurred at times when both these practices were more intense and in the case of the latter, more widespread than they are today. Grazing may reduce ground fuel levels in grassy woodlands, but will have no impact whatsoever on forest fuels where there is a heavy build-up of leaf or twig litter, providing a ladder by which fire will reach the canopy in "blow-up" conditions. It is also axiomatic that logging operations which open up the forest canopy and increase litter loads at the ground level will increase the risk of development of severe wildfire.

Where does all this leave us? The impediments to action to develop effective programs to reduce the incidence of severe wildfire in south-eastern Australia are immense, but the practices needed are relatively simple to implement and, achievable. That achievability has been demonstrated by the situation in the South-West of Western Australia where since the Dwellingup fire disaster of 1962, fire management strategies based on widespread prescribed burning programs have managed to prevent any further major disasters. Even there, however, these effective strategies appear to be breaking down as they run increasingly into the institutional problems that have so impeded progress in the eastern states.

We will never mature as a nation until we learn to come to grips with the realities of our environment and collective action is based on that reality, whether it relates to the sustainability of our agricultural and pastoral systems or the stewardship of our remaining natural environments. Currently, well divorced from reality, and more often than not in the realms of romance, our view of our protective duty to the pitiful remnants of the natural world that still enrich our spirits is more likely to lead us down the road of their eventual destruction than their retention as fully functional reminders of our original wild and beautiful Australia.

ATTACHMENT 2.

Australian Bushfire Management: a case study in wisdom versus folly

One man's wisdom is another's folly

Ralph Waldo Emerson

By Roger Underwood

Many years ago, still a young man, I watched for the first time the grainy, flickering black and white film of the British infantry making their attack on the opening day of the Battle of the Somme. The stark and terrible footage shows the disciplined soldiers climbing from their trenches and, in line abreast, walking slowly across no-man's land towards the enemy lines. They scarcely travel a few paces before the German machine gunners open up. They are mown down in their thousands. They are chaff before a wind of fire.

I can still remember being struck nerveless by these images, and later my anger when I realised what that calamitous carnage represented. It spoke of the deep incompetence of the Generals who devised this strategy of doom and then insisted upon its implementation. It spoke of front-line men led by people without front-line experience. It spoke of battle planners unable to think through the consequences of their plans, and who devalued human lives. It spoke of a devastating failure of the human imagination.

Worst of all, the strategies of the World War 1 Generals demonstrated that they had not studied, or that they had forgotten, the lessons of history. In the final year of the American Civil war, 50 years earlier, the Union army had been equipped for the first time with Springfield repeating rifles, replacing the single shot muskets they had previously used and still were being used by the Confederate army. The impact on Confederate soldiers attacking defenders armed with repeating rifles was identical to that later inflicted by machine guns on the Western Front. But it was a lesson unlearnt, of collective wisdom unregarded.

None of you will have any difficulty in seeing where this analogy is taking me.

The catastrophic bushfires in Victoria this year, and the other great fires of recent years in Victoria, New South Wales, the ACT and South Australia are dramatic expressions ***not just of killing forces unleashed***, but of human folly. No less than the foolish strategies of the World War 1 Generals, these bushfires and their outcomes speak of incompetent leadership and of failed imaginations. Most unforgivable of all, they demonstrate the inability of people in powerful and influential positions to profit from the lessons of history and to heed the wisdom of experience.

But just a minute, I can hear some of you thinking. Is this fellow going too far here? What about the malignant influence of global warming on bushfire conditions, making things impossible for firefighters? What about the unprecedented weather conditions on the day, making the fires of February 2009 "unstoppable". What about the years of drought making the bush super-ready to burn? Does he not realise that conditions beyond human understanding have now arisen in Victoria, making killer bushfires inevitable? And what about the promises of technology, the super-aerial tankers and so forth, that will give the initiative to our firefighters for once and for all?

I have thought long and hard about all these issues. I am well aware of the drought, of the terrible conditions on the days of the fires, and of the view from some quarters that all of this is a result of global warming. I accept that drought and bad fire weather increase the risk of serious bushfires. What I do not accept is that "unstoppable" bushfires are the inevitable consequence. And while I will always welcome improved firefighting technology, I know from experience and from an understanding of the simple physics of bushfire behaviour, that technology can never be a substitute for good land management. The serious bushfire is like a disease that is incubated over many years; good land management is the preventative medicine that ensures the disease does not become a killer epidemic.

To me, the epidemic of recent killer bushfires in Victoria are not an indicator of what is inevitable in the future. To me, they are an indicator of the inevitable consequences of what has happened in the past. To me, these fires toll like bells: they toll for failed leadership, failed governance and failed land management.

The issues of leadership and of good governance are central to my position. What these terrible fires point to is that the leaders of our society, Victoria's politicians and senior bureaucrats, have palpably failed to do the most fundamental thing expected of them: to safeguard Victorian lives and the Victorian environment in the face of an obvious threat. They have failed to discharge their duty of care. Just as we now look back with incredulity at the amateurish strategies of the Generals in The Great War of 1914-1918, so will future Australians look back on the work of those responsible for land and bushfire management in this country (our bushfire Generals) in the years leading up to The Great Fires of 2003-2009.

The toll of the 2009 Victorian fires is shocking. Over 200 lives - lost. Thousands of homes - destroyed. Millions of dollars worth of social and economic infrastructure - reduced to ashes. The work of generations, the farmlands, stock, fences, woolsheds, yards and pastures – dead and gone. Native animals and birds - killed in their millions. Beautiful forests – cooked, in some cases stone dead. Catchments – eroding. The costs – multi-millions of dollars. Carbon dioxide into the atmosphere – the equivalent of a year's supply for the whole of Australia. Psychological damage to children and families – uncountable.

Our bushfire Generals..... those Premiers, Ministers and senior bushfire bureaucrats in whom the people of Victoria put their trust..... can have no excuses.

They cannot say they didn't know we have serious bushfires in Australia. This is no soft, green island where no bushfire ever burns. Australians have not arrived only recently in this hot, dry sclerophyllous land. Even if we overlook for a moment the fire management experience of Aboriginal people, accumulated over 40,000 years or so, non-Aboriginal Australians have been here for over 200 years, with 200 fire seasons, thousands of hot, dry and windy days, dozens of prolonged droughts, tens of thousands of thunderstorms, millions

of lightning strikes, and hundreds of thousands of bushfires. This is no new or unique phenomenon. **[Note 1]**

They cannot say the impacts of intense bushfires on human communities were unimaginable. We have known for 200 years that European settlement represented the insertion of a fire-vulnerable society into a fire-prone environment. We have seen the consequences of mixing hot fires and settlements on many..... too many..... occasions, to doubt the result. [2]

They cannot say that Australians are powerless in the face of the bushfire threat, that bushfires are "unstoppable". From the earliest days of settlement, through to the evolution of the fire management systems developed by experienced land and forest managers in the 1950s and 1960s, we have known what is needed to minimise bushfire intensity and bushfire damage [3], even under extreme conditions. From at least the 1960s we have known how to build and maintain houses in fire-prone environments so as to optimise their survival.

They cannot say that the relationships between fire and the Australian bush are still unknown. There have been 200 years of observation and records and over 50 years of scientific research on this very subject. This experience and this research has confirmed that fire is not an alien visitor, but a natural part of Australian bushland ecosystems. The right sort of fire is an agent for rejuvenation, regeneration, recycling and bushland health, a stimulus for biodiversity. Fire is to the Australian bush as are the waves and tides to Australian seaweeds and marine life. It is the ***absence*** of fire, especially of mild fire, that is the real threat to the Australian bush, because the inevitable result is a landscape-level holocaust, from which it might take a century or more for recovery.

And they cannot say that they were not warned. Warnings have emerged from the aftermath of every damaging bushfire for the last 70 years or more..... from inquiries, commissions and reports, from independent auditors and from land managers, bushfire scientists, foresters, farmers and firefighters. In recent years the warnings have come thick and fast. Magnificent books have been written on the subject [4]; there have been dozens of scientific papers and popular articles written by our very own world-respected bushfire experts like Phil Cheney. There have been detailed submissions by professional groups such as Forest Fire Victoria, the Bushfire Front and the Institute of Foresters of Australia. As recently as 2008 the Victorian Parliament undertook its own review and produced one of the best reports I have ever seen. Its key recommendations were simply..... "noted" in passing.

Can anyone say that no clear lessons have emerged from the bushfire calamities of the past? Can anyone say they are unaware of the previous fires that have burned Australian farms, settlements and suburbs, incinerated our national parks, nature reserves, rangelands and forests, or scorched our northern savannahs? Did no-one notice all those bushfires over the years that cut power supplies, burned out bridges and roads, destroyed schools, churches and hospitals, interrupted or fouled water supplies, destroyed observatories and threatened species, plantations, orchards and vineyards?

No, there is no shortage of lessons. They have even flowed in, for those who should have listened and learned, from Greece, from Portugal, and from the western United States and Canada during the last few years.

Over and over again, the same words have rung out, the same message has been sent:

1. In our climatic zone with hot dry summers and periodic drought, and with our flammable vegetation and frequent lightning strikes, bushfires are inevitable.
2. If fuels are allowed to accumulate, bushfires in eucalypt forests rapidly attain an intensity that exceeds the human capacity to extinguish them, notwithstanding the most modern and massive suppression forces.
3. Communities and economic assets in the path of high intensity fires will suffer horrible damage.
4. But! Potential damage can be minimised by application of a fire management system that incorporates responsible planning, and high standards of preparedness and damage mitigation, especially fuel reduction.
5. And! We have a choice: fires are inevitable, but we can chose to have mild controlled fires, or ungovernable infernos.

No, our politicians and bushfire generals cannot say they have not been warned. They cannot say there were no lessons to learn. They cannot say the message had not been sent.

They can only say that it was not received, or that it was received but ignored. Neither excuse is acceptable.

So what ***are*** the explanations? Why were sound messages not received, or received but not acted upon? Why, after 200 years of experience and 50 years of world-leading research, after working examples of how to set up an effective system of bushfire management have been established..... how was it possible that our political and bureaucratic leaders opted to adopt a bushfire system that does not work, that fails to protect Victorians from death, disaster and environmental calamity?

There are two answers.

1. The first is political. Put simply, in the last 25 years and when it comes to bushfire management, Australia governments have failed to govern. The focus of politicians has been on getting elected or staying in power, not in providing intelligent, tough and effective governance. This has led to political parties courting the preference votes of pressure groups and of city-based electors who are in the thrall of pressure group philosophies.

   Despite the protestations of environmentalists over the last few weeks, there is no question that the influence of green activists at Federal, State and Local government levels has resulted in a steep decline in the standard of bushfire management in this country. Their influence is exemplified by two things: (i) opposition to prescribed burning for fuel reduction, resulting in unprecedented fuel build-ups in parks, forests and reserves close to population centres; and (ii) rural residential developments, in which developers and residents have been prevented or discouraged by environmentalist-dominated local councils from taking reasonable measures to ensure houses are bushfire-safe; and where people are living in houses in the bush where there is no effective enforcement by councils of building codes or hazard reduction. [5]

   The situation where a Government fails to govern is, of course, made worse when communities and individuals fail to self-govern. People building houses and choosing to live in the bush also have a personal responsibility – to look after themselves and

their neighbours. This responsibility, it seems to me, has also been discouraged by modern governments.

2. The second explanation is technical. In recent years many Australian bushfire authorities have been seduced by the siren call of technology. This has lured them into a fatal trap. Their assumption is that any fire can be contained so long as they get it early and then have enough hardware to throw at it. This approach arose in the United States in the years after World War 2, and is thus known to Australian land managers as "the American Approach".

The American Approach is fundamentally flawed. Fifty years of its application in the United States and ten years in Australia has demonstrated that no force of firefighters in the world, indeed the fire-fighting resources *of the world* could they be marshalled into one place, can stop a crown fire in heavy forest which is generating a jet-stream of spotfires downwind, each spot fire also landing in heavy fuels, and starting new crown fires. The best and the bravest men and women, armed with the most munificent, the most magnificent and the most expensive equipment, is totally overwhelmed [6].

This is a reality that still appears not to have penetrated the Australian bushfire Generals and our political leaders. Not only have we seen the American Approach increasingly supported in this country, and then watched as it invariably fails when pitted against multiple hot fires in heavy fuels..... despite this!..... it seems to have taken on a life of its own. Every year more money is poured into the purchase of super-expensive equipment, but the outcomes on the ground just get worse. As recently as last week, Australian emergency services experts were launching new and strident calls for more and more expensive technology, completely ignoring the need for preventative measures.

Adoption of the American Approach has been accompanied by an equally disastrous institutional re-arrangement: the progressive transfer of bushfire responsibilities on crown lands from land management agencies to the emergency services. In this scenario, beloved of politicians and bushfire Generals, the focus of funding is shifted from preparedness and damage mitigation to emergency response. What this means in practice is less emphasis on fuel reduction and more on building up fleets of water-bombers, tankers, and other high tech firefighting gizmos, an enormous paramilitary force (overseen by technocrats in Head Office) whose function is to put out fires after they start... but which is doomed to failure whenever they are faced with multiple fires burning in heavy fuels under hot windy conditions.

These new and deleterious institutional arrangements persist because they are supported by powerful vested interests. The emergency services have a vested interest in maintaining a huge fire suppression machine and in making every fire – even an inconsequential fire – an emergency. I have watched over recent years as they have created a state of dependence on their firefighting forces, which, when things go bad, they cannot deliver upon. And they have encouraged the belief in the public mind that all fire is bad and has to be suppressed or avoided.

Politicians also have a vested interest in the American Approach. It is easier and simpler to finance suppression systems than damage mitigation, and they can bask in the glow of measures which are highly visible to the public and the media, and give the impression that they are doing something useful, irrespective of the fact that it will not succeed under bad fire conditions. I ask you....how often have you seen a politician lighting the first match of a

prescribed burn, compared with the occasions when you see them breaking the champaigne over a newly purchased helicopter water bomber?

In saying this, I need to make an important point: I am not critical of the firefighters on the ground, professional and volunteer. I know these people, and I know them to be brave, resourceful and tough. I admire them unreservedly. But they are increasingly being asked by their own leadership to do the impossible.

But what of the assertions from groups such as the Australian Conservation Foundation and the Wilderness Society that because of global warming, big unstoppable bushfires are here to stay, and we might just as well get used to them. I totally reject this line of argument. It is an insult to human intelligence and to the human spirit. If the computer projections are correct and it does become hotter and dryer, this means we have to make even greater efforts at fire prevention, further improve our state of preparedness and take even more serious measures to minimise potential bushfire damage. The idea that there is nothing we can do in the face of global warming but retreat into the CFA shed and wait for the next fire to come at us over the horizon is defeatist and in the end, inhumane. And suggestions that everything will be OK if only Australians reduce their carbon dioxide emissions is surely an example of kindergarten-level thinking.

The need for mitigation of bushfire damage through fuel reduction by prescribed burning is absolutely central to effective bushfire management in dryland Australia [7]. I support the concept unequivocally, although I set some clear parameters: burning must be based on sound research into fuel characteristics, fire behaviour and fire effects; burns must be conducted professionally by trained personnel using the best-available burning guides; and every burn must be part of an overarching strategic approach, the carefully designed and constantly updated jigsaw known as the Strategic Burning Plan.

This is how it is done in Western Australia and could be done in Victoria. But even in WA the system slipped in recent years, as foresters battled to keep a fuels management program going in the face of cunning opposition from environmentalists and compliant politicians. WA has also seen an almost complete abandonment of effective bushfire management on private land over the last decade, with Local Government opting out and no-one else filling the vacuum. This is a situation people like me are trying to address as we speak. Would it not be better, we say to the WA government, to sort things out in advance, rather than after a disaster?

Nevertheless, 50 years of hard experience in Western Australia and world-class research [8] has demonstrated beyond argument that while fuel reduction by prescribed burning does not prevent bushfires, it ensures fires do less damage, and it makes them easier and safer to extinguish. In gambler's terms, it shortens the odds in favour of the firefighter. In human terms, it means people living in bushland areas where fuels have been reduced, are less likely to be burnt to death than are people living amongst heavy fuels.

Victoria, New South Wales and to a lesser extent South Australia are years behind Western Australia when it comes to the critical business of fuels and fire management. There is a no need for new research to demonstrate the value of prescribed burning, as some academics are suggesting [9]. The need is to apply existing knowledge in a vastly expanded prescribed burning program on the lands that burn. The need is to upgrade the fire skills of field staff in parks and forests so that they can handle burns confidently and efficiently. The need is to

develop comprehensive planning and control systems to ensure burning is professionally carried out, and the results are properly monitored and recorded. Above and beyond all this is the need for governments to recognise these needs, to act on them and to support their staff in the field.

And here's the rub. Based on history, you could be excused for asking will anything change, or will we see just another revolution of the bushfire cycle? [10]

My fear is that governments, however much they make the right noises, will in the end want to stay in office, and unless things change, this will mean pandering to those who (despite their current protestations) have consistently opposed responsible bushfire management.

My fear is that the forces who benefit from the *status quo* will already be marshalling their resources in its defence. These will include the bushfire Generals who will not want to lose their power and influence, or to see funding going to land management (which they do not control) instead of new helicopters, water bombers and tankers (which they do).

I fear that all-knowing academics from the Fenner School of Environmental Studies at ANU, and members of the Canberra and Melbourne intelligentsia will emerge from their leafy campuses to tell us that actually there is no problem at all.... surely, everyone knows that killer bushfires are simply Mother Nature at work, or the planet's revenge for our despicable environmentally-unfriendly behaviour. This line will be pushed over and again, helping to massage the consciences of politicians reluctant to make substantial changes to policies and practices which they think will be electorally unpopular [11].

Yes, I am fearful. But I am also hopeful (in a pessimistic way!) My intense hope is that ***this*** time things might change. Notwithstanding the whining of the effete intelligentsia, and opposition to change from the green bureaucracy, the powerful environmental groups and the emergency service chiefs, I think that this time it is going to be hard for the Victorian government to find excuses for doing nothing. In turn, I think that it is also going to be hard for State governments in NSW, SA, Tas and WA to ignore the carnage in Victoria and the fact that fingers are being pointed very directly at the politicians and their bushfire Generals.

I also think that the Federal Government might finally decide that it is high time they reviewed their approach, which is basically one of rewarding State governments for failed land management. And I think that a great many Local Governments are going to realise that the planning buck stops with them..... if they knowingly put people into danger through their town planning and environmental policies, and the people are then killed, they cannot escape accountability.

Finally, I think that this time, it will finally dawn on governments and their advisers that ***in the Australian bush if you do not manage fire, you cannot manage for anything else***.

Think about that for a moment. ***In the Australian bush if you do not manage fire, you cannot manage for anything else***.

It is all very well to say that the management objective for our parks, forests and reserves is "protection of biodiversity", as most national parks agencies say these days. The trouble is, this objective cannot be achieved without first having put in place an effective bushfire

management system. Where is the biodiversity today in those thousands of hectares of bushland without a green leaf to be seen, those "bare ruined choirs where no bird sings"?

It is the same in areas where the stated management priority is to protect water catchments. But to say this, and then adopt a strategy that allows fuels to build up until the day comes when the catchments are reduced to dead trees and ash - is blatantly self-defeating. And it is the same for every other land management objective, whether this be protection of aesthetics and lovely forest landscapes, protection of recreational areas, protection of commercial values and residential areas or the conservation of soil, remnant bushland on farms or threatened species.

Therefore, the first rule of land management in Australia is this: get your bushfire management right, or be prepared to lose the lot.

I started this paper with a reference to World War 1, and the futility of the strategies adopted by the Generals throughout the first three and half years of the war. It is significant that the breakthrough in 1918, the new strategy, was designed by an Australian, indeed a Victorian, General Sir John Monash. The Monash strategy was based on firstly establishing clear priorities and unambiguous objectives - he knew exactly what he wanted from amongst the options of what could be achieved. It was based on excellent planning, anticipation of difficulties and attention to detail [12]. It was based on the advice of experts, men who had been at Gallipoli and in the trenches in France and Belgium, and who spoke from experience on the ground, not from ideology. Above all, Monash was not prepared to sacrifice human lives needlessly. With all of this behind them, the troops on the ground did the rest. Monash's new approach provided the blueprint for the end to the slaughter on the Western Front.

What Australian bushfire management is crying out for is a new General Monash, a leader who understands that the current approach has failed and is doomed to continuing failure, that the influential advisers have no front-line experience. An effective new leader will know that if we clarify and properly rank our objectives, listen to the voices of experience and the lessons of history, and act accordingly, the odds favouring success will be massively shortened.

But the great General Monash himself would not succeed without the support of Prime Ministers, Premiers and Ministers, prepared to stand firm behind him when the Wilderness Society, the Canberra intelligentsia and the ABC current affairs people gang up on him. A good response to this lot might be "Sorry, mates, we are doing what is best for Australia and Australians, based on good science, experience and the word from the people who have most to lose". Politically incorrect, of course, but it is the approach adopted when it comes to defence of the country against external enemies and national security, and which most Australians accept in that context.

Nor will a new general succeed without legislative and policy backing to enable land management agencies to win back the ground they have lost to the emergency services. Our parks and forests agencies must be empowered and resourced to manage fuels, indeed they must be required to do so, if necessary by legislation. Australia must abandon the American Approach, replacing it with an Australian Approach, a system in which equal weight is given to prevention and suppression, rather than trying, helplessly, to pile all our eggs in the suppression basket.

For any of this to happen our political leaders need to hear from the people whose lives and assets have been sacrificed or recklessly put at risk by the failed policies of the past. It is essential that the people who have suffered demand systemic change, not just window dressing, more helicopters and overseas firefighters. Unless they speak up, there is no chance they will be heard. Politicians will take the political way out. [13]

I think we can say that the environmentalist approach to bushfire management, including reliance on aerial firefighting, has been given a very fair go. It has had a good test. Regrettably, and predictably, the results reveal that it has been a failure [14]. The ***excuses*** put forward, especially that fires are unstoppable because of global warming, are simply that: excuses. They do not allow for the capacity of intelligent humans to foresee a threat and to forestall it.

To conclude. The choices before us are straight-forward: do Australians, and especially Victorians, want our bushfire and land management planning done by professionals with front-line experience, or by campus intellectuals and ideologists? Is it smarter to manage bushfire fuels by burning them at times of our own choosing when conditions are mild, or to stand back, do nothing and risk being engulfed by fire at the worst possible time? If fires are inevitable, which is preferable: a controlled or a feral fire? And do we see humans as part of the ecosystem and plan accordingly, or do we see them as interlopers, as illegal immigrants in the Australian bush?

Do we opt for Wisdom or for Folly?

March 2009

Notes

1. The question of Aboriginal burning is still debated. According to the accounts of early explorers and settlers and to present-day Aborigines, pre-European burning was widespread and frequent. This information is rejected by environmentalists as "hear-say". Western Australian ecologist David Ward has found a unique way to unlock the history of pre-European burning, through his study of fire scars on grass trees. Ward's work in the jarrah forests of Western Australia, indicate that fire occurred there at intervals of 2-4 years, and combined with his understanding of fuel dynamics and fire behaviour, he concludes that these fires would have been of mild intensity and patchy. Academics from Melbourne University, without ever having worked in the jarrah forest, have dismissed Ward's findings, preferring the print-outs from a theoretical computer model.

2. Not everyone agrees about the environmental impact of large intense wildfires. Dr Ross Bradstock who lectures to undergraduates at the Australian National University, has written in an article in the Melbourne Age newspaper that that there was no scientific evidence for the claims that millions of birds and mammals died, or that forest diversity was reduced in the Victorian Alpine fires in 2003.

3. Laura Meredith, writing of her home in Tasmania in 1840, records a time when her husband was away and bushfires were threatening her home. She discovered with relief that her husband *had taken the wise precaution of burning the ferns over the whole of a wide span of the forest which surrounds us* and thus the home was rendered safe.

4. The best book written on fire in Australia is Stephen Pyne's *Burning Bush* (first published in 1991 and updated following the 2003/4 fires) but there are also numerous books on fire science and history, including the excellent *Fire and Hearth* by the anthropologist Sylvia Hallam. Hallam quotes Lort Stokes, a fellow traveller with Charles Darwin on the *Beagle* who watched as Aboriginal people near

Albany carried out their routine burning of the bush, replacing (in Stokes' words) fires of "ungovernable fury" with those of "complete docility".

5. In the very week leading up to Victoria's Black Saturday, Western Australian bushfire managers found themselves dealing with a Greens Member of Parliament who was threatening to organise a protesters' camp in the bush to prevent a prescribed burn. The burn was planned to protect two local townships plus some very lovely forest from wildfire.

6. As Shakespeare pointed out: *A little fire is quickly trodden out, but being suffered, rivers will not quench.* Many of those who oppose prescribed burning believe that if we simply had enough firefighters, permanently waiting in the bush for fires to start, and able to tread on them at the instant of ignition, no large fires would ever occur. Firefighters regard this as impractical. In eucalypt forests carrying heavy dry fuels, a fire can become too fierce to allow direct attack by firefighters within minutes of ignition, indicating that the "treading out" approach would require several million firefighters on standby throughout Australian forests for several months of every year.

7. "Dryland Australia" is the bulk of the continent, outside the tropical rainforests of the north, some of the wet temperate rainforests of southern Tasmania, and coastal mangroves. It is the Australia that burns.

8. The Project Vesta research, a 10-year study completed in Australia in 2007, involved a collaboration of CSIRO, government agencies and the Bushfire Cooperative Research Centre. It represents the most comprehensive and technically defensible bushfire research program ever carried out anywhere in the world. The results unequivocally support the value of prescribed burning as a means of reducing bushfire intensity, and puts forward new approaches to fuel measurement and characterisation.

9. "More research is needed" is the standard response of academics and scientists to any issue. This is because they depend on research grants to pay their salaries and expenses. In Australia the fundamental questions about fire behaviour and fuels management have already been answered, going back to the work by Alan MacArthur, Phil Cheney, George Peet and Rick Sneeuwjagt in the 1960s and 1970s, and on building design by the CSIRO going back to the Tasmanian fires of 1967 and the Ash Wednesday fires of 1983. The pressing requirements today are for refining fire behaviour tables and developing prescribed burning guides for various forest types, in other words for applied or operational research which builds on current knowledge. This sort of work can only be carried out by bushfire experienced researchers in the field, not by theoretical analysts and computer experts in academia.

10. The Bushfire Cycle runs thus: first there is a disastrous bushfire. This is followed by inquiries, commissions and reviews and the system is greatly upgraded. Over subsequent years, the new system is so effective that there are no serious bushfires. Apathy and complacency set in, weirdo pressure groups arise, governments lose interest and funds and staff are reduced. The system degrades. Then there is another bushfire disaster and the wheel revolves once more.

11. According to the doyen of Canberra intellectuals Professor Clive Hamilton, speaking on ABC's Radio National recently; "the most interesting thing about the recent Victorian bushfires has been the attacks on greenies." Apparently he did not find the loss of over 200 lives as interesting as the ruffling of the feathers of a few environmental activists.

12. Les Carlyon in his magnificent book *The Great War*, notes that Monash's final planning conference before the attack on Hamel in 1918 had an agenda of 133 items. Elsewhere it is recorded that the then-Colonel Monash, commanding Australian troops at Gallipoli in 1915, set up his command HQ *thirty metres* from the Turkish front trenches.

13. The fundamental issue, and the basis of the whole difficulty facing professional bushfire managers, is very well summed up by Jim Hacker, fictional Minister for Administrative Services in the television series 'Yes Minister': "*There are times in a politician's life when he is obliged to take the wrong decision. Wrong economically, wrong industrially, wrong by any standards – except one. It is a curious fact that something which is wrong from every other point of view can be right politically. And something which is right politically does not simply mean that it is the way to get the votes – which it is – but also if a policy gets the votes then it can be argued that that policy is what the people want. And, in a democracy, how can a thing be wrong if it is what the people will vote for?*" The ultimate test for

the Victorian government in the wake of the recent fires is whether or not it caves in to green demands on bushfire issues in order to win preference votes and stay in power at the next election. The 'Yes Minister' scenario, and past performances, suggests that they will fail this test, and will cave in, unless there is a dramatic outburst of political courage and responsible government.

14. It was notable that some of the worst of the recent fire damage in Victoria occurred in the dark, at night or under gale force winds when aerial waterbombers were grounded. This is consistent with my own experience. In 1978 I was the Officer in Charge in the karri forest in Western Australia during the Cyclone Alby bushfire crisis. The first thing we had to do as the cyclonic winds approached, was to ground all our aircraft and tie them down.

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