

A NATIONAL BUSHFIRE DISGRACE

This paper outlines the problems faced by the Australian community because of the shortcomings of bushfire Authorities in all States and Territories.

The impact upon our natural environment is evident right across our nation but the impact on our human community has only just begun.

The paper suggests a “step change” in official attitudes to bushfire administration by means of a Statutory Inquiry to examine the expenditure of almost \$5 billion annually on fire management by governments at all levels.

Introduction

By January 2016, this nation has seen major bushfire tragedies unfold over the past ten or so years with little change in policy approach, despite assurances that changes are happening. One feels entitled to wonder whether, in the fire and emergency field, there has been an enfeeblement of intellect inhibiting any policy reviews or whether the policy stance is simply locked in arrogance.

Already, in the first third of the current fire season, a number of human lives have been tragically lost, house losses have totalled around 500, plus many other assets, outbuildings and thousands of livestock. The total monetary cost of the non-human losses would by now exceed one Billion dollars. Where does this cost reside?

Insurance companies will pay out to those insured, but the community will eventually pay through higher premiums. Governments will pay forms of assistance, but the community will pay through taxation. Government infrastructure damage will require restoration and, again, the taxpayer will pay. Those who self-insured will also pay.

All this means that the Australian community bears the whole cost of bushfire damage and losses. The ledger this year to date is not pretty: an annual cost approaching \$5 Billion (a sort of insurance premium?) but losses already at one fifth of this.

The carriage of this \$6 Billion (and counting) burden by the Australian community is not sustainable. Not. Sustainable.

None of the discussion above takes into account the costs to the community of the effects of the current national approach to bushfire administration on our environment. Most ecologists would opine that these effects are very large, posing a serious threat of terminal decline to the extent that our livelihoods will be compromised.

Never before in Australian history has bushfire fuel management fallen to such a low level that the majority of the countryside is classified as having “dangerous” fuel levels.

Never have our bushfire authorities placed such heavy reliance on firefighting as the answer to the bushfire threat, eschewing the “preventative medicine” approach of fuel management that was successful in the past. They ignore the fact that the suppression approach almost always fails when most needed.

How to build an industry.

The F&ES industry has grown to the extent that it rivals – equals – what used to be one of Australia's strongest industries – wool growing.

Yet instead of creating value and wealth, the F&ES industry *swallows* almost \$5 billion of taxpayer dollars each year. This is scarcely believable but its source is AFAC's own research!

Here, the mistake has been made by a succession of politicians of all persuasions who have been snowed.....snowed by the quasi-military organisations acting as our “fire and emergency services” who have developed bureaucracies at a really cracking pace.

Politicians have readily accepted the simplistic approaches espoused by these bureaucracies. As is well known, it is much easier for politicians to announce new toys like large air tankers than to address the intricacies of fuel management or the finer points of survival.

The use of motherhood statements based on alleged safety concerns has ensured growth of employment in the sector. Conversely, bush fire research has been fragmented and distracted. Research work on some subjects has been spread into a number of jurisdictions, with a risk of duplication (although it must be recognised that today's more National approach is serving to help minimise this).

But there do exist instances where researchers have been distracted on to work which, eg, addresses the influence of climate change on bush fire occurrences. This instance was a “research study” by the now defunct Bushfire CRC which, after bravely assuming that climate change would lead to hotter summers in Australia, then confirmed that more bushfires would occur as a result. So the conclusion was that climate change would bring more bushfires! And they called this “research”!

During the last two decades or so the industry has developed and implanted the concept of a bushfire “service”, ie a government service which has no direct or visible cost to individuals who can then lie back and expect the government to deal with the fire problem when it appears. Uniquely for government budgetting, there is little or no public discussion or concern expressed about the cost of bushfire administration in Australia.

Finally on this aspect, there would be little future growth in prospect for an industry which espouses and practices programmes of fuel management designed to lower the number and impact of Megafires.

Far better for that industry's own narrow interests to pursue activities concentrating on fire suppression and which are more media friendly and enable politicians to show more and more expensive toys. This is happening even though long-established science, Australian history (and just about every post-tragedy inquiry) screams for landscape-scale fuel management.

The breadth and depth of the campaign to defend the present policy approach of this industry is truly impressive. Two articles written by the Chief Executive of AFAC late last year boasting about the saving of lives by the removal of people from perceived danger (how can that be measured?) set the tone for later publicity. The industry has now leaned on the Chief of the BNHCRC to support its policy approach and the latest product of this pressure is from the Insurance Council of Australia.

There is a breathtaking arrogance evident in the Australian fire suppression industry. For a representative of the Victorian branch of the industry to describe the Great Ocean Road fire effort as a “successful outcome” is simply outrageous. There appears to be no limit to the propensity of the industry to mis-state facts (even lie) to preserve its policy stance.

There is no apparent pause in the demands of the industry for more funding and the medium term future appears locked into a carbon copy of the American situation where fires just become larger, expenses increase horribly and annual losses mount so high as to be unbelievable.

In its present form and policy approach, this industry is sowing the seeds of its own destruction (along with a tragically high number of community members and their assets) and to any thoughtful observer, is not sustainable. Not. Sustainable.

So what can we do about this “Industry”? We can attack the issues explained below, in the hope that the change to particular aspects will correct the overall policy approach to wildfire management in Australia.

Issue 1 – Life Skills Training

I think it was 1979 when the Gray's Point coronial report was issued. Briefly and from memory, most of a tanker crew perished because the tanker which sheltered them was parked upslope from a very active fire which engulfed it. After establishing the facts the Coroner asked whether the extremely well experienced Brigade Captain had any training.

In the report, lack of training was identified as a major contributing factor to the tragedy.

In a number of such inquiries in the years since then (even after Canberra 2003) firefighter training has been commented upon by the judiciary, with calls for better, deeper or wider training curricula.

In few if any of these coronial reports has “experience” been acknowledged as a critical element of firefighting skills. Since “experience” is not formally documented as are other qualifications, the legal profession discounts it as a paper-based solution to firefighter skills.

Looking back to the time just after Gray's Point, I recall how the NSW Bushfire Service blundered around trying to get a training programme off the ground quickly. Brigades were pressured to elect training officers and these in turn were pressed to run all members through a basic fire course. This was essentially a series of lectures by the newly-appointed training officer and all who attended were deemed to have passed and gained the qualification.

The subjects covered in that course were simple, eg: Fire burns faster uphill than downhill, how to use water and keep an eye on your supply, how a pump works in principle, etc. So the “training” was, at that stage, an attempt to head off future coronial criticism.

Since those early years, as with all things bureaucratic, the training curriculum has expanded enormously, now covering nearly all aspects of firefighting as well as a much larger number of what I would call “life skills”. Such skills include radio operation, truck driving, chainsaw use, first aid, operating AED units, etc.

While these are all excellent courses and impart skills to most students, they tend to crowd out the courses which directly relate to fire behaviour and the recognition of various aspects of it. They also do not necessarily find or assess leaders.

The big mistake is the **lack of hot fire training** and the consequent understanding of the process of fire and its behaviour.

I have not seen any training session which tells people at length and in detail what to look out for if they are first at a fire, ie describe the fire, what it's burning, where it's heading, what resources will be needed, how to attack it, etc.

So the problem is that because the RFS training curriculum wants to cover too wide a range of subjects, it does not seem to have time to do those things which would **make a firefighter**. It seems that the observations of lawyers in courtrooms, in combination with Work Health and Safety legal requirements, force training schedules to include the life skills referred to earlier.

And that phrase is the key: Training should be an opportunity for people to “have a play” with fire. There was a fire school at Jindabyne run in the 80’s by Barry Aitchison and Barry Belt and this was a fun but very practical and extremely educative few days for students who took lots away.

Some Training Possibilities

If you want to know how a firefighting effort is going or how it should proceed, “Look for the grey hair” another Group Captain told me many years ago.

Apart from the need to ask whether a particular training course makes a better firefighter, how can teachers instil, in a classroom, the products of experience? How can we, to the satisfaction of the courts, formally document the experience, habit and judgement held by many of our firefighters? If we had an answer to this we would be well on the way to a very satisfactory qualifications regime.

Such a regime would ensure that a field officer would be able to determine quickly what approach should be followed at a fire. It would lead to the exclusion of the “educated impractical person” from positions where judgement calls and/or true leadership characteristics at fires are critical.

About the only judgement call that these persons can make is to run away from the fire because it appears too dangerous when in reality it most likely may not be. This seems to be confirmed by the trend in firefighting these days which seems often to instruct volunteers to stand well back from flame fronts because they are “unpredictable”. Empty whole towns instead of analysing the fire, building a burn trail and then patrol the town, wearing it down.

Further research on this matter (ie the content of training courses) is needed urgently.
Very. Urgently.

Issue 2 - The Attack on Resilience

In the last decade or so, and particularly since the report of the Victorian Bushfires Royal Commission (VBRC) after the disastrous fires of 2009, there has emerged a most disturbing pattern to the policy approach of national bushfire Authorities.

There are a number of aspects to this, but all of them are seriously alarming to most fire scientists and thoughtful students of bushfire matters.

The first and most important aspect is the broad message being transmitted, to the effect that “the government service” will deal with the fire and that the specialised knowledge required for this task resides only in the bushfire services. While those particular words are not used, the overwhelming impression given by fire Authorities is “leave us alone to do our job”.

The broader community has reacted to this message in differing ways. Those in the cities accept the perceived need for the “service” because the outcome matters little to their immediate situation. They mostly, of course, hope that the government can ameliorate the

effects of wildfires on their fellow citizens, so they accept the apparent wisdom. Being honest, they don't know anything about the problem so they accept the apparent wisdom from government.

The second reaction comes from those who live in situations where fire can be a real preoccupation, at least in the hot summer months. These people do not all share the acceptance of the policies of the Authorities:

They do not accept that all fire is bad.

They do not accept that all fire should be run away from, especially the day before a forecast catastrophic fire danger day.

They do not accept that "the only course of action is to leave and live".

They do not accept that "nothing can be done to save your town".

It would appear that, with these people, the Authorities are losing traction through oversimplified messages. To any casual observer, there seems to be some degree of arrogance in their attitude, because messages are directed to the simplest and slowest. I have lost count of the people who express confusion to me when warnings are broadcast:

Why leave?

It's not a bad fire day today, will the forecast weather for tomorrow be correct?

There's no fire yet, are they certain there will be one tomorrow? Will they light one for us?

Where do we go?

Who's going to save my house?

Etc.

How significant is the size of the problem? There have been studies estimating the number of dwellings and other infrastructure which exist within 50 or 100 metres of forested land. Even those within 200 metres of forested land can be a problem. The number of such buildings in what are becoming known as "bush fire prone" areas is simply enormous, probably nationally in the millions of houses.

On the edges of and around the district of virtually all cities, towns and villages in Australia people have decided to build and live without the inconvenience of space limitations (such as in urban areas) but with a sense of space and distance from immediate neighbours. This, in many areas, leaves room for the generation of community feeling and a greater readiness to see common aspects of life with neighbours and to assist them if required.

In situations where a common threat to safety emerges, a community spirit quickly becomes apparent. As a situation develops, this spirit engenders resilience, a seriously powerful influence for countering adversity. Note that this characteristic comes from the ground up – a product of a community stirred.

The arrogance of government and its bureaucracies is shown by their attempt to "grow or foster resilience". They will **never** achieve that. As noted, resilience must come from the ground.

A couple of examples:

First, on Friday evening, 7th January 2003, Tharwa village was looking at a very short future. Fire on the mountain behind the village (Mt Tennent) was, at 1.30 am on the Saturday,

absolutely ballistic, with flame heights at the top of the mountain well over three times the height of the tree canopy. We had a grandstand view from the Clear Range, where we were chasing spot fires.

People in the village, led by Val Jeffery, and against official advice, pitched in, lit a burn around the north and west sides and saved that village. The factor of resilience (used to be known as common sense and initiative) was operating in top gear that night!

Second, by contrast, recent (12 January 2016) advice indicates that the town of Yarloop in WA might have had no such spirit in 2016. It seems that no effort was made to protect the town from the fire of which they had considerable notice, to the extent that it burnt down **at night!** This town certainly appears to have been the victim of government attempts to encourage resilience.

A thoughtful reader, besides being appreciated for reading this far, would note that the present policies being followed by the “industry” are in themselves a serious attack on community resilience. Thus, “leave and live” etc (more properly “**leave and lose**”) pushes communities away from any thoughts of stay and defend, assist neighbours and the community, etc.

In an article on Rural Fire Protection, almost 50 years old, Alan Macarthur wrote:

Without any doubt, the safest place for any family is in their own home. There are few recorded instances of houses being burnt whilst occupied. Generally a house catches alight from burning embers lodging on the roof or in the eaves. It generally takes little effort by the womenfolk or the children to put out these spot fires by the use of water or dirt if ladders should be available. (Growing Trees on Australian Farms - Forestry and Timber Bureau Canberra 1968)

In 1978, *Bushfires in Australia* by R H Luke and A G Macarthur was published. This book today remains the basic text for all people interested in bushfire matters and is required reading for any aspiring firefighter. The following quote is almost 40 years old but is as true as ever:

Whether people can use their home as a haven during a bushfire depends on the extent of their preparations, especially in reducing fuel and establishing firebreaks near their homes.

It is worthy of note that the latter quote qualifies the former because, presumably, of the then newly established trend for rural and peri-urban residents to surround their homes with dense vegetation or to build in forested areas without modifying their surrounds. Peri-urban Councils, hungry for ratepayers, rushed to approve subdivisions in areas which were heavily forested but they ignored (or did not understand) the time bombs being created.

So while the principle of home being the safest place is true in most rural and pastoral (ie broadacre) environments, the Otways, Dandenongs, Adelaide Hills, the Blue Mountains and many other peri-urban settlements are the areas where this cannot apply without at least some vegetation treatment. The concept needs to be qualified – and work done – to bring these latter properties and/or their owners back to reality.

Progressive ideas on this are mentioned below, hopefully containing a little more sense than the present industry approach.

The VBRC's reaction to the problem was to blame the local Councils for their vegetation management laws (tree preservation orders, etc), to find that people should not live in such heavily forested areas (move them away from bush fire prone areas) and this generated the present ludicrous fire danger ratings and the policy of "leave early" etc. What hope the development of community resilience?

Generating Resilience

The essential principle for government at any level in considering encouragement of community resilience is to recognise that it comes from the ground. There are therefore severe limitations which apply to any government involvement.

It would appear that the best way to achieve a better outcome is to turn present policy on its head. This means that instead of giving the message that "it's all too complicated, leave it to us, keep away" government should be saying "here is the knowledge, you must acquire this if you live in a bush fire prone area".

Instead of an "age of entitlement" communities have to move to an "age of responsibility" where they understand the principles of the bush fire challenge and then are free to, without government funding, develop their own community's pride and self reliance.

Thus, government actions stop at the passing of laws to enforce the study of bush fire principles for all who live in bushfire prone areas. This study does not have to be of anything like a degree or diploma, but simply a compulsory, say, two or three month evening course at one evening a week, with a statement of attainment at the end.

In most communities this would achieve a motivation in enough people to establish community self reliance and confidence – the exact opposite of current policies!

Issue 3 – Science, Politics and Fuel Management

On 9 January 2016 The Weekend Australian published an article by the Chief Executive of the BNHCRC which contained a significant number of factual errors and omissions. Much of the flavour of the article was to defend the current policies of Australian bushfire authorities, ie that the evacuation policy, while costing a few houses, saved many lives! There is no possible basis for the latter statement simply because it cannot be proved one way or the other!

For the CEO of a well funded research body to issue statements strongly implying that, as a result of research since the Black Saturday fires in Victoria :

We know how houses burn and why some survive a bushfire

is a gross misstatement of the truth, which is that the reason some houses survive is a mystery, but most of the houses which did not burn were attended by people who actively defended them!

Further, the article goes on to say that in studies after major recent bushfires:

We have learned much about why people act in a certain way and make decisions under the extreme stress of a natural hazard. Because of this we now have a more realistic understanding of what it means to defend a house and what it is like fleeing through smoke.

Why is research money being spent on understanding what defending a house means? How is it that this subject is not simply taught or publicised widely?

Despite the fact that certain towns in WA were not warned about possible fire encroachment, the research CEO blithely goes on to say that warning messages are, thanks to research, more targeted and better timed!

This standard of public statement is, unfortunately, a parallel of the standard of the research programme in bushfire matters in the BNHCRC.

It confirms the impression that the demise of the underperforming Bushfire CRC has not delivered any significant improvement in the range or quality of research. The BCRC was rated by many as a **failure** because it did not establish fuel management as the **front and centre** of bushfire administration requirements.

It did not go anywhere near achieving the understanding by the political and other upper levels of government on fuel management matters. Ecologists such as Gammage and Jurskis have achieved more!

A further hard fact is that the Productivity Commission, an economic and social research body, has also done more in this area!

A cursory review of the range and depth of the bushfire research programme indicates no attempt to confirm or deny the current policies of the suppression agencies. That there is no such vision inside the research body is extremely disturbing.

It is a stunning discovery, evidenced by the recent article, that the CEO of the country's bushfire research body is such a syncophant of his stakeholders, with all their clearly apparent policy shortcomings. While he remains thus it is not possible to hope for a more useful research profile.

In the face of all this, it has become apparent that the influence of the suppression agencies on the scope and depth of bushfire research has led to the gross neglect of a whole range of bushfire administration issues and the possible derogation of truly scientific research.

Reordering Research

During the 1970's one of the catchcries of research was "relevance" and the then perceived need to involve industry in setting research priorities. While this was an appropriate goal in many areas, it was found to have somewhat compromised the advance of knowledge – particularly basic knowledge - in others.

If we fast forward to the present, we can see an area in which the advance of knowledge has been seriously compromised – bushfire research.

When the CSIRO bushfire research unit existed the programme was a mix of pure (basic) research and mission-oriented research. This was ideal, but with the passing of years, the budget priorities meant that it ended. In addition, many of the government land managers sought to do their own research, but much of this has comprised poorly designed and executed work.

The current arrangement most certainly appears to encompass a significant amount of waste. A tighter and more correctly focussed programme, located inside CSIRO, would be appropriate and would generate far larger benefits, with implications for a complete review of present bushfire policy approaches acceptable in a community and political sense.

Conclusion

In this paper I have tried to deal with the major policy points and general attitudes which can be focussed upon by a Federal Politician. If we can insert some of the Gammage/Jurskis environmental insights, then we might be on the way to following Roger's suggestion of the other day.

What is now urgently required is a complete root and branch review, by a Commission of experts, of all sectors of the industry, ie from AFAC down. This would, ideally, travel to all states and examine local problems. It would recommend to the Federal government what conditions should be placed on funding for the States and Territories for their bushfire administrations. It would achieve the application of Force to bring those administrations to heel.

The composition of the Commission would exclude any nominee of the present administrations but would include firefighters, fire scientists, ecologists (but only some!) and enlightened environmentalists.

Michael Lonergan

13 January 2016 (an anniversary of significance)