

By email to the Inquiry



Dear Sir/Madam

13 May 2020

## **INDEPENDENT INQUIRY INTO THE 2019-20 VICTORIAN FIRE SEASON**

I wish to make an individual submission to the inquiry, focussed on improving management of bushfire risk in Victoria. In my observation there are weaknesses at all levels of bushfire management, ie national, state, regional, local government, town and home. I wish to make practical suggestions for significant improvement, many with very little cost.

### **My background**

I worked at all 3 levels of government in management and policy roles, Australian Government 10 years, Victorian government 24 years, including Office of Local Government 3 years. Qualifications in economics, politics and management.

### **Experience with bushfire**

Some experience. Twice I have been caught in a bushfire while driving in country Victoria. In my management roles I was responsible for the safety of up to 3,000 staff at 60 locations throughout Victoria, many in bushfire areas. I defended a property in NE Victoria during the Black Saturday 2009 bushfires and assisted recovery of a burnt out farm in NE Victoria earlier this year.

### **Observations of bushfire management**

Over the last 30 years or so there have been significant improvements to emergency management throughout Australia, eg:

- National and State level emergency committees and detailed plans;
- local government emergency committees and detailed plans;
- information websites by fire and emergency authorities; and
- mobile phone warning apps.

However, despite all that activity and use of resources we appear to be poorly prepared and our response to emergencies is inadequate. I suggest this can be measured, and the inquiry should ask:

- what proportion of the population of Victoria are prepared for bushfire when they drive on bush sided roads, eg travelling for work, to a holiday destination or just a day trip, (eg are they carrying water, woollen blankets, instructions for being caught in bushfire on the road)? My guess 5%.
- what proportion of homes (including rental properties) in bushfire areas have a written bushfire plan posted up in the home? 10%?
- what proportion of towns in bushfire areas have a concise bushfire plan ie one page? 5%?
- What proportion of Victorian adults know the bushfire rating system? 2%?

A suggested simple questionnaire is at [Attachment 1](#). This survey could be undertaken quickly and cheaply in Victorian government departments and agencies. Coordinated by the organisation's central safety committee and results reported back to your office. A good opportunity for safety committees to publicise and train bushfire safety.

My guess is that the preparedness is very low. In 30 years I am not aware of any evidence that Victoria's, **preparation by the public**, for bushfire (and other emergencies) has ever been measured.

### **Lack of confidence by the public in emergency management, eg no rationing**

During the early stages of the current virus pandemic throughout Australia there was widespread panic buying of some grocery items and other supplies. In effect this was a vote of no confidence by the people of Australia in our country's emergency/disaster management. The behaviour by the general public was predictable and reasonable. A month or so earlier, during the worst of the bushfires, Australians saw that there was no plan for **rationing** of essential supplies such as face masks to deal with smoke, even in Sydney, nor rationing of fuel, food etc in fire ravaged areas.

During WW2, throughout Australia, there was rationing of fuel, food, clothes etc, undertaken in accordance with well established plans and systems. Yet there were no rationing plans or systems evident during the bushfires or pandemic which is a clear indication that Australia's emergency planning has significant deficiencies.

In a major bushfire the need for rationing is **immediate** eg top priority is diesel fuel for fire fighting vehicles. Holiday makers may be demanding fuel so they can evacuate. Who decides? What's the plan? Plans for rationing, in a wide range of emergencies, need to be established and practised, and administered by local government.

### **Communication**

Many of the weaknesses in Victoria's and Australia's emergency planning are due to deficient communication. Humans have a very limited threshold for complication. "KISS" is a basic principle in communicating between humans ie "keep it simple stupid", it is stupid not to be simple. Simple communication works, complicated doesn't.

### **Australia's fire rating system**

The national bushfire rating system is obviously stupid, way too complicated: 6 rating names x 6 colours x 6 definitions x 6 actions!! Imagine if our road traffic signals had 6 colours. Furthermore, parts of the fire rating system are counter-intuitive eg blue, the colour of water means "high" fire danger. On the TV news parts of Australia showing blue lakes are supposedly showing areas of high fire danger!

The rating system also shows green "Low-moderate". This is also wrong. Most of us have an oven at home and we know that "moderate" heat is hot enough to cook ie approx 180-190 degrees centigrade. "Low" has a different meaning, it is significantly less than moderate, a low heat 150 degrees centigrade is used to simmer food. We need to communicate with the Australian public in language they understand. Low does **not** = moderate.

Australia's 6 level fire rating system was **not** designed as a system for communicating bushfire danger to the public. It was developed in the 1960's by CSIRO scientist A.G. McArthur to measure the degree of danger of fire in Australian forests (source Wikipedia, refer [Attachment 2](#)).

Since it was setup as a public warning system throughout Australia authorities have implicitly conceded that it is a flawed system, too complicated, eg a CFA one page summary 2018 ([Attachment 3](#)) now shows only 4 levels, the lowest rating rolls together "very high", "high" and "low-moderate".

I recommend that the current system be replaced with a simpler system, consistent with our road traffic system, but 4 levels eg:

Green – **low** fire risk, cold, wet or both, no action needed.

Yellow – **moderate** risk, warm, dry, light wind, fire can spread slowly, be careful.

Orange – **high** risk, hot, strong wind, fire can spread fast, be prepared to evacuate, total fire ban.

Red – **extreme** risk, hot, strong wind, fire will spread fast, many bushfires likely, total fire ban, evacuate.

Such a system is a lot simpler, intuitive and could be adapted for other risks throughout Australia eg floods, cyclones, dust storms, etc.

### **State Bushfire Plan**

The latest “State Bushfire Plan” on the website of Emergency Management Victoria is **2014!** 48 pages. Section 10 of the plan is titled “continuous improvement”, a frequently used and much abused term in the Victorian public service in my experience. Improvement from time to time is **not** continuous improvement. My understanding is that the term originated in Japanese car manufacturing where improvement was invited 24/7 by anyone, including unskilled workers on the production line. The essence of “continuous improvement” is the understanding that good ideas can come from anyone, anytime, and can be implemented immediately, eg simply by amending instructions and indicating the update by a later “version” (abbreviated to v) and date, further implemented by communication and training.

Emergency Management Victoria appears to support continuous improvement but in fact doesn't practice it. The latest State Bushfire plan is 2014! It should be updated annually well before bushfire season.

A few more comments on the Victorian State plan:

Page 2, only a few definitions shown, but actually more explained in a confusing way on page 3.

Page 2, no definition of “bushfire plan” ie plan for imminent bushfire threat eg at level of town or home.

Page 2, no definition of “preparation” but actually defined on page 3.

Page 3, first paragraph refers to “the phases of prevention, response and recovery”. This might appear to be semantics but I believe it is highly damaging. Yes of course it is desirable to prevent a problem but with bushfire total prevention is impossible. Before fire season fuel loads can be reduced and other proactive steps can be taken to prevent bushfires starting but inevitably some bushfires will start. We need to be **prepared** for bushfire season so the phases are:

preparation, response, recovery. Prevention is part of preparation but preparation is much broader.

Page 9, refers to the National Strategy for Disaster Resilience but no mention of rationing as part of preparation.

Page 13 briefly outlines “Municipal Planning”. This is extremely important and a major weakness in my observation. I was working for the Office of Local Government, Victoria at the time of council amalgamations 30 years ago. If I recall correctly the rationale was that larger councils would be able to provide better services and contribute to economic growth and employment through better support for business eg faster approval of development proposals ie optimise opportunities. But a less discussed or publicised rationale was that larger municipal councils would be better at handling threats. I don't see that that has happened. Municipal councils should have a network of safety committees and they should report on safety, even a chapter, in their annual reports. But safety appears absent in the Mornington Peninsula Council annual report and other publications. The Office of Local Government should be promoting and requiring safety in municipal councils.

Page 13, last paragraph “The Emergency Management Commissioner is developing an approach and framework for emergency management planning at the local level.” After 6 years still nothing? An effective local plan should be summarised on one page, I have submitted a format, below.

Page 20 refers to fire danger ratings but no mention of effectiveness.

Page 22 refers to “household preparedness” but no mention of a household bushfire plan.

Page 25, “science and technology”. I understand that the CSIRO has done a lot of analysis of bushfire behaviour in different habitats but I found it very difficult to search their information. CFA

publications show some excellent written and diagrammatic explanation of fire behaviour in grasslands, coastal scrub and tall forest. However, it would be more educational to view a short video say 3 minutes, showing actual fire in these 3 environments eg how fast does the fire travel, how high the flames, how hot, what causes spot fires, how far ahead can spot fires start etc. I suggest CSIRO be asked to prepare the video. Aim is to educate the public but also to scare them to prepare their homes and cars. Some people, including some in Blairgowrie, believe that coastal scrub doesn't burn.

### **Municipal, Local Government Level**

Some further observations of weaknesses in bushfire management at the local government level:

Mornington Peninsula Shire currently has the following 3 documents on its website

[www.mornpen.vic.gov.au](http://www.mornpen.vic.gov.au)

1. "Municipal Emergency Management Plan", latest v4.0, 3/5/2018, 35 pages, prepared in accordance with the Victorian "Emergency Management Act 1986". OK overall plan but some weaknesses eg no mention of rationing.
2. "Functional Sub Plan", SP03 "Municipal Fire Management Plan", latest v?, undated, 50 pages. Page 7 shows a hierarchy of planning, 4 levels, ie:
  - State
  - Regional
  - Municipal
  - Personal

"Town" level is missing, and this is critical.

Further into the plan, at page 45, a confused statement is made:

*"Community Information Guides: provide a planned response for emergency services and the community to a bushfire close to a township that has the potential to impact on the local community. This is a local plan (Bushfire Safety Plan)."*

3. "Blairgowrie Community Information Guide-Bushfire", v2\_05, Nov 2012, 16 pages. Most of this document repeats general information from the CFA and does not include basics for a plan eg who is the leader, how will communications be undertaken. This is **not** a town bushfire plan.

### **Town Level Bushfire Plans**

Fire and emergency authorities tell us every year to prepare for fire season eg clear flammable debris from around our home, clear out gutters etc. Websites, booklets and online videos assist this advice. They tell us to have a "fire plan" ie a plan for **imminent fire threat**. Very sensible.

However, there also needs to be bushfire plans for high risk towns and locations throughout Victoria.

### **Mallacoota**

A friend of mine lost his home there and reported general chaos, no evidence of a plan. What about all the other high risk coastal towns, including towns that were burnt by previous major bushfires eg Lorne, Anglesea. Did they learn from the previous experience? Did they have a town bushfire plan? I suggest the current Victorian inquiry ask for copies of the 2019 town bushfire plans for the high risk towns throughout Victoria.

### **Bermagui NSW, January 2020**

This could also be a useful recent case study, albeit from across the border but some Victorians holiday there. Bermagui is a typical high risk coastal town, surrounded by thick forest, limited narrow access roads, and packed with holiday makers in January. In early January 2020, New Year's day, a major fire was approaching the town, it was pitch black at 9am due to thick smoke and approx 2,000 people including my son, huddled on the beach at the largest building, the surf life saving club. Totally predictable. Many times when fire has threatened a coastal town the whole population has retreated to the beach, water being viewed as safety. On the beach people will naturally move to the largest building.

We also know:

- Major fires near coastal towns will burn power poles, therefore no electricity to power town water supply or filtration pumps, or fuel pumps at petrol stations, or lighting or other electricity for appliances like fridges etc
- Major fires will also burn communication towers, which knocks out mobile phones and radio.
- On arrival tourists will tend to do short trips and not fill up petrol in their cars until they are preparing to go home after their holiday, therefore if fuel is unavailable they don't have enough in their tank to leave.

So was Bermagui well prepared? My son, reports it was unclear whether there was an overall plan. Holiday makers received a text to tell them to take shelter at the lifesaving club. The leader of the Bermagui Surf life Saving Club (SLSC) appeared to be the designated leader for the crisis, planned beforehand? However, there didn't appear to be any designated coordinator of medical support and many people were suffering from the thick smoke including babies. The town's electricity stopped about 4pm, town water pressure ok, but filtration had stopped, water looked dirty and people were told not to drink it. Any emergency water at the SLSC?

The 240v loud speaker/s at the SLSC stopped when the power went out, their portable loud hailer megaphone was not working, messages were passed through the crowd by voice shouting.

Also in the afternoon mobile phone reception stopped and normal radio reception stopped. Messages were received at the SLSC by VHF radio from fire authorities? There was a generator at the SLSC, planned? At the end of the day, after a wind change, the crowd was told to go back to their homes for the time being, the road out of the town was blocked off due to fires. It was at least a day before holiday makers had a possibility to leave the town but there was no fuel in the town or other towns within the vicinity.

### **Blairgowrie, Victoria**

Blairgowrie is a small town on the Mornington Peninsula about an hour south east of Melbourne. Most of the township is in thick coastal scrub. To the west similar vegetation extends through Sorrento, Portsea and the Point Nepean National Park. There are 2 main roads in the end of the peninsula, both only 2 lane with thick scrub along and close to the road. One road along Port Philip Bay, the other along the ocean.

Blairgowrie is designated by the Mornington Peninsula Council as a "bushfire prone area". I have owned a house in Blairgowrie for 11 years and I have been seeking a fire plan for the town for 8 years.

The Blairgowrie area is one of the most dangerous in Victoria, eg scenario January, 20,000 holiday makers at the end of the peninsula, 25-30 knots north wind, fire starts say NE end of Point Nepean

National Park, or northern end of Sorrento near golf club or say Cameron's Bight. Fire trucks can't get there through heavy traffic, fire spreads fast towards the ocean coast. People panic, hook up caravans, boats, head off, some will queue at petrol stations. The only 2 escapes, Point Nepean Rd and Melbourne Road are at a standstill. The fire has now burnt over a mile, then comes the usual wind change, 20-25 knots westerly, but the fire front is now a mile wide, has build up heat and rips through people trapped in cars and houses. Fire trucks can't assist because they can't get there.

The area Rye, Blairgowrie, Sorrento & Portsea, ie southern Mornington Peninsula, needs specific town fire plans. In 2012 the then Fire Services Commissioner Victoria, Mr Lapsley, addressed a community meeting in Blairgowrie. Subsequently I wrote to Mr Lapsley on 15/10/2012 ([Attachment 4](#)) with some suggestions to improve bushfire management. I also requested the fire plan for southern Mornington Peninsula. In his reply 20/11/2012 ([Attachment 5](#)) Mr Lapsley noted some merit in my suggestions but didn't take the opportunity to pursue them. He also suggested the local council and the CFA had adequate planning for Blairgowrie. I disagree, and this is a good case study.

### **Suggested format for Bushfire Plan for Towns**

[Attachment 6](#) is a Bushfire Plan for the town of Blairgowrie which I have drafted quickly to show the structure of what an effective plan could look like. Simple, one page, could be posted in homes, shops notice boards etc. I suggest you compare it with the "Blairgowrie Community Information Guide-Bushfire", Nov 2012, 16 pages, refer above, available on the council website.

A one page plan should be prepared for all towns and areas in Victoria which have a high risk of being cut off by bushfire. State emergency authorities can identify the high risk towns, local government can prepare and maintain the town bushfire plans, but they need a suggested example.

In the case of Blairgowrie there are other factors which show the need for more strategic planning, including standing emergency powers which don't require a State or national declaration of emergency, because those powers are too slow. As described above, in peak season there are approximately 20,000 holiday makers in the southern end of the Mornington Peninsula with only 2 dual lane access roads. In the event of a major fire there would be widespread panic plus many cars would want to fuel up at Blairgowrie or Rye before heading home, thereby blocking the cars evacuating behind them. Petrol stations in Blairgowrie and Rye need to be closed fast, immediately. Petrol can be obtained on the Mornington Peninsula Freeway at Baxter. Who has the power to order immediate closure of a petrol station? Police? Local government delegate? Closure needs to be fast and highly visible, eg by hi-vis bunting lines, to stop cars blocking the evacuation roads.

### **Home Level Bushfire Plan**

As explained above Australia's bushfire preparation is way too complicated, also at the home or personal level. In Victoria the Country Fire Authority (CFA) provides good information to consider when preparing a home bushfire plan, but they don't show an example. At a community bushfire meeting in Blairgowrie last year the audience asked the CFA representative for an example of a home bushfire plan, but none was provided.

[Attachment 7](#) is an example of what it could look like. I prepared this for my home in Blairgowrie. I also prepared a bushfire evacuation checklist ([Attachment 8](#)). Bushfire can develop very fast and you might only have 10 minutes to evacuate.

These papers need to be simple, one page A4. They also have to be located fast in an emergency. In my Blairgowrie home my "emergency station" is the pin board in the laundry which shows 4 pages A4 size ie

CFA fire rating sheet (same as Attachment 3)  
Home Bushfire Plan (same as Attachment 7)  
Road map showing direction of evacuation routes, depending on wind direction.  
Bushfire Evacuation Checklist (same as Attachment 8).

**Conclusion**

Our volunteer and professional fire fighters are extremely brave and dedicated, I make no criticism. However, there are weaknesses in the management of bushfire risk throughout Victoria (and Australia). In this brief submission I have identified some of the weaknesses and suggested some solutions. I would wish to make further contribution if the opportunity was available.

Yours faithfully



Andrew Bruce Laing



**BUSHFIRE DANGER – QUESTIONNAIRE (at 13-5-2020)**

**This survey is to measure bushfire communication. Your answers are anonymous.**

1. Do you ever drive on roads through bush, or grass paddocks? YES / NO.
2. In the car do you carry (a) a copy of CFA instructions for when caught in bushfire YES / NO, (b) emergency water YES / NO, (c) woollen blankets? YES / NO.
3. Do you ever live or stay in a house with bush on the property or close by? YES / NO.
4. Are you aware of the bushfire danger ratings on road signs, TV etc? YES / NO
5. How many danger rating levels are there?.....
6. Is the rating system posted up, at your home, eg on a wall or fridge door? YES / NO
7. Can you name the fire rating levels, colour, meaning and action required?

Name of rating	Colour	Meaning	Action required

8. How useful is the bushfire rating system to you? Good / OK / Poor

Thank you! The information will be used to review the bushfire communication system.



# McArthur Forest Fire Danger Index

Attachment 2

From Wikipedia, the free encyclopedia

The **McArthur Forest Fire Danger Index** (FFDI) was developed in the 1960s by CSIRO scientist A. G. McArthur to measure the degree of danger of fire in Australian forests. The index combines a record of dryness, based on rainfall and evaporation, with meteorological variables for wind speed, temperature and humidity.<sup>[2]</sup>

A similar approach was adopted by McArthur for grassland areas. Luke and McArthur details the early development and use of these indices.<sup>[3]</sup> In 1980 Noble et al.<sup>[4]</sup> produced algorithms based on mathematical equations of best fit. These algorithms have been used since the early 1980s to enable easy computation. However they are often used with input values outside McArthur's intended design, resulting in FFDI values in excess of 100. The power function nature of the algorithm, together with limits of precision in measuring the input variables, may result in a large range of uncertainty in the calculated FFDI. For example, in conditions that produce an FFDI of 100, small fluctuations in wind speed and temperature would suggest a  $\pm 20\%$  range in FFDI.

McArthur tested his meter using low-intensity fires on Black Mountain, near Canberra (see Luke and McArthur) with the most extreme conditions being when FFDI was in the 20s range. McArthur specified a wind averaging period of "more than 5 minutes" ("Fire behaviour in eucalypt forests; Australia. Forestry and Timber Bureau : Leaflet ; no. 107).<sup>[5]</sup> A 10-minute period is the most common period used in Australian wind speed measurements and calculated FFDI values using different wind averaging periods cannot be compared. Since wind speed varies considerably over small distances, "observed" FFDI values will vary even more.

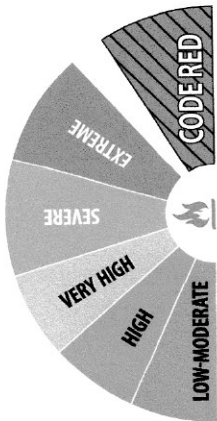
A fire danger index of between 12 and 25 on the index is generally considered a "high" degree of danger, while a day having a danger index of over 50 is considered a "severe" fire danger rating. Above this level in 2010 a distinction was made between forest and grassland fuels. For forest fuels, an FDI over 75 is categorised as "extreme" and over 100 as "catastrophic" (in Victoria the alternative rating name of "Code Red" has been adopted). For grassland fuels the threshold FDI values for the Extreme and Catastrophic ratings were increased to 100 and 150 respectively. Fire danger ratings are determined by the responsible fire agency in each jurisdiction, based on weather information provided by the Bureau of Meteorology and fuel information. Other considerations besides the Fire Danger Index, such as the likelihood of lightning ignitions and the severity of wind changes may also be considered by the agencies in determining a fire danger rating.

McArthur used the conditions of the Black Friday fires of 1939 as his example of a 100 index.

The FFDI on Black Saturday, 7 February 2009, reached much higher than the maximum value of 100. At such extremes it is meaningless to specify a particular value of FFDI. After the Black Saturday bushfires, the McArthur Forest Fire Danger Index was revised. The category "Catastrophic" or "Code Red" (Victoria) was added to help identify those situations where forest fires will spread so quickly that they present a critical threat to life and safety.

## References

- "New Warning System Explained" ([http://www.cfaconnect.net.au/index.php?option=com\\_k2&view=item&id=873](http://www.cfaconnect.net.au/index.php?option=com_k2&view=item&id=873)). Country Fire Authority. Retrieved 6 February 2011.
- Dowdy; et al. (2009). "Australian fire weather as represented by the McArthur Forest Fire Danger Index and the Canadian Forest Fire Weather Index" ([http://www.bushfirecrc.com/sites/default/files/managed/resource/ctr\\_010\\_0.pdf](http://www.bushfirecrc.com/sites/default/files/managed/resource/ctr_010_0.pdf)) (PDF).



**FIRE DANGER RATING**

## Be aware of the Fire Danger Rating and know what to do.

The Fire Danger Rating predicts how a fire would behave if one started, including how difficult it would be to put out. The higher the rating, the more dangerous the conditions. The rating is your trigger to act, so to stay safe you need to be aware of the Fire Danger Rating in your district. During the fire season, the Fire Danger Rating will feature in weather forecasts, be broadcast on radio and TV and appear in some newspapers. It can also be found on the CFA and VicEmergency websites, or by calling the VicEmergency Hotline **1800 226 226**

### CODE RED

These are the worst conditions for a bush or grassfire. Homes are not designed or constructed to withstand fires in these conditions. The safest place to be is away from high risk bushfire areas.

### WHAT SHOULD I DO?

Leaving high risk bushfire areas the night before or early in the day is your safest option – do not wait and see. Avoid forested areas, thick bush and long, dry grass. Know your trigger – make a decision about:

- when you will leave
- where you will go
- how you will get there
- when you will return
- what you will do if you cannot leave

### EXTREME

Expect extremely hot, dry and windy conditions. If a fire starts and takes hold, it will be uncontrollable, unpredictable and fast moving. Spot fires will start, move quickly and will come from many directions. Homes situated and constructed or modified to withstand a bushfire, that are well prepared and actively defended, may provide safety. You must be physically and mentally prepared to defend in these conditions.

Consider staying with your property only if you are prepared to the highest level. This means your home needs to be situated and constructed or modified to withstand a bushfire, you are well prepared and you can actively defend your home if a fire starts.

- If you are not prepared to the highest level, leaving high risk bushfire areas early in the day is your safest option.
- Be aware of local conditions and get information by listening to ABC Local Radio, commercial and designated community radio stations or Sky News TV, going to **emergency.vic.gov.au** or calling the VicEmergency Hotline on 1800 226 226.

### SEVERE

Expect hot, dry and possibly windy conditions. If a fire starts and takes hold, it may be uncontrollable. Well prepared homes that are actively defended can provide safety. You must be physically and mentally prepared to defend in these conditions.

Well prepared homes that are actively defended can provide safety

- check your bushfire survival plan.
- If you are not prepared, leaving bushfire prone areas early in the day is your safest option.
- Be aware of local conditions and get information by listening to ABC Local Radio, commercial and designated community radio stations or Sky News TV, going to **emergency.vic.gov.au** or calling the VicEmergency Hotline on 1800 226 226.

### VERY HIGH

If a fire starts, it can most likely be controlled in these conditions and homes can provide safety. Be aware of how fires can start and minimise the risk. Controlled burn-offs may occur in these conditions if it's safe – check to see if permits apply.

### HIGH

Check your bushfire survival plan.

- Monitor conditions.
- Action may be needed.
- Leave if necessary.

### LOW-MODERATE

*Attachments 3*



*Sept 20 18*

15 October 2012

Mr Craig Lapsley  
Fire Services Commissioner  
121 Exhibition St  
Melbourne 3000

Dear Mr Lapsley

### **BUSHFIRE SURVIVAL**

At the community meeting at Blairgowrie on 4 October I made some suggestions for improving preparation for bushfires. You asked me to submit them to you.

#### **Leverage or multiplication of fire fighting resources**

Increasingly government has to do more with less. Severe climate events are increasing. The public needs to be well prepared and stock up before events occur as stocks will run out during severe events such as fire, flood, tsunami.

Government could leverage it's efforts by requiring hardware stores to set up an "Emergency Station" to sell items required in an emergency. This could be as simple as a small floor-space with a flashing red light with the attached sheet available. Local emergency authorities could request supply of items relevant to that location and publicise the stores. It would be a great community service by the stores and likely profitable.

Government could also leverage members of the public more eg ask people living in high, wide view houses to be spotters. Supply them with binoculars, bearing compass etc. Also ask people living in high risk areas to keep large capacity fire extinguishers as an extra line of defence.

#### **Hard to get items**

Fire comes with the wind. Every home in high fire risk areas should be fitted with a weathervane so the occupants can monitor wind strength and changes themselves. Problem that these are not stocked commonly by hardware stores.

Small pure wool blankets suitable for some thermal protection are hard to get due to much cheaper, but unsuitable synthetic blankets.

Fire planning recommends grab bags but I haven't found anything suitable. A family needs a grab bag for each member labelled with name and showing a checklist of items. Needs to be clear plastic so that contents are visible with a pocket on the outside for a checklist and other pockets for small items. Emergency agencies could design this and ask hardware stores to stock them at Emergency Station.

Emergency agencies need to help the public to get supply of the above 3 items (and other emergency items).

**Alert system**

A siren is useful when it is activated, for those who hear it. But there are many situations where people will see a danger before a siren is activated or outside the range. The danger could be fire, flood, tsunami, gunman, shark etc. Sometimes people will sound their car horn, flash their lights, to warn others. It would be useful if Australian government adopted a standard car horn/lights warning which can be used universally to warn of impending danger eg 3 short bursts of the horn or 3 flashes of headlights.

**Fire Plan for Southern Mornington Peninsula**

Extensive bush, 20,000 people at peak summer, 2 narrow roads. This area is one of the most dangerous bushfire areas in the world and needs one of the best fire plans. Where can I view the fire plan? I was unable to find it by internet search.

Yours sincerely

Andrew Laing



(Below is an example only)

## **EMERGENCY STATION**

**BUNNINGS ROSEBUD STORE (updated 15 October 2012)**

In an emergency we can run out of stock of essential items. We urge our customers to be well prepared for emergencies by supplying themselves with these items well in advance. You may need these items if you live or holiday or travel through areas where these emergencies may occur.

### **BUSHFIRE/ HOUSE FIRE**

Fire extinguishers this aisle  
Steel buckets this aisle  
Mops Aisle 17  
Leather gloves Aisle 16  
Protective clothing Aisle 12  
Goggles this aisle  
Mask this aisle  
Woollen blankets this aisle  
Water containers 20L & 10L this aisle  
Weathervane this aisle

### **FLOOD**

Shovels  
Large plastic bags  
Etc

### **GENERAL EMERGENCIES**

First aid kit  
Grab bags  
etc



FIRE SERVICES  
COMMISSIONER  
VICTORIA

Attachment 5

Level 26, 121 Exhibition Street  
Melbourne VIC 3000  
GPO Box 4356, Melbourne VIC 3001  
T +613 8684 1388  
F +613 8684 1399  
E admin@firecommissioner.vic.gov.au  
DX 210077

www.firecommissioner.vic.gov.au

Our ref: CD/12/499916

20 November 2012

Mr Andrew Laing  
[Redacted]

Dear Mr Laing

### **BUSHFIRE SURVIVAL**

Thank you for your letter dated 15 October where you outline suggestions for advancing bushfire safety and for attending the recent community meeting at Blairgowrie.

I have provided you with CEO details for Masters and Bunnings Stores, may I propose that you pass your suggestions in relation to retail outlets stocking items useful in emergencies onto them.

Similarly, your suggestion of a standard car horn or lights signalling is interesting, although not too far removed from the current use of any device to signal "SOS".

In relation to currently planning for the southern Mornington Peninsula, the Mornington Peninsula Shire prepares a municipal emergency management plan, which is available on their website [http://www.mornpen.vic.gov.au/page/page.asp?page\\_id=140](http://www.mornpen.vic.gov.au/page/page.asp?page_id=140)

In addition, the regional office of CFA (Southern Metropolitan region Ph. 97671800) will be able to advise you of additional local planning undertaken in relation to bushfire planning undertaken by them.

Thank you again for your interest.

Yours sincerely

Craig Lapsley PSM  
**Fire Services Commissioner, Victoria**

Mr John Gillam  
Managing Director  
Bunnings  
Locked Bag 3004  
Hawthorn Vic 3122

Mr Don Stallings  
Managing Director  
Masters Home Improvement Store  
Locked Bag 3004  
Hawthorn Vic 3122

cc. Terry Hayes, Executive Manager Community Capability, CFA

**BUSHFIRE PLAN - BLAIRGOWRIE TOWN (draft v1, 27-4-2020)**

**Purpose:** This is a one page plan for **imminent bushfire threat** to the town of Blairgowrie eg where hundreds or thousands of people are trapped in Blairgowrie by a large bush fire, unable to evacuate to Rye or further east, or to Sorrento and further west. Possibly for 12 hours or so.

**Emergency leader 24/7:** Commodore (ie CEO) of Blairgowrie Yacht Squadron, or representative.

**Shelter and assembly:** Blairgowrie Yacht Squadron (BYS) on the beach, to the west of Blairgowrie shops. If BYS is unavailable, assemble at Blairgowrie shops car park.

**What to bring:** Blairgowrie is rated as a bushfire prone area. Follow CFA instructions and your own home "Bushfire Plan" for what to wear and take if you need to evacuate your home. Refer to CFA booklets and other publications at:  
[www.cfa.vic.gov.au/plan-prepare](http://www.cfa.vic.gov.au/plan-prepare)

Bring as much water and food as possible. Also blankets, chairs, torches.

**Medical attention:** BYS first aid officer will coordinate medical attention eg for smoke inhalation, burns, etc and preparation of a list of all people who have evacuated.

**Communications:** The fire authorities and Police will communicate with our emergency leader by mobile phone if working, or satellite phone or VHF radio if mobile phones not working. Messages will be passed to the evacuees by the BYS loud speakers or portable megaphones. To notify residents of danger car horns may sound 3 times, repeated as necessary. There is no town siren in Blairgowrie.

**Water and food:** Emergency leader will arrange rationing of water and food if required.

**Toilets:** At the BYS the emergency leader will arrange additional toilets if required. If the BYS is unavailable use toilets opposite the shops on the beach side.

**Lighting (for night, or dense smoke in daylight):** At the BYS the emergency leader will arrange backup lighting using the club's generators if 240v power has stopped. If the BYS is unavailable the emergency leader will coordinate emergency lighting.

**Posting of this plan:** Post in your home emergency station with your home fireplan etc, eg on your kitchen/laundry pinboard, kitchen fridge etc. Copy also on back of your toilet doors.

**Updating of this town bushfire plan:** The emergency leader will update this plan in consultation with the Blairgowrie community and arrange an ongoing plan for BYS to provide the services above in an emergency.

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**BUSHFIRE PLAN – [REDACTED] BLAIRGOWRIE (at 27-4-2020)**

**Introduction:** This is a one page plan for **imminent fire threat**. See also Melway map of Blairgowrie on laundry pin board showing highlighted escape routes.

**House location:** House entrance faces north-east, towards the bay beach. Rear of property faces south-west. Windvane is on Guest House roof, visible from rear of house. Two escape routes, Point Nepean Rd ie Beach Rd, and Melbourne Rd both run east/west. Note longer distances possible east and west for fire to build size and heat. Melbourne Rd is a poor escape route as heavy vegetation on both sides of road and no water. In an extreme emergency both Melbourne Rd and Point Nepean Rd would clog with cars quickly and stop, and block emergency vehicles from getting in. Be prepared to evacuate on foot, preferably to bay beach (nearest is opposite Adelaide St).

**House fire equipment:** Fire extinguisher at entrance to kitchen, hoses at front fence, back wall of house, back wall of guest house, buckets in laundry. In a major fire tap water pressure will be low. House would be extremely difficult to defend due to surrounding trees, sloping ground and close inflammable structures, not recommended.

**Dangerous weather, hot and windy, get ready:** Check wind direction often. Check internet (cfa.vic.gov.au), radio (ABC local), Bushfire info line 1800 240 667, and TV for weather and fire updates.

**Prepare to evacuate:** Gates open, cars parked facing gates, cars packed with basics ie fire extinguisher, water, cups, woollen blankets, food, first aid, computers, mobile phones, medications. Also in car: dog lead, water bowl, food. Inside each bedroom: protective clothing laid out for emergency **heat** exposure ie long sleeve thick cotton shirt, jeans, woollen socks, boots/running shoes + emergency leather gloves, wide brim hat, face mask. Also bag, preferably back pack with few clothes for hot weather + grab bag of essentials (mobile phone & charger, wallet/ handbag, keys, medications, toiletries, first-aid, battery powered radio, insurance policies house, cars).

**Trigger to leave:** day fire rating “Severe, Extreme or Code Red”, direction by fire authorities or observation of smoke/ fire siren etc.

**Travelling in dangerous weather:** If you are travelling in hot and windy weather, eg to back ocean beaches or winery areas keep the above items in the car ready for emergency use. Best to stay close to Bay beaches on dangerous days.

**Smell smoke, fire approaching:**

Check wind direction on windvane if possible. Best evacuation if **wind not coming from the north**, ie not coming from front of house, load grab bags and clothes into car and head for front Bay beach via Bell St, then William St. Keep going to Rye shops if possible as it is a wide safe area. If car travel not possible, walk to front beach (10 mins) or run. Note Blairgowrie shops is a “Neighbourhood Safer Place”, not as safe as Rye shops.

**Worst case, shelter in house:**

If fire is close from the north, or no time to evacuate, grab towels, assemble in rear lounge room near brick wall, get buckets of water and use hoses if possible. As fire front passes, ie extreme heat, and if house catches fire cover yourself in wet towels and evacuate to front yard of house via side brick path unless possible to evacuate via front door.



**BUSHFIRE EVACUATION CHECKLIST (updated 28-1-2020)**

**PERSONAL GRAB BAGS eg use pillowslips:**

Wallet/purse/handbag (incl driver's licence).  
Keys.  
Jewellery.  
Mobile phones and chargers.  
Computers & chargers.  
Documents (passports, legal docs, insurance docs etc).  
Council rates notice for ID for Police to return to property after fire.  
Computer backup USB sticks (photos, documents).  
Medications & prescriptions.  
Glasses.

**CLOTHES:**

Protective clothing for fire heat – long-sleeve cotton shirt, long pants, woollen socks, sturdy shoes, wide-brim hat.  
Fire/smoke protection – mask, goggles, leather gloves.  
Change of clothes.  
Toiletries.

**CAR:**

Glovebox: CFA instructions "Radiant Heat, If You're In A Car"  
Water & cups.  
Food.  
Woollen blankets.  
Fire extinguisher.  
Dog lead, water bowl, food, bedding.  
First-aid kit.  
Torch (Iphone).  
Portable radio.

**BEFORE LEAVE HOUSE:**

Turn off gas supply (house side path, near front of house).  
Close and lock all doors & windows.  
Move outdoor furniture away from house.  
Fill roof gutters with water, **if time.**  
**Leave front gates open for fire truck access.**