

13 March 2011

Re: Perth Bush Fire Review

Thank you for this opportunity to comment about bush fire management in the Perth Hills.

We have lived at our property for nearly 30 years, and along both Brooking Road opposite our house, and Hedges Road, there have been no controlled burns during the time that we've lived here. It's a disaster waiting to happen.

I cannot comment about other hills suburbs, but Darlington, the John Forrest National Park and anywhere else where housing developments have been encouraged need to have controlled burns in order that a Roleystone disaster is not repeated.

Yours sincerely

.....
(Mrs. M. Reif)

From:
To:
Subject: Fw: less risk of being razed ?
Date: Tuesday, 8 March 2011 7:59:22 AM
Attachments: [Fire-Brake_004.jpg](#)
[Fire-Brake_003.jpg](#)
[Fire-Brake_006.jpg](#)
[new_tank_Dec07_004.jpg](#)
[Fire-Brake_005.jpg](#)

Mr. Keelty
Say the cost of a similar Fire-Brake system was \$10,000

Fitting out 100 hills dwellings would cost \$1m.

Those 100 houses would have 100x10 tonnes of water on standby = 1,000 tonnes - which could be dumped in around 30 minutes via those 100 systems.

I understand 278 tonnes of water were dropped by helicopters during the Kelmscott/Roleystone bushfire last month.

Our place is an orphan
100 would be more like a small army

Rgds
Paul P Clune

I sent the note below to Paul Murray @6PR....but remain unwilling to use the media
PPC

Channel 7 had a 6pm TV news item on my roofjets on 15th December 2006 showing my roofjets at work (@ 400litres per minmute - they ain't 'sprinklers' !!...your garden hose output peaks at around twenty litres per minute...))

The voiceover in that TV news segment went something like
" Mr. Clune believes that if the owners had his system in place their house would not have burnt down".....as footage of the Roper house in Kalamunda being razed was shown.....so making Mr. Clune an utter mongrel rat to all and sundry

What I actually said was "All I believe is that it's better to have this system than to not have it"

Since then - all of the above means I'm saying nothing to the media

Rgds
PC

----- Original Message -----

From: [REDACTED]
To:
Cc:
Sent: Monday, August 24, 2009 2:35 PM
Subject: less risk of being razed ?

Dear Minister

Further to the \$450,000 set up cost plus \$500,000 annual cost of a new fire warning system reported in today's West Australian, please have someone address our FIRE-BRAKE system.

We do not claim anything other than that the dumping tonnes of water around houses as a bushfire approaches should have a dampening/braking effect.

Fire-Brake 005 is roofjet mounted on south gable throwing 200 litres / minute..in circle of 30m diameter...[a normal garden hose does 20 litres / minute.](#)

Jet takes about 90 secs per full circle. Jet drenches lower parts of nearby gum trees to left and right plus the pines behind fence in Fire-Brake 004. The back of jet throws spray over house.

Fire-Brake 004 is path along east boundary past pump & engine (under skillion) to first tank - put there in Dec 06

new tank Dec 07 is of both tanks (the second, on right, I put in place dec 07) so total water on standby is now 12 tonnes

Fire-Brake 006 is north gable jet throwing 15m radius circles @ 200 litres/minute (jet goes over roof of free standing garage on lower left hand corner and up into neighbour's pine trees behind fence in photo Fire-Brake 004).

We have about 30 minutes of pump time to dump 12 tonnes of water over & around the house - so if pump started say 20 mins before fire arrives the fire might have less chance of razing house.

Fire-Brake 003 is of 6,300 litre (first) tank in foreground and roof retic from engine/pump to north and south gable jets - view is from NE to SW

I understand some other homes have pumps connected to their swimming pools - but am not aware of jet capacities.

If there were more self powered roofjets plumbed into tanks or swimming pools for use in case of fire @ 200 litres/minute each, would a bushfire not have more trouble getting up to firestorm status ?

I believe fire helicopters carry 1 tonne per trip in a bucket - except Elvis - which apparantly carries six tonnes per trip.

If 100 hillside houses had 10 tonnes each in tanks and dumped it around themselves (@ 400 litres per minute each as a fire approached) - that would equal 40 tonnes per minute.....or about six trips by Elvis per minute.....i.e....one Elvis trip every ten seconds ... being dumped in front of a fire as it approached !

We hope we never have to find out. I designed and fitted our FIRE-BRAKE system at a cost us of \$5,000 all up.

Regards

Mr. Paul Clune

From:
To:
Subject: Re: Dwellings in bushfire country
Date: Wednesday, 9 March 2011 1:03:33 PM

Thank you Belinda

I've done my anti-bushfire nuts & bolts.....and yes, I used to compose contracts and scrutinize clauses (my company was Joseph Charles Learmonth Duffy - Gavin Hegney was my Valuation Dept manager) & caution my staff in dealing with black letter contracts with: "Don't get a full stop upside down....."

But that was all before the turn of the century.....and whilst there is still a couple of years before my three score and ten arrives, I'll leave all the here-to-fores & by-with-froms for others...but thanks for your suggestion.

And I thank you very sincerely for your confirmation that Mr.Keelty will have my notes put across his desk (or screen ...as the case may be)

Please don't hesitate to ask if some , any or all, perthhills bushfire review panel members would like to come up to Roleystone & see my jets (&/or fire hoses) in action.

Adios for now

Rgds

PPC

----- Original Message -----

From: [REDACTED]
To:
Sent: Wednesday, March 09, 2011 12:30 PM
Subject: RE: Dwellings in bushfire country

Good afternoon Mr Clune

Thank you for providing your additional information. I will ensure this is passed to Mr Keelty.

It may be helpful for you to put your thoughts together in a formal submission. The template for submissions is available on our website which is www.wa.gov.au/perthhillsbushfirereview

Kind regards
Belinda

Perth Hills Bushfire February 2011 Review
Locked Bag 10, Cloisters Square, Perth WA 6850

W: www.wa.gov.au/perthhillsbushfirereview

From: Paul Clune
Sent: Wednesday, 9 March 2011 11:33 AM
To: Perthfirereview
Subject: Dwellings in bushfire country

Hello again Mr. Keelty

You could hardly be expected to know that we moved to a 3,000 sqm lot here in Roleystone from a 700 sqm lot in Ardross in 2002.

The fresh air is gorgeous but the bushfire risk was nerve wracking. Now it's just plain stressful.

After the 38,000 ha Karragullen fire (sometime around 2004) I resolved to never be so exposed again. We got light 'snow' here during that fire, but the snow was black ash.

Running around filling buckets and spraying garden hoses were useless hence my resolution to never be so exposed again. After that fire I measured our garden hose output. It ranged between 15 & 20 litres/ minute.

During the eighteen months following that fire I sourced pumps, pressure water jets (Hunter 12mm aperture with 200 L /min output @ 60 psi) hoses, valves and tanks. Now we have 12 tonnes of water which can be pumped (new 6.5hp petrol Honda with Onga Blazemaster) out at 400 litres/ minute in two 15m radius circles (80 secs per full circle) from the jets mounted on each roof gable. The system was completed in 2006 so now we have 30 minutes to dump 12 tonnes of water around the house and up into nearby trees. The tanks are horizontal and being on legs are easier to set on concrete blocks rather than vertical tanks which require a lot more level ground to sit on.

The tanks are at roof level so the pump does not have to lift the 12 tonnes up (say 4 metres) before throwing it. Water costs about 85 cents a tonne to buy - so it's hardly worth loading up the pump with such a lift for the sake of \$10 - and once the tanks are full, they will hopefully never have to be re-filled.

Additional to the roofjets (see Fire-Brake 002) are two firehoses. They are fed by the two red taps above the pump (see fire-brakeMkII 003). The right hand red tap feeds the 15m rolled up hose behind the pump for use at the rear of our house & the left hand red tap feeds the 36m firehose reel bolted to a verandah post outside the kitchen door (see fire-brakeMkII 001) and being of that length can target trees at least 45 metres away to the front of the house.

The system might fail - but I believe it is better to have spent the \$5,000 and have it on stand-by (to hopefully never be used) than not.

If every second house around here had something like the system, wouldn't a bushfire have more trouble getting up to firestorm status?

Most of us know the local bugs around here will build mud nests in any aperture left open for a few weeks - so the 200 L /minute jets I bought are the spring loaded pop-up type otherwise used to irrigate golf courses. I realize they're not metal but if a fire gets so close and so hot as to melt them; it would be "goodbye house" anyway.

Brass open aperture jets will get blocked with insect mud unless flushed out (almost) daily whereas the spring-loaded jets (see jets 002) cannot get blocked because they only lift up under 60 psi pump pressure.

If Local &/or State Govts urged their hillside rate/tax payers on large timbered lots to replicate something like what I've sourced and assembled, maybe we could all collectively enjoy a better stand-by asset to deal with a bushfire - such that, if another one did start, it will hopefully not ramp up to a firestorm and raze hillsides again.

What difference would the order: "Start Your Engines" make...with 1,000 tonnes on standby in 100 houses (at a cost of say \$10,000 per house = gross cost \$1m.) the whole 1,000 tonnes of which would be dumped in 30 or so minutes.....surely would not a bushfire be severely braked ?

With property values having almost trebled since 2001 there should be ample asset equity for the majority of owners, without the readies, to borrow against for the cash to buy the package.

I have zero commercial interest in the adoption by others of what I have done. My interest is, as mentioned, solely to motivate others to do something similar - via your involvement perhaps?

As before - one house is an orphan, whereas one hundred is a small army....and like any army, the pumps, jets and engines would have to be identical so that strangers/neighbours/firefighters could start them without having to deal with various make & model differences in an emergency at un-attended dwellings when a fire started.

Regards
Paul Clune

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From:
To:
Subject: Pert Hills Bushfire Review Submission
Date: Monday, 7 March 2011 3:47:52 PM
Attachments: [Perth Hills Bushfire Review Template for Submissions\[1\].doc](#)

I attach a submission to this Review on behalf of the Brigadoon Progress Association.

Our submission was also sent to FESA and we have been told it has been passed to the Major Incident Review being conducted by Mr Stuart Ellis AM.

John Scotford
Chair, Brigadoon Progress Association



Perth Hills Bushfire February 2011 Review

Submission to the Perth Hills Bushfire February 2011 Review

Submissions should be submitted electronically (preferred) to:

[Redacted]

or posted to:

Perth Hills Bushfire February 2011 Review
Locked Bag 10, Cloisters Square
PERTH WA 6850

Note: All submissions received will be made available on the Inquiry's website. People wishing to make a confidential submission should make this clear at the time of lodgement and the Inquiry will not publish those submissions. However, people should be aware that whilst every endeavour will be made to ensure confidentiality, there is a possibility that such submissions might be released in accordance with the *Freedom of Information Act 1992*.

Contact Details

Name:	John Scotford
Address:	
Email address:	
Telephone number:	

Organisation Details (Where Applicable)

Is this submission presented on behalf of an organisation:	Yes
If yes, name of organisation:	Brigadoon Progress Association Inc.
Position in organisation:	Chair

Response to Terms of Reference

You must address at least one of the Terms of Reference.

1. **The adequacy and effectiveness of information and communication campaigns and mechanisms, including systems for alerting residents in relation to the fire or potential fires.**

Warning : StateAlert

In January 2010 there was a serious fire in the Brigadoon area. At a community meeting shortly afterwards, many residents raised concerns with the FESA representatives present. Essentially, those concerns were about StateAlert messages being received well after the emergency was past, or not at all. The FESA representatives said that lessons would be taken from the fire and assured us appropriate remedial action would be taken. At a similar community meeting held after the recent Baskerville fire similar concerns about StateAlert were raised and the FESA representative was asked what remedial actions had been taken in the intervening 12 months. He said he could not answer the question and that we should write to the Chief Executive Officer on the subject.

Clearly, from the experience of Brigadoon and nearby residents, StateAlert has failed in both 2010 and 2011. Once again, residents received messages far too late to be of any practical help, or received no messages at all. The recorded and website information provided by FESA on the evening the fire started said at least as early as 10.30pm that a fire which was out of control would impact our suburbs and that we should leave immediately. It appears that no StateAlert warnings were sent to residents until 2.15 am or later. By that time, virtually all residents had long been made aware of the fire danger through contact by friends or relatives or neighbours.

The FESA website says that "**StateAlert** automatically delivers emergency warnings direct to you when lives may be in danger in your neighbourhood." That did not happen. Some residents received a warning nearly four hours after the danger was first being broadcast via the website and radio; some residents never heard anything at all. At night time a

phone ringing in the house is the best way of alerting people who are asleep and it did not happen.

Question 1 What has been done to improve the StateAlert system since January 2010?

Question 2 What changes are proposed in the light of the patent failure of StateAlert demonstrated by the Baskerville fire?

Warning: alternatives

By at least 10pm on the evening of the fire, FESA (or volunteer) vehicles were in the area. The personnel involved made contact with a small number of residents, by virtue of driving onto or near their properties. The vast majority of residents, however, were unaware of the presence of the vehicles.

If the FESA/volunteer vehicles had been equipped with sirens, they could have sounded them en route to the anticipated fire front. Alternatively, the vehicles could have repeatedly sounded their horns as they drove about. Residents would thereby have been aroused (many/most were in bed) and, on investigating, would have learned of the imminent fire danger. Has the Authority considered a more formal system of siren warnings, either through fixed or portable sirens?

Question 3 Is there a FESA policy on the subject of siren/horn warnings by vehicles attending an anticipated fire front? Has the Authority considered a formal system of siren warnings?

Re-entry of evacuated residents

Residents have complained about confusion regarding re-entry to their properties following evacuation. In some cases, residents were permitted to return to their properties but, on returning, were immediately informed by FESA public information that their property was under threat and they should leave or prepare to defend their property (Watch and Act warning). That information in some cases was being provided more than 12 hours after the residents had returned. This is confusing and can lead to

residents disregarding warnings. We are informed that residents of one road were prevented from returning to their properties when attempting to enter from one direction, while residents attempting to enter from a different direction were given permission to proceed.

Question 4 Has FESA conducted any analysis of the re-entry procedures implemented during the Baskerville fire?

David Redpath

7 March 2011

Mr Mick Keelty
Chairman, Independent Inquiry,
Perth Hills Bushfire February 2011
197 St George's Tce,
PERTH WA 6000

Dear Sir

RE: Bushfire event 6 February 2011, Kelmscott

The purpose of this letter is to raise my concerns to the Inquiry about the consequences of the 6 February Bushfires. By way of background I am a long time resident of one of the severely affected Streets. In the past I was a member of State Emergency Service in Armadale for ten years including time as Co-ordinator/Controller and I have attended two disaster management training courses at the Australian Counter Disaster College in Macedon, Victoria.

I have been disappointed by various comments in the press attributed to Local and State Government officials and politicians, which, amongst other things, have included the condemnation that residents don't do enough to look after their properties to protect them from fire. This sort of comment impresses me as being an attempt to blame the victims and, I think, ignores the real culprit.

While I am certain there are individual landowners who could do more and rightly deserve condemnation the simple fact is that the fire did not travel over 5kms north from its point of origin through suburban housing from house to house to my back fence. It travelled from South of Brookton Hwy North through the Darling Range Regional Park (DRRP) and attacked my house from out of the DRRP. ☹



As you can see my property backs onto the DRRP. Hundreds of acres of overgrown bush were on the other side of my fence line, which has been burnt out by the fire which travelled over 5kms in less than an hour crossing Brookton Hwy, Buckingham Rd and Canning Mills Road, see maps and satellite photographs attached.

There have been several major fires in the DRRP close to my house since 1993 in the time that I have lived here. The last big fire in 2004 was stopped at my back fence and we thought something might be done to reduce the fire hazard to housing..... But nothing has eventuated. In the 18 years I have lived here there has been no controlled burns or any other fire hazard reduction management in that area.

Blanket accusations of negligence levelled at residents and particularly those who lost everything are unhelpful and insensitive. Perhaps such accusations are true in some cases, but in many instances they are not true and the primary problem was the fuel loading and lack of fire hazard reduction in the DRRP.

The house on the [redacted] which was completely destroyed has only one palm tree on its site, is surrounded by lawn and is at the intersection of the street where there is a wide road between it and the bush. There was nothing more those victims could have done to prepare their property. See the photo below.



Other houses further down the hill show evidence of scorching from flying embers which clearly came from the DRRP.

We residents can look after our 1/4 acre blocks and organise firebreaks etc... but when the massive natural bush park land on the other side of the fence is not managed, has no controlled burns and is left to load up with fuel waiting for a catastrophic fire the efforts of residents are

never going to be enough. Those who have looked after their property become just as much a victim as those who do not.

There are hundreds of acres of bush behind my house protected by a 3 metre firebreak some 20 metres beyond my boundary. This means that plenty of bush grows in between that puny firebreak and my property fence line. The scrub from the DRRP encroaches onto my property, growing over and through my fence!

See the photo below taken 6th March 2011 on another section of the boundary fence of the DRRP at the The situation on my back fence was similar to that
photographed below with considerable amounts of vegetation growing up to and over my back fence and into my property.



The small orange sign just inside the fence reads "Banyowla Regional Park," Which I understand is or was part of the DRRP. The maps attached indicate it is part of the DRRP.

I have 3 metre firebreak inside my fence line constructed of brick paving and a second 5 metre wide paved area next to the house, but that failed to prevent fire damage to my house because the fire in the DRRP went unchecked roaring up to and over my back fence. My entire backyard was burned out, my house damaged and what is left of my back garden is now down at the Armadale tip. I emphasise that I was absolutely one of the lucky ones. Nevertheless I need to say very clearly that my property had no chance against the enormous fire that was coming along the hill spreading into the housing from the DRRP!

I am very concerned that the fallout from this fire disaster will be that the residents will be made to "jump through hoops" and have to deal with people running around with little pads of Infringement notices while the authorities responsible for the Darling Range Regional Park stick their heads back in the sand and we residents are left to face the same situation again in 5 to 7 years from now.

Shortly after moving here in 1993 I went over the fence into the DRRP and cleared the area between my back fence and the firebreak some 20 metres beyond my fence line. Next day I had the Ranger on the doorstep telling me off and threatening me with prosecution. Here we are in 2011 and it takes a catastrophe for any sort of response. I hope the response is more sophisticated than "let's blame the victims."

I would like to see the discussion expanded to include what steps will now be taken to protect residents from the poorly managed DRRP and other natural bush parks. Do we have a right to sue over the negligent management of those areas when fire damage inevitably happens.

The area where I live is residential. Government gave permission for houses to be built in this area. Presumably the safety of residents was an issue given very careful consideration in the determination to zone areas as residential and that sufficient fire protection measures were going to be in place. In my view those same authorities also have a duty of care to us, their neighbours to ensure that a catastrophe like this does not occur again through negligent management of the DRRP and other natural bush parks.

My knowledge of the legal obligation of Government in relation to fire hazard reduction is limited nor do I claim expertise in prescribed burning strategy. However I note that the Indicative Prescribed Burn Program – 6 Seasons Swan Region extracted from the Dept of Environment website at <http://www.dec.wa.gov.au/content/view/128/1870/1/3/> indicates that no prescribed burning will take place in the DRRP in the next few years. See extracted Map attached.

Given that no prescribed burn has taken place in the DRRP behind my house in the 18 years I have lived here and no prescribed burning is planned in the foreseeable future I am very concerned that next time the DRRP goes up in flames we won't be so lucky. I would like something to be done about that please.

Sensible things which could be done to improve matters.

- Clear a decent width firebreak behind Ashley Drive, Sunset Tce and further north behind Taronga Drive. This would prevent the bush growing right up to our fence lines and reduce the vegetation encroaching onto our property.
- Implement a regular controlled burn program for high risk areas in the DRRP ie anywhere where there is housing within 100metres.
- Provide more green pickups in fire critical streets to assist residents to get the stuff away from their property.
- Provide residents with access to fire hydrants to enable them to protect their property and fight the fires and,
- provide training in their use for willing residents.
- Access to fire tracks behind Ashley Drive, Sunset Tce have been blocked in recent times. In the past I have had to direct fire fighters to the access points up to a Kilometre away. Better access to fire tracks would be useful.

Other Observations

Speed of onset of the fire was an issue. I first noticed the fire at about Midday and thought it was on the south side of Brookton Hwy about 5-7kms from my property. I looked outside an hour later and estimated it was near the end of Ashley Drive. The fire travelled over 5kms in less than an hour crossing several major roads, see map and satellite photographs attached.

This speed of onset is vastly quicker than cyclone or flood and more like the sudden onset of an Earthquake. The consequence of that speed of onset is that deployment of emergency resources and communications with residents and potential victims is mitigated. Making a sensible assessment of the scope and scale of the disaster is difficult in such a limited timeframe.

In my case I began to respond to the situation at about 1.00pm. Preparing for evacuation and preparing the house ie watering down the backyard, blocking down pipes etc... I was forced to leave my home by Police at around 1.20pm. Because of the constrained timeframe our ability to execute our bushfire plan was effectively nil.

I think in future literature published about fire plans and bushfires it would be useful to caution people about how long it actually takes to prepare the property and evacuate and they should allow themselves at least an hour.... where that warning is available.

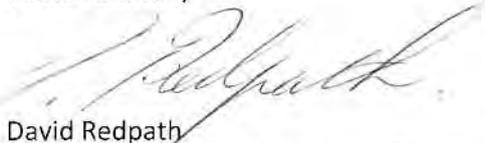
Evacuation advice was very limited. Police came to my door entered my house and very assertively assisted my wife and I to leave immediately. There was no clear advice about evacuation centres. Many residents simply spent a couple of days in the car park at the back of the Kelmscott shops. People have been critical of the timing of some advice by SMS etc... I am not one of those. As detailed above I was aware of the fire and had begun preparations prior to receiving formal advice.

I found the best source of information about "what was happening" was radio talkback on station 6PR. People were calling in with information about their personal experiences which was very helpful to residents. Most people have radios in their vehicles and once on the road and evacuating this radio is really the only sensible source of information. By comparison TV coverage was limited in the short term and websites are slow to up-date.

Finally my heartfelt thanks goes to those wonderful fire fighters who saved my house which actually caught fire and was saved by their excellent efforts.

Nothing in my comments above should be taken as a criticism of the fire fighters doing their job and particularly the volunteers who risk so much. Their courage and efficiency in the most frightening of circumstances is an enormous example to us all.

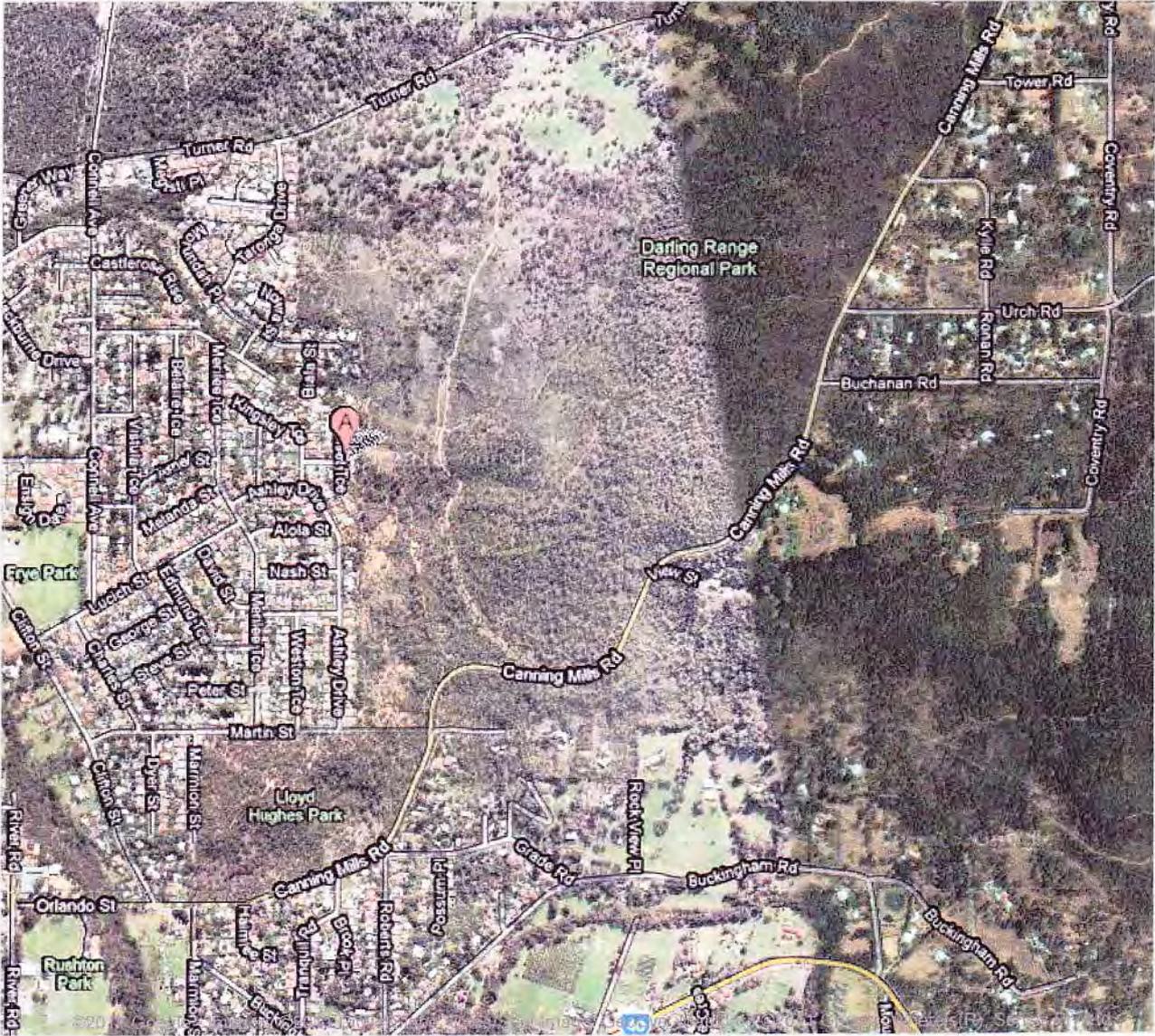
Yours Faithfully



David Redpath
Master of Accounting (Curtin University),
Master of Business Administration (University of NSW)
Formerly member CPA Australia, AIMM, MIPAA



To see all the details that are visible on the screen, use the Print link next to the map.



Indicative Prescribed Burn Program - 6 Seasons Swan Region

Burn Program is Subject To Change

- National Park Index**
- 1 - Moore River National Park
 - 2 - Yanchep National Park
 - 3 - Heerdcup National Park
 - 4 - Alton Valley National Park
 - 5 - Vallyunga National Park
 - 6 - John Forrest National Park
 - 7 - Greenmount National Park
 - 8 - Mundaring National Park
 - 9 - Gooseberry Hill National Park
 - 10 - Kalamunda National Park
 - 11 - Heales National Park
 - 12 - Leconardie Falls National Park
 - 13 - Pickering Brook National Park
 - 14 - Wandoo National Park
 - 15 - Canning National Park
 - 16 - Searns National Park
 - 17 - Yalgarrup National Park
 - MT - Proposed Monadnock National Park

Legend

- Localities
- Shire/Local Government
- Coastline
- DCO Region
- DCO District
- National Parks
- Forest Blocks
- DEC Estate:
 - BA - Bio Herpetological Reserve/State Forest/Mineral Reserve
 - BT - B. In. Reserve/Cons Park/Harmon Park/National Park/Lature Res.
- MBP 6 Season Plan**
 - 2010 - Spring
 - 2011 - Autumn
 - 2011 - Spring
 - 2012 - Autumn
 - 2012 - Spring
 - 2012 - Autumn

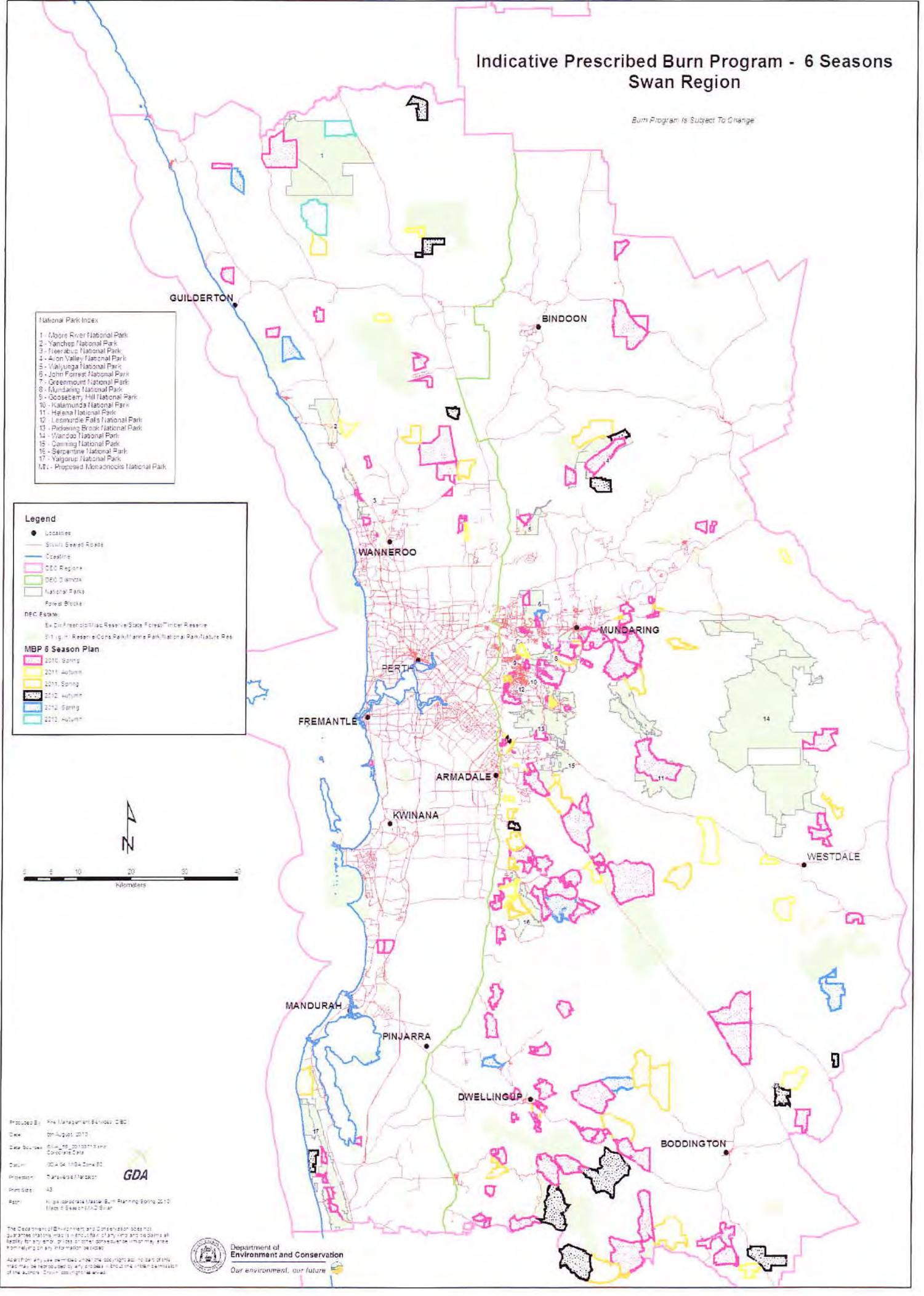


Produced By: Fire Management Services - DEC
 Date: 08 August 2010
 Data Source: GIS, Topographic and Coordinate Data
 Datum: GDA 94 / WGS 84 Zone 50
 Projection: Transverse Mercator
 File Size: 43
 Path: K:\gis\products\Maple_Burn_Planning\Spring 2010\Maple 6 Seasons 1010010.mxd



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From:
To:
Subject: FW: Kelmscott Bush Fires - Relevant Information
Date: Saturday, 26 February 2011 3:34:18 PM
Attachments: [FW Bushfires Act .msg](#)
[IMAGE1.jpg](#)
[IMAGE2.jpg](#)
[IMAGE3.jpg](#)
[Bushfires Act Emergency Services Levv.msg](#)
[Bushfires Act and Emergency Services Levv.msg](#)
[FW Bushfires Act .msg](#)

Dear Sir/Madam

You may find the correspondence below and attached, which I have also sent to Stuart Ellis who is doing the FESA review, of interest. Please feel free to contact me at the numbers below if I can be of further assistance.

Regards

Geoff Burrell

From: Geoff Burrell
Sent: Sunday, 20 February 2011 5:45 PM
To:
Subject: Kelmscott Bush Fires - Relevant Information

Dear Mr Ellis

I have been forwarded your email address by Roger Underwood of the Bushfire Front, though I would like to point out that I have no association with that organisation and only obtained Roger's email address via his sister, who I used to work with.

My reason for contacting you is that I had written to Armadale Council, FESA and the Auditor General prior to the Kelmscott Bushfire stating some concerns about issues of non-compliance with the Bushfires Act, particularly with regard to vacant blocks located within residential subdivisions like my own. I attach this correspondence below for your information as I think they may be useful to you. Unfortunately FESA was the only one of the three that did not deign to reply to me, so I can give you no insight into their frame of mind at this time. The figures and tone from the Council are indicative of an institutional complacency, and the AG was limited in what he could and could not look at by statutory roles, which is a pity!

The correspondence is as follows:

1. My email to the City of Armadale (Bushfires Act)
2. A reply from the City of Armadale (3 pages labelled Image

- 1,2,and 3))
3. My email to the AG (Bushfires Act & Emergency Services Levy)
 4. The AG's response (Bushfires Act & Emergency Services Levy)
 5. My email to FESA (Bushfires Act) – to which there was no reply

My emails above are all similar but slightly modified for the different recipients.

Points of interest to note from our recent fire are:

- Neighbours who stayed reported a total lack of water supply. Whilst a reduced supply is often a feature of these events the neighbours believe our lack of water was due to the fact we have a gravity feed water tank on top of our hill, with water supply and pump located at the bottom of our hill. When the power poles were burnt the pump stopped and so did the water - if this is true it must be a pearl of planning!!
- One third of Bromfield Drive (my house and garden are on the corner of Narrik and Bromfield) has underground power and the rest doesn't. One would ask why we don't all have underground power living as we do in a recognised high risk fire area. There was also a big difference after the fire for those of us sitting in the dark with candles whilst looking at our neighbours with the lights blazing!
- Reticulated gas is so expensive to install on larger blocks over (sometimes) hard ground that people use gas cylinders and tanks, many of which exploded on the day of the fire and were presumably a major hazard for fire crews. Reticulated gas is provided to all the streets on our hill, but not to individual properties unless requested and paid for by the householder (What kind of business model is that - why would you go to the expense of putting a service into a street if you did not want people to buy it from you?). In my own case it took a year of correspondence and finally a threat to write to the Minister before anyone would even come and assess the suitability of the ground leading to my property for a gas line (the old hard ground furphy) - in the end it took about 2 hours to install. I mention this because exploding tanks of gas were a big feature of this fire.
- As you presumably know, many people like me received their FESA alerts after they had already evacuated. On reflection, and unlike many other people, I don't believe this was a FESA problem. I evacuated, as did many of my neighbours, when the radio stated Bromfield Drive would be impacted by fire in 20 minutes, and believe me it was in a rush! Of course my part of Bromfield Drive (over the hill from the main fire front) was not actually impacted until probably five hours later. With better information I could have beaten a more orderly retreat and left my property slightly better prepared. I could also have assisted other property owners who were under more direct threat. Many of my neighbours actually returned to protect their properties and some were able to put out spot fires (often with buckets of

water from the swimming pool) and save properties. Why radio stations were broadcasting information during the fire, that was either erroneous or misleading, and adding to the confusion (one station broadcast an eyewitness account that Savage Road was in flames, which from what I can see was a total lie) I do not know.

- From my perspective the Bushfire Ready Action Group wasn't ready (I am a member) and its 'telephone tree' system totally failed me as I received no contact from any other members. When I phoned the person listed after me in the list, they had already evacuated!
- You will have seen from the correspondence above that Armadale Council is not enforcing the provisions of the Bushfires Act. I understand from my own observations, and what neighbours who remained behind tell me about the fire's behaviour, that some of these vacant blocks catching fire caused several properties to be damaged or lost. Indeed they would have caused the destruction of my own street if not for the timely arrival of what one neighbour described as a 'Water Cannon' from Perth Airport. This piece of kit can apparently 'fire' 8,500 (litres or gallons) of water in 2 mins and its rather surreal and timely arrival was a major factor in saving Narrik Court and beyond.
- The council's no burn policy in the parkland that it manages – apparently based on some flawed PhD research that even the student now discounts – led to the fire in Lloyd Hughes park being a big contributor to this disaster
- The Churchman Brook Bushland sits on the top of our hill and those neighbours adjacent to it say it has not been properly managed (presumably by DEC). I have been here nearly nine years and do not remember any burn off in the bushland during that time.
- I noted a piece the newspaper recently that the Water Board had done some archaeology which showed that traditional bush consisted of far less but much larger trees. The Board used this research to manage bush around dams and have improved run-off as a result. Surely this is a principle that could be used to manage all bush, leading to better amenity and safety for all.
- It was a feature of my experience as an evacuee that none of the telephone information numbers for Armadale Council/FESA/Main Roads/Etc were ever able to be accessed, presumably due to under-staffing. One neighbour reports getting through to FESA after wringing continuously for 30 times, only to be read out what was on the website – the operator had no additional information so one would question what purpose they served?
- Instead of telephone information I ended up on a website roundabout where one site continually referred me to another that looped round, usually via one more site, back to the original. I could not face attending the public meetings, where

people received news of their property loss in the most brutal fashion imaginable. This has to be improved upon.

- Neighbours who stayed report the (often heroic) ground crews seemed to be lacking coordination in their attempts to deal with fires – rather reacting to what they could see rather than being directed. This may be normal in these situation, where large numbers of crews, many from out of area and unfamiliar with the terrain, are trying to work a major fire. I mention it for your information.
- The wooden supports of Buckingham Bridge were adjacent to large clumps of bamboo, blackberry and other bush for at least 8 years prior to the fire, presumably contributing to its collapse and the closure of the Brookton Highway. Whoever looks after the rivers needs to answer for that one. If you want proof take the walkway across the Brookton Highway from the bottom of Bernard Street, you will see the same scenario repeated where a major water pipeline and foot-bridge cross the Canning River. The fire does seem to have tracked through around the river for some distance.
- Many householders did not manage their blocks well, I certainly could have done better. Large tree in gardens adjacent to houses were a familiar sight in the area. I think householders who did not manage their bush properly have learnt a very, very hard lesson -it is yet to be demonstrated if the other culprits in this fire have done so. I am convinced that with better information and education from FESA/Volunteers/Rangers that they could have changed their behaviour prior to the fire's impact, reducing its severity.

If you have read this far, thank you. I realise some of these points are probably beyond your brief and I hope that one of your recommendations might be for the need for a more general 'no blame' enquiry into the fire that allows valuable lessons to be learnt that might save other areas of the Scarp from the experience we have had here in Kelmscott. That really would be something worth doing.

If you wish to discuss any points I can be reached on
. I work T,W,T only.

Regards

Geoff Burrell

From:
To:
Subject: FW: Bushfires Act

Good Day

Could you please forward this for consideration by the relevant Council body.

I would like to raise the issue of the management of vacant blocks under the Bushfires Act for Council's consideration. There are a few points I would like to make:

1. Prior to the Emergency Services Levy being introduced Volunteer Bushfire Brigades had to raise funds and burn-offs were a common occurrence (I am assuming these are linked). Occupied and vacant lots were energetically inspected by Volunteers and appropriate action taken, with burn-offs being common. Since the introduction of the levy I have hardly seen a burn-off in my area (Kelmscott Hills/Brookton Valley) and many blocks now carry very dangerous levels of combustible materials.

I am unsure if this is a direct relationship, or if it is impacted by lack of Volunteers, changing burn-off practices, and/or a drying climate reducing the time for burn-offs to occur but I can assure you the difference has been dramatic. Given my area (adjacent to Churchman Bushland) is stated to be one of the riskiest for bushfires in Armadale this is doubly surprising, particularly as this is a hilly area of established housing.

2. The second issue I have to raise is the apparent non-enforcement of the provisions of the Bushfires Act with relation to vacant blocks (I also think it is time there was a distinction made in the firebreak requirements for vacant blocks and for established gardens). There are many blocks in this area that have never complied with the firebreak requirements in the 8 years I have lived here, i.e. they have never had mineral earth firebreaks, or the ground cover reduced to 5mm. I am told some of these are owned by Armadale Council, or by State Government Departments (no one seems too clear) several are owned by investors. I would direct you to the crossroads at Ranford Road (off the Brookton Hwy) and Hamersley Road, where there are two diagonally opposite blocks that have never to my certain knowledge complied with the Bushfire Act requirements in the time I have lived in the area.

I feel this issue is also partly related to the lack of involvement from the Volunteer Bushfire Brigades, who used to stir up the area like a stick in an ant's nest but are now rarely seen. Now we have (probably) one fire ranger run ragged trying to get round the district and log all the non-compliances – an impossible job.

3. In some cases I would also question the sufficiency of a mineral earth firebreak alone. On steep hillsides, some with houses adjacent to large empty blocks, these are not going to do the job that is required of them, especially where they are overhung by large trees.
4. I also believe the current drying climate has not been factored into the timing for preparation of firebreaks. Many vacant blocks, and some occupied ones, are waist high in tinder dry grass and bush long before the 30th November deadline, and present a significant risk to neighbouring properties. In my case I have to cut my neighbours fire breaks where they abut mine to reduce the danger to my own property, and I would not be the only person in that situation.
5. Unattended or underprepared vacant blocks are, of course, just another opportunity for arsonists to exploit.
6. Finally I would mention that vacant blocks in themselves are a real nuisance in established areas. For most of the year they are home to vermin (which attracts the snakes), glue-sniffers, rubbish dumpers and idiots on quad bikes. They also seem to present a great area for noxious weeds to gain a foothold.

I think there is a real case for looking at the larger issue of the management of vacant blocks located within residential areas. I would recommend making it compulsory that they are fenced, kept clear of rubbish, and the grass cut on a regular basis, not just once a year as at present. This would lift the amenity of the area and reduce the opportunity for anti-social behaviour. Who knows it might even encourage investors to develop or release their land onto the market for others to use, instead of sitting on it for years to the detriment of the larger community (don't we have a current land shortage?).

I hope you have the opportunity to give some consideration to these issues, which it appears to me underscore many of the bushfires that break out around Armadale during the summer months. I understand you cannot easily amend something like the Bushfires Act but it might be possible to circumvent that problem by amending Council policy to improve the management of vacant blocks in residential areas.

I would like to finish on a positive note and congratulate Armadale Council on the remarkable job of regeneration it has carried out in the City over the last few years. I have been really impressed with the improvement in amenities, which I believe has made a real difference to the lives of people living in the City. I should also mention that in my own dealings with individual Council officers I invariably find them well informed, polite and helpful.

Regards

Geoff Burrell

From:
To:
Subject: Bushfires Act & Emergency Services Levy

Good Day

I would like to raise the issue of the management of vacant blocks under the Bushfires Act with the Office of the Auditor General, which I think may be a systemic problem across Perth. There are a few points I would like to make for your consideration:

1. Prior to the Emergency Services Levy being introduced, with Volunteers Bushfire Brigades having to raise funds, burn-offs were a common occurrence. Occupied and vacant lots were energetically inspected by both Volunteers and Council Rangers, and appropriate action taken (I have been fined by both and burnt off a couple of times!!). Since the introduction of the levy I have hardly seen a burn-off in my area (Kelmscott Hills/Brookton Valley) and many blocks now carry very dangerous levels of combustible materials.

I am unsure if this is a direct relationship, or if it is impacted by lack of volunteers, changing burn-off practices, and/or a drying climate reducing the time for burn-offs, but I can assure you the difference has been dramatic. Given my area, adjacent to Churchman Bushland, is stated to be one of the riskiest in Armadale, this is doubly surprising, particularly as this is mainly a hilly area of established housing.

2. The second issue I have to raise is the non-enforcement of the provisions of the Bushfires Act with relation to vacant blocks in particular (I think it is time there was a distinction made in the firebreak requirements for vacant blocks and for established gardens).

There are many blocks in this area that never comply with the firebreak requirements. I am told some of these are owned by the local council or by State Government Departments (no one seems too clear) several are owned by investors. They don't have mineral earth firebreaks, they don't reduce the level of combustible material to the required 5mm, and they don't trim back trees that impinge on firebreaks. I feel this issue is also partly related to the lack of attention from the Volunteer Bushfire Brigades, who used to stir up the area like a stick in an ant's nest but are now rarely seen. Now we have (probably) one fire ranger run ragged trying to get round the area.

3. In some cases I would also question the sufficiency of a mineral earth firebreak alone. On steep hillsides, with houses adjacent to large empty blocks, these are not going to do the job that is required of them.

4. I believe the current drying climate has not been factored into the timing for preparation of firebreaks. Many vacant blocks, and some occupied ones, are waist high in tinder dry grass and bush long before the 30th November, which is the usually date to have firebreaks established. In my case I have to cut my neighbours blocks where they abut mine to reduce the danger, and I wouldn't be the only person in that situation.
5. Unattended or underprepared vacant blocks are, of course, just another opportunity for arsonists to exploit.
6. Finally I would mention that vacant blocks in themselves are a real nuisance in established areas like mine. For most of the year they are unattended, home to vermin (which attracts the snakes), glue-sniffers, rubbish dumpers and idiots on quad bikes. They also seem to present a great area for noxious weeds to gain a foothold in an area. As a result I think there is a real case for looking at the larger issue of the management of vacant blocks in residential areas. They should be fenced, kept clear of rubbish, and the grass cut on a regular basis, not just once a year as at present. This would lift the amenity of areas and reduce the opportunity for anti-social behaviour. Who knows it might even encourage investors to develop, or release their land onto the market for others to use, instead of sitting on it for years to the detriment of the larger community (don't we have a current shortage?).

I hope you have the opportunity to look at this issue, which it appears to me underscores many of the bushfires that break out around Perth during the summer months.

Regards

Geoff Burrell



Mr Geoff Burrell

4th Floor Dumas House
2 Havelock Street
West Perth WA 6005

Tel: (08) 9222 7501
Fax: (08) 9321 5183
Email: ag@audit.wa.gov.au

Dear Mr Burrell

MANAGEMENT OF VACANT BLOCKS UNDER THE *BUSH FIRES ACT 1954*

Thank you for your e-mail of 16 December 2010, in which you raise your concerns about the management of vacant blocks of land under the *Bush Fires Act 1954*.

My mandate is to audit the accounts of State public sector agencies and undertake examinations into the efficiency and effectiveness of agencies and programs. Any identified matters of significance are reported to Parliament. We carefully consider all matters brought to our attention and use the information to help choose topics for investigation. In keeping with our independence, decisions on what to investigate are made after proper consideration of the relative merits of the matter, including the risk, materiality and resourcing implications.

Although FESA is the responsible agency for administration of the *Bushfires Act 1954*, section 33 of the legislation clearly gives responsibility to the relevant local government to give written notice to all owners and occupiers of land to take measures to prevent bushfires. Such measures include installing firebreaks and burning off undergrowth. Under the *Auditor General Act 2006* I do not have a mandate to consider matters under the jurisdiction of local governments, including compliance with legislation. Therefore, I cannot investigate the matters you have raised.

I would suggest you contact your local Council to raise your concerns about the vacant blocks in your area. If you are not satisfied with their response, you could consider approaching the Department of Local Government.

You have also mentioned your concern that the introduction of the Emergency Services Levy (ESL) has directly resulted in an increased non-compliance of management of vacant blocks. The ESL was introduced in 2003 and is operated by FESA as a State Government charge, although it is collected by local governments as part of the rates. It is levied on all property, except vacant land owned by a Council. All of it is sent to FESA and is used to fund fire and emergency services. As the allocation of the ESL funds involves a significant amount of government resources, I have directed that an assessment of the effectiveness and efficiency of

the ESL funding will be added to our database for consideration as a potential future audit topic examination.

Thank you again for raising your concerns with us. Feedback and suggestions from all sections of the community about the operations of government agencies provide valuable input into our audit programs.

Yours sincerely

A handwritten signature in black ink, appearing to read 'C. Murphy', written in a cursive style.

COLIN MURPHY
AUDITOR GENERAL
21 December 2010

From:
To:
Subject: FW: Bushfires Act

Good Day

I would like to raise the issue of the management of vacant blocks under the Bushfires Act for FESA's consideration. There are a few points I would like to make:

1. Prior to the Emergency Services Levy being introduced Volunteer Bushfire Brigades had to raise funds and as a result burn-offs, which had to be paid for, were a common occurrence. Occupied and vacant lots were energetically inspected by Volunteers and appropriate action taken. Since the introduction of the levy I have hardly seen a burn-off in my area (Kelmscott Hills/Brookton Valley) and many blocks now carry very dangerous levels of combustible materials.

I am unsure if this is a direct relationship, or if it is impacted by lack of Volunteers, changing burn-off practices, and/or a drying climate reducing the time for burn-offs to occur but I can assure you the difference has been dramatic. Given my area (adjacent to Churchman Bushland) is stated to be one of the riskiest for bushfires in Armadale this is doubly surprising, particularly as this is a hilly area of established housing.

2. The second issue I have to raise is the apparent non-enforcement of the provisions of the Bushfires Act with relation to vacant blocks (I also think it is time there was a distinction made in the firebreak requirements for vacant blocks and for established gardens). There are many blocks in this area that have never complied with the firebreak requirements in the 8 years I have lived here, i.e. they have never had mineral earth firebreaks, or the ground cover reduced to 5mm. I am told some of these are owned by Armadale Council, or by State Government Departments (no one seems too clear) several are owned by investors.

I feel this issue is also partly related to the lack of involvement from the Volunteer Bushfire Brigades, who used to stir up the area like a stick in an ant's nest but are now rarely seen. Now we have (probably) one fire ranger run ragged trying to get round the district and log all the non-compliances – an impossible job. I know that this is not a FESA responsibility but I do think FESA should be looking at this issue in the 'big picture' context, as poorly cleared blocks obviously increase the risk of fire.

3. In some cases I would also question the sufficiency of a mineral earth firebreak alone. On steep hillsides, some with houses adjacent to large empty blocks, these are not going to do the job

that is required of them, especially where they are overhung by large trees.

4. I also believe the current drying climate has not been factored into the timing for preparation of firebreaks. Many vacant blocks, and some occupied ones, are waist high in tinder dry grass and bush long before the 30th November deadline, and present a significant risk to neighbouring properties. In my own case I have to cut my neighbours fire breaks where their vacant lots abut my property to reduce the danger to my own property, and I would not be the only person in that situation.
5. Unattended or underprepared vacant blocks are, of course, just another opportunity for arsonists to exploit.
6. Finally I would mention that vacant blocks in themselves are a real nuisance in established areas. For most of the year they are home to vermin (which attracts the snakes and foxes), glue-sniffers, rubbish dumpers and idiots on quad bikes. They also seem to present a great area for noxious weeds to gain a foothold.

I think there is a real case for looking at the larger issue of the management of vacant blocks located within residential areas. I would recommend making it compulsory that they are fenced, kept clear of rubbish, and the grass cut on a regular basis, not just once a year as at present. This would lift the amenity of the area and reduce the opportunity for anti-social behaviour. Who knows it might even encourage investors to develop or release their land onto the market for others to use, instead of sitting on it for years to the detriment of the larger community (don't we have a current land shortage in Perth?).

I hope you have the opportunity to give some consideration to these issues, which it appears to me underscore many of the bushfires that break out around the Metropolitan area during the summer months. I understand you cannot easily amend something like the Bushfires Act but it might be possible to do some short term remedial work with local councils on policy to improve the management of vacant blocks in residential areas.

Regards

Geoff Burrell

Enquiries : Brian L Watkins

29 December 2010

Mr Geoff Burrell

Dear Mr Burrell

Thank you for your email, and the comments contained therein, and I advise as follows.

Property specific fire controls are the primary basis for fire management in the community and represent the "lowest common denominator" approach. Fire preparedness is a critical aspect in reducing risk and enabling effective fire response. It is the responsibility of each and every landowner and land manager to ensure that their landholdings meet statutory fire regulations and that they have implemented adequate fire preparedness measures.

The costs of installation of firebreaks are borne by all landowners, which is reasonable given that the landowners (or land managers) are responsible for fire management on their property. It is relevant to note that annually, Local Government and State Government agencies direct significant resources toward community level fire management. This shared approach ensures that the risk to the community in terms of fire management is minimised and enables the formation of effective partnerships and working relationships for fire response, education and advice.

Individual landholders are responsible for ensuring the risk of fire is minimized on each property. By undertaking this property specific approach to fire prevention, should one segment fail, the whole community is not put at risk.

By relying on each of the individual property owners to ensure fire preparedness, the City has needed to be flexible in the type of firebreak that it considers acceptable.

The City also needs to ensure that, within this flexibility, the minimum provisions of the Bush Fires Act are adhered to. The application of the Bush Fires Act in this context is not a simple task, because this legislation is principally design for rural and agricultural areas, not the fringes of the Metropolitan area.

Individuals seeking to preserve vegetation on their land (which is also an aim of the City) are not required to have mineral earth firebreaks, provided other alternative measures are undertaken. For alternatives to be utilized, landholders must apply for firebreaks "of an alternative nature or in an alternative location" by the 1st of November each year. This allows evaluation of the alternatives in sufficient time for enhancement of the arrangements by the "Firebreak Notice" gazetted time, should the original proposal not be sufficient.

For instance, allowances may be made for residential properties based on the following:

- Property is less than 5,000 m²;
- Substantially cleared of native vegetation and
- Grass is maintained on the property at 5 cm or less in lieu of a firebreak.

Other circumstances and/or methods of control that may be considered as an alternative to perimeter earthen firebreaks on larger lots (> 5,000m²) include:

- Controlled burns;
- Appropriate chemical control of vegetation using herbicides;
- Grazing;
- Physical removal of fire hazard (fuel loads) and regular maintenance;
- Use of natural features (rock outcrops, low heath areas);
- Discreet zoning of vegetation type and cover; and
- The installation of irrigation systems.

For all properties in the City, other alternatives may also be considered, depending upon local factors and circumstances.

Ranger Services assess individual properties for compliance with the legislation and advice of appropriate actions required. Assessing properties is a resource intensive activity, which highlights the importance of liaison, training and educational components of fire preparedness in the regional approach.

Several months prior to the beginning of the fire season Rangers evaluate areas throughout the City for the purpose of identifying and formulating a firebreak inspection strategy for that particular year. Rangers also issue Notices in accordance with the provisions of the Bush Fires Act, to landowners where it is identified that a potential fire hazard is developing and requires additional work prior to the firebreak period.

Firebreak inspections are carried out by on ground inspections. Furthermore Rangers respond to information received from the community in regard to properties that are considered to be a particular fire hazard.

Statutory advice of the requirements in regard to firebreaks is included with the annual rates notices sent to all landowners. In addition to this, notices are placed in the West Australian and local newspapers advising residents and landowners of the requirements of the "Firebreak Notice".

In the City of Armadale, some interesting statistics have arisen as a result of compliance activities as indicated below:

- Firebreak inspections are undertaken between December 1st and March 14th each year to determine compliance with fire regulations;
- During the 2009/2010 firebreak inspection period there was in the region of 24,000 rated properties in the City of Armadale;
- In total, approximately 2,500 properties (almost 1 in 9) were inspected.
- 226 Infringement Notice were issued for non compliance

These figures indicate a high level of fire regulation compliance in the City of Armadale, with only 9% non-compliance.

Given that the other 91% comply with the provisions of the firebreak notice it is reasonable to assume that the current method employed by the City to advise landowners of their responsibilities in relation to firebreaks is evidence that the City of Armadale is committed to serving the interest of the community in regard to fire hazard control within the district.

I trust that this now clarifies the situation in regard to the issues that you have raised, should you require any further information please contact Ranger Services on 9399 0111 during normal office hours.

Yours sincerely



Brian L Watkins
Manager Ranger & Emergency Services

**Submission to the
Perth Hills Bushfire February 2011 Review**

Submissions should be submitted electronically (preferred) to:

or posted to:

Perth Hills Bushfire February 2011 Review
Locked Bag 10, Cloisters Square
PERTH WA 6850

Note: All submissions received will be made available on the Inquiry's website. People wishing to make a confidential submission should make this clear at the time of lodgement and the Inquiry will not publish those submissions. However, people should be aware that whilst every endeavour will be made to ensure confidentiality, there is a possibility that such submissions might be released in accordance with the *Freedom of Information Act 1992*.

Contact Details

Name:	
Address:	
Email address:	
Telephone number:	

Organisation Details (Where Applicable)

Is this submission presented on behalf of an organisation:	Yes / No
If yes, name of organisation:	
Position in organisation:	

Response to Terms of Reference

You must address at least one of the Terms of Reference.

The adequacy of current preventative measures, specifically prescribed burning and other bushfire mitigation activities.

The impact of land use, environmental and building laws, practices and policies in the affected areas, affecting bushfire prevention, mitigation and response and what, if any, changes may be required.

The actions that can and should be taken by landowners, residents and tenants in relation to bushfire risk management including undertaking vegetation clearance, operation of evaporative air-conditioners and storage and/or removal of hazardous inflammable material surrounding their dwellings and buildings. This should include consideration of associated enforcement regimes and penalties.

The adequacy and effectiveness of information and communication campaigns and mechanisms, including systems for alerting residents in relation to the fire or potential fires.

Improvements that can be made in relation to the coordination of activities across all levels of government, including with volunteer groups.

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Actions that should be undertaken by the land owner.

Land owners should be allowed to clear vegetation around all buildings as recommended by FESA for at least 20 meters without the need to apply to council for a

permit to do so.

At the Kwinana council , the town planning scheme no 2 , only allows for clearing a 3 meter fire break and 3 meters around buildings.

A written Permit is required for additional clearing.

Published May 2010 , The West Australian Planning Commission in conjunction with FESA released "Planning for Bushfire Protection Guidelines" , These guidelines are for local councils for planning new subdivisions.

The guidelines fall short on catering for existing established areas. The advise contained in this document should be followed. It deals with Building codes and in appendix 2, on pages 44 and 45 shows a 20 meter low fuel protection zone around the house and a 80 meter hazard reduction zone.

Fesa "Prepare. Act . Survive Published october 2009 outlines information for preparing for bushfires , page 13 shows a 20 meter circle of safety around homes with detailed preparation instructions

Fesa Bushfire Survival Manual , nov 2008 page 17. "Pick your Plants" deals with planting fire resistant trees and shrubs , evergreen trees and fruit trees and lawns to form a green fire break and to minimise fire spreading and Shielding the house from radiated heat.

Housing insurance providers should also play a role in advising home owners the importance of property fire preparation and to conduct onsite inspections, the premium for the policy should be reduced due to the reduction in risk to the insurance provider.

For the record , i have legal action being taken on myself from the Town of Kwinana for illegal clearing around my house (Town of Kwinana minutes 14 july 2010) which was done in accordance with FESA recommendations for safety.

Casuarina had a serios Bushfire on boxing day 2008

Michael Rutledge

9 March 2011

Dear Mr Keelty,

Perth hills bushfires February 2011 review

I am making a brief submission in relation to the following Term of Reference.

1. The adequacy of current preventative measures, specifically prescribed burning and other bushfire mitigation activities.

My wife and I have lived in Gooseberry Hill adjacent to national park since 2003. I attach a map that demonstrates the proximity of bush to the residential area in which we live. In that time there has never been any preventive burn off, although one was scheduled around 2005. When we contacted the Shire following the fires in Roleystone, we were advised that no burn off would be likely for at least another two years. The lapse of time we are told is due to the possibility of the smoke affecting coastal suburbs. It seems to us that ten years or longer between burn offs is far too long.

In walking though the adjacent national park the fuel load is significant and growing yearly. The fuel load is not grasses, but is a thick bed of forest litter, lying at the base of heavily wooded terrain.

We acknowledge that no amount of preparation can safeguard against all types of fires however the existing situation falls far short of what is reasonable in terms of bush fire mitigation on several counts:

- There are the normal, (council provided?) firebreaks on the eastern side between bushland and residences, but there are none on the west and north;
- The time lapse between burn-offs is far too long; and
- There are no major breaks existing to control the run of fires.

We live at the top of a narrow valley and, as you will be aware, 'fires pre-heat their fuel source through radiation and convection. As a consequence of these heat transfer effects, fires accelerate when traveling uphill and decelerate traveling downhill. The steepness of the slope plays an important role in the rate of fire spread. The speed of a fire front advancing will double with every 10 degree increase in slope so that on a 20 degree slope, its speed of advance is four times greater than on flat ground.'

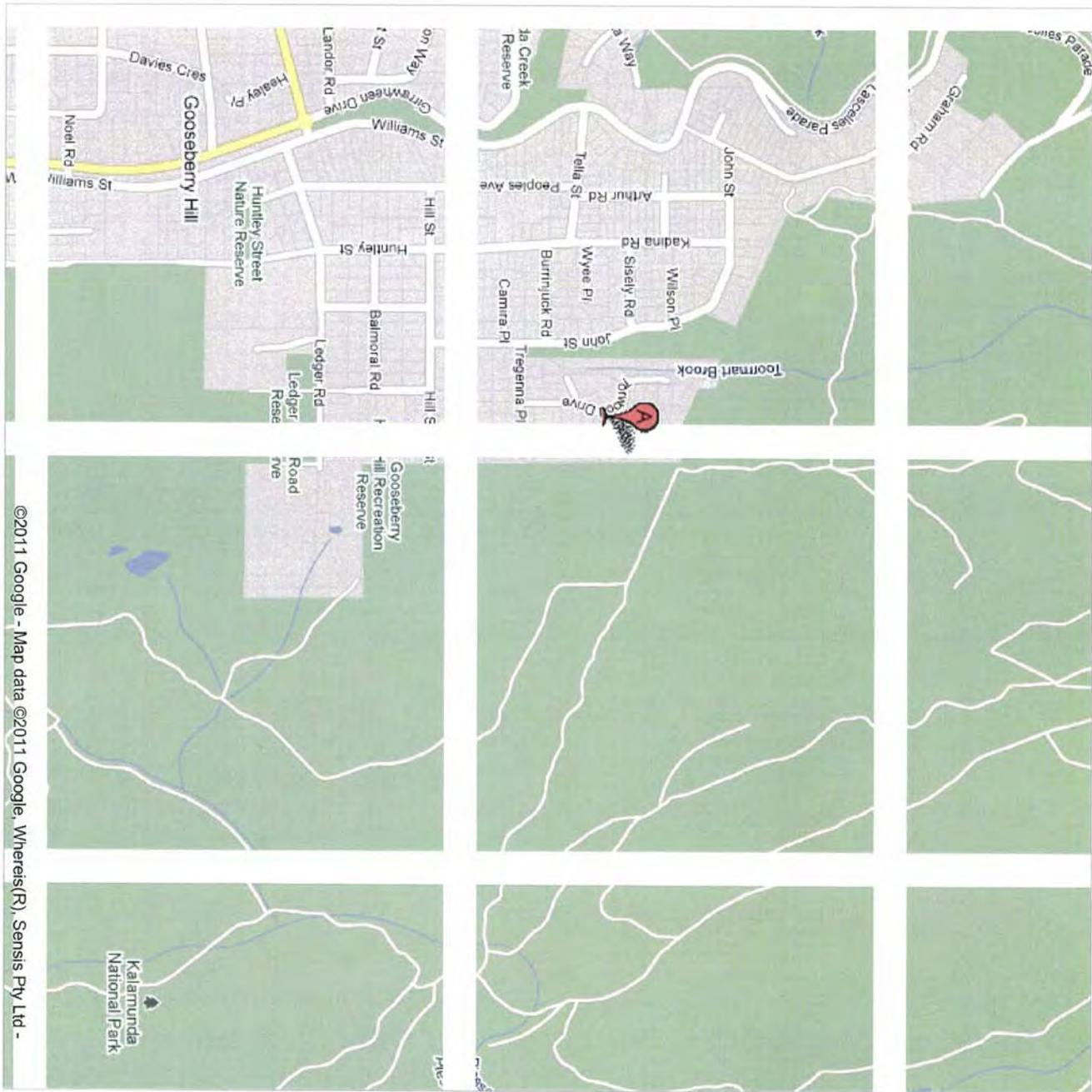
It should also be noted that a fire coming from the East (as occurred earlier this year) has the potential to cut off all residents living in a number streets from any escape once that fire crosses Williams road. (Refer map)

We keep our property litter free through burn off and removal every year. We have also removed many trees on it, at considerable personal expense. As such we believe we have been responsible but question the lack of activity of those authorities responsible for the public land around us.

Yours sincerely



Dr Brian Gordon



Mr Mick Keelty
Chairman of the inquiry into the Roleystone/Kelmscott fires

Dear Sir and Review Team

As residents of the Perth hills for around 26 years we have always been mindful of the need to ensure that our residence is as safe as possible in a bushfire.

We live in a beautiful part of the hills at Bedfordale on 1.17 hectares and our home is surrounded by a mix of gum trees and blackboys.

Each year we take steps to ensure that we reduce the bushfire risk by burning off the blackboy skirts, undergrowth and accumulated gum leaves. We maintain our fire breaks and we also have a misting sprinkler system on the roof which is operated by a petrol pump with an independent water supply.

However our concern is that all our preparation and work will be wasted if we are prevented from returning home by any well intentioned road blocks as it is vitally important that we are present to operate the pump for the sprinkler system and to put out any spot fires.

With this in mind and in view of the trauma and conflict the road blocks cause not only to homeowners but to the police officers responsible for enforcing them, I would like to suggest the following:

Residents in areas deemed to be at risk of bushfires could be given the opportunity to have their home and contingency plans assessed by appropriate experts on a regular (perhaps annual) basis. If they are considered to be capable and likely to be able to defend their home they could then be given a letter of authority or identification card to be shown to police or fire services maintaining roadblocks.

Implicit in such a system would be a requirement that the homeowners would absolve the authorities of any responsibility for letting them through the roadblock.

To my mind this would be a resolution to a problem which currently undermines the stay and defend policy.

We would also like to suggest that a number of strategically located air raid type sirens would serve as a worthwhile adjunct to the excellent SMS service currently in operation. Years ago there was a siren located in the Armadale township which could be heard a long way and which was instantly recognized as a fire warning.

Thank you for your interest and involvement in this matter which hopefully will have important ongoing implications for people desiring a hills lifestyle.

Regards

Phil and Judith Lewis
8/3/2010

From:
To:
Subject: Perth Hills Fire Evaporative airconditioning
Date: Friday, 11 March 2011 8:11:39 PM

Dear Sir/Madam,

I am a resident of Kelmscott, apart from the discomfort of smoke over the Kelmscott area, I was not directly affected by the recent fires in the Kelmscott hills area. As this has now become an independent review I would like to raise my concerns re Evaporative air conditioning.

I have a system in place which is now 10yrs old, with much hype in the media re embers entering these systems I decided to do some research. I located the FESA site and was alarmed to find a report conducted in December 2006 by David Lamont at the University of Western Australia. This study highlighted the vulnerability to ember attack enabling the fire to penetrate the roof cavity with ease. The honey comb sections of the cellulose pads are particularly flammable.

Trials were conducted on several stainless steel mesh guards, I have contacted the manufacturer of my machine and this fire guard is no longer available. There is an alternative pad on the market (not available through the manufacturer) GLASdek 3 pads which has been proven to be extremely resistant to fire. I am currently following this up to see if these pads can be fitted to my machine.

As a consumer I would like to see as part of your review, when these trials were conducted in 2006, why weren't the people of Western Australia informed of the flammable nature of these pads and why didn't the government legislate after these trials?. That all pads in evaporative air conditioners should be made of glass fibre. This report also states "that these type of pads should be fitted in bushfire prone areas".

Michelle Samson

Sent from my Mac mini

**Submission to the
Perth Hills Bushfire February 2011 Review**

Submissions should be submitted electronically (preferred) to:

or posted to:

Perth Hills Bushfire February 2011 Review
Locked Bag 10, Cloisters Square
PERTH WA 6850

Note: All submissions received will be made available on the Inquiry's website. People wishing to make a confidential submission should make this clear at the time of lodgement and the Inquiry will not publish those submissions. However, people should be aware that whilst every endeavour will be made to ensure confidentiality, there is a possibility that such submissions might be released in accordance with the *Freedom of Information Act 1992*.

Contact Details

Name:	Anne Johnston
Address:	
Email address:	
Telephone number:	

Organisation Details (Where Applicable)

Is this submission presented on behalf of an organisation:	No
If yes, name of organisation:	
Position in organisation:	

Response to Terms of Reference

You must address at least one of the Terms of Reference.

- 1. The adequacy of current preventative measures, specifically prescribed burning and other bushfire mitigation activities.**
 - i. There needs to be more assistance to landowners to conduct controlled burns on their own property. At the moment this is occasionally provided by the Volunteer Bush Fire Brigade who are not able to cope with the number of requests they receive.**
 - ii. Elderly residents are not always able to conduct their own burning programmes.**
 - iii. Permits are not always issued to do this**

- 2. The impact of land use, environmental and building laws, practices and policies in the affected areas, affecting bushfire prevention, mitigation and response and what, if any, changes may be required.**
 - i. The bushfire hazard in the hills areas is compounded by the large sizes of the blocks of lands. In order to keep these large blocks fire safe, mature trees need to be removed from around houses. Because of local Govt regulations prohibiting this without a permit the procedure is difficult. In addition the cost is high.**
 - ii. If the minimum permitted size of the blocks was reduced the amount of hazardous material in ratio to gardened areas of land would be improved.**
 - iii. The Local Authority needs to increase its green waste collection and green waste tip passes for residents in areas prone to bushfire. At the moment the same amount of green waste disposal access is given to all residents: whether in urban Armadale or Roleystone.**

- 3. The actions that can and should be taken by landowners, residents and tenants in relation to bushfire risk management including undertaking vegetation clearance, operation of evaporative air-conditioners and storage and/or removal of hazardous inflammable material surrounding their dwellings and buildings. This should include consideration of associated enforcement regimes and penalties.**
 - i. The Local authority has bylaws requiring landowners to implement fire reduction measures. These need to be actively policed so that those who do adhere to them are not put in danger by those who don't. The fines that would be issued would pay for the cost of the policing.**
 - ii. A lot of hazardous material collects on the street verges of properties, particularly vacant land. The local authority needs to implement an annual verge clearing programme (e.g in Urch Rd) for its own properties and/or a penalty for landowners who do not clear the verge.**

- iii. There needs to be a better public awareness campaign of fire reduction, so that landowners are aware of their personal obligations to maintain their property in a fire safe condition. Many people have moved into Roleystone from overseas (particularly Great Britain) or are fly in fly out workers and may need information.
- iv. Some modification to evaporative air conditioners must be come mandatory: e.g. an automatic cover over the vents when they are switched off, an automatic smoke activated switch to turn them off.
- v. If this is not possible, then a ban should be placed on the installation of evaporative air conditioners in high bushfire prone areas.: the risk of them not being adequately monitored during a fire emergency and the subsequent danger to the community is high.

4. The adequacy and effectiveness of information and communication campaigns and mechanisms, including systems for alerting residents in relation to the fire or potential fires.

- i) The information provided by ABC radio was superb once the fire was an emergency.
- ii) The SMS info was received well after we had evacuated and was therefore ineffective.
- iii) It was difficult to find out what we should do over the long term. I had evacuated my elderly parents from their home and spent the afternoon and early evening with them in the local shopping centre. We needed to know earlier that they could not return to their home so that arrangements to billet them for the night could be done.

5. Improvements that can be made in relation to the coordination of activities across all levels of government, including with volunteer groups.