

22 MARCH 2011

PERTH HILLS BUSHFIRES REVIEW. FRB 2011

DEAR SIR.

I WISH TO MAKE THE FOLLOWING SUBMISSION WHICH I FEEL IS VERY RELEVANT TO YOUR REVIEW.

FOR MANY YEARS I HAVE BEEN PROMOTING
THE USE OF HOUSE ROOF- SIDES SPRINKERS AS A
FIRE CONTROL SYSTEM, AS THE ENCLOSED LETTERS WILLS HOW.

IN THE VICTORIAN BUSH FIRES I SAW VISION AND KNOW THERE WERE A NUMBER OF HOMES SAVED BY USING A FIXED SPRINKLER SYSTEM.

I HAVE THISD TO TALK TO F.E.S.A. OVER THE YEARS AND RECENTLY AS THE ENCLOSED LETTERS PROPUE WITHOUT SUCCESS.

DO YOU HAVE A COPY OF THE ROYAL COMMISSION
REPORT ON THE VICTORIAN BUSHFIRES AND DOES THAT MAKE
ANY COMMENT ON THE HOMES SAUGD BY FIXED SPAINKLESS

TAM AT PRESENT AWAITING MORE PHOTOS EROM
MRTOZER SHOWING GRAPHIC DETAILS OF HIS HOUSE STILL
STANDING AMONGST BLACK DESOLATION

WHY WILL NO FIRE AUTHORITY CONSIDER OR MAKE RECOMMENDATIONS ABOUT FIXED SPRINKLERS SYSTEMS.

MOURS SINDERRY.

MACB, DOUGLAS,

- @ PROBABLY 80% OF PIRECONTROL IS BY WATER.
- 2) IF SCHEME WATER IS TO HOUSE-ALWAYS AVAILABLE-REFILLS PIRE TRUCK
- 3 IF FARM- WATER TANKS-SWIMMING POOLS- ALWAYS AVAILABLE.
- # IF FARM SEPARATE FIRE FIGHTING PUMP REQUIRED MAINS

 POWER OR PETROL DRIVEN SHOULD BE IN FIRE PROOF HOUSING
 AS WITH ALL FIRE ALARM SYSTEMS TEST AT RECULAR INTERVALS.
- (3) FIT BRASS BUTTERFLY SPRINKLERS (BIG DASP-LONG THROW) TO COVER ROOF AREA OF HOUSE OR SHEDS-PLUS PAST DOOF AREA, WALLS
- (6) PLUMB WITH 34"OR' COPPER PIPE. I OR 2 RUNS.
- TO PLUMB UP OUTSIDE OF BUILDING LOR 2 LEVER ACTION BALL!
 GATE VALUES IM FROM GROUND AVAILABLE TO ANYONE.
- (8) PLUS HOSBS FROM OUTSIDE TAPS.
- 9 IN VICTORIA FIRES SEVERAL HOMES AND PEOPLE SAVED BY ROOF SPRINKLER SYSTEM.
- (6) MAJOR COMMERCIAL BUILDINGS MUST HAVE SPRINKLER SYSTEM.
- (1) SHOULD BUILDING BY LAWS FOR FIRE PRONE AREAS INCORPORATE
 ROOF SPRINKLERS FOR HOMES AND SHEDS.
- (12) WHAT DID ROYAL COMMISSION ON VICTORIA FIRES REPORT ON BUILDINGS SAVED BY ROOF SPRINKERS IS THAT IN PORM ATT ON AVAILABLE?
- (3) GUTTERS STAY WET TILED ROOF HOMES HAVE THOUSANDS OF SMALL GAPS-WILL ALLOW HOT ASHIN-NOWALL WET.
- (3) TOOD TAY, WA. FIRE COST \$ 100 MILLION Phus.
- (15) PORT LINCOLN. SA. FIRES. ONE SHED STORING TONA NETS LOSS \$3 MILLION. SCORES OF HOMES LOST 2009 AND SEVERAL YEARS BEFORE. COST HUNDREDS OF MILLIONS.
- 16 COSTS. COPPER PIPE 34" \$70 6M LENGTH

LEVER ACTION BALL/GATE VALVES \$ 14ea
BRABS SPRINKLEPS \$ 15 ea.

TOTAL COST AVERAGE SYSTEM PROBABLY LESS THAN \$ 3000.

(1) WORTH CONSIDERATION ?? MRC. DOUGLAS

NOTE THIS LETTER SENT TO SHIRES

TOODYAY.

8 FEB. 2011

ARMADALE - WARDONA SERPBUTINE - TARRADANE

FIRE CONTROL SYSTEM, SPRINTERPY

I HOPE YOU FIND THE ENCLOSED INFORMATION OR INTEREST. YOUR LOSSES FROM FIRE HAVE BEEN SO HUGE.

I HAVE SEEN SEVERAL HOMES IN W.A. WITH SPRINKLER REDF SYSTEMS. THEY ARE GREAT,

THE ENCLOSED SPREAD SHEETS WERE ISSUED BY F. E. S. A. WA. AND PUBLISHED BY THE SUNDAY TIMES PAPER. I HAVE TAKEN THE LIBERTY TO EVERLAY SUGGESTED

DISTAILS OF A HOME STIED ROOF & WALL SPRINKLER SYSTEM. THIS WOULD DEPEND ON SIZE OF BUILDINGS AND TYPE

OF SDRINKLERS USED.

. THE PORT LINCOLN AREA HAS BEEN BURNTOUT TWICE IN RECENT YEARS, I SENT THEM ALL THE DETAILS THAT I HAVE SENT YOU, AND ENCLOSED IS A COPY OF THE CITY OF PORT LINCOLN LETTER TO ME WHICH IS SELF EXPLANITORY.

SHEET Nº 2 - ITEM NO Y CONCERNS VICTORIA BLACK SATURBRY I HAVE AN A.B.C. CATALYST D.V.D CLEARLY SHOWING ONE HOUSE (FITTED WITH A SPRINKLER SYSTEM) UNTOUCHED BY FIRE WITH DEVASTATION ALL AROUND. THIS HOME OF MR TOZER ALSO HAD ALL GLASS IN WINDOWS, SET IN A BED OF SILICON, ALLOWING GLASS TO 5XPAND AND NOT SHATTER. DUD COST \$ 60 FROM A.B.C. 1 300 650 587, "IN LINE OF FIRE"

WHAT WAS THE COST OF HOMES LOST IN YOUR FIRES, HOW MANY HOMES COULD HAVE BEEN SAVED IF YOUR BUILDING CODES PROPURED MANDATORY HOME SPALUNLER SYSTEMS IN FIRE PRONE AREAS. ??? YOURS SINCERELY ! et Joughes MAC. DOUGLAS.

Enquiries: E-mail: Fax:

Community Safety & Places 9267 9267 swan@swan.wa.gov.au

9267 9444

8 March 2011

Mr C Douglas



Dear Mr Douglas

Advice - Fire Control Sprinkler Systems

Thank you for your correspondence dated 8 February 2011 in relation to providing advice on fire control sprinkler systems and please accept my apologies for the delay in responding.

The City takes fire prevention very seriously and encourages all residents to prepare their homes in a fire safe manner. I am aware that there are some private residences within the City's rural areas that have already installed sprinkler systems on their homes and I can advise that in relation to the fire which commenced in Red Hill on Saturday 5 February 2011, no homes were lost.

Thank you once again for your correspondence.

Yours sincerely

Shannon MacPherson

A/Manager Community Safety & Places

Community Safety & Places





City of Port Lincoln



Port Lincoln - Seafood Capital of Australia

Level One, Civic Centre 60 Tasman Terrace PO Box 1787, Port Lincoln South Australia 5606 T: 08 8621 2300 SH5ST F: 08 8621 2399 E: plcc@plcc.sa.gov.au www.portlincoln.sa.gov.au



28 January 2010

Mr C Douglas



Dear Mr Douglas

RE: ROOFTOP SPRINKER SYSTEMS

Thankyou for your concerns over the welfare of Port Lincoln residents after the December 23rd, 2009 bushfire and also for your information regarding rooftop sprinkler systems.

I can inform you that having lost our Resource and Recovery Centre in fires during January of 2009, Council has installed a rooftop sprinkler system for fire prevention on all the new buildings. Hopefully this puts us in a good position during fire events in the future and sets a good example for the community to follow.

There is considerable information available to residents in fire prone areas on the various ways that they can help protect their homes, including the advantages of rooftop sprinkler systems. There are a number of these private systems already in use and hopefully they continue to become more popular.

Thankyou once again for your concern.

Yours sincerely

Nigel Melzner

MANAGER COMMUNITY INFRASTRUCTURE

A.B.C 700 HARRIS ST ULTIMO NSW 2007

10 FEB. 2011



ATT. CATALYST PRODUCTION.

"HOUSE & SHED FIRE PROTECTION SYSTEMS"

DEAR SIR,

FOR MANY YEARS I HAVE BEEN PROMOTING HOUSE & SHED FIRE PROTECTION SPRINKLER SYSTEMS "AS CAN BE SHOW CLEARLY ON YOUR D.V.D. IN THE LINE OF FIRE "WHICH I PURCHASED FROM YOU has TYBAR.

- ON PEB 2009 MR CAMBRON & FATHER MR WARWICK TOZER SOME WHERE IN STATH WE WIN, VICTORIA SAVED THEIR HOME FROM DISTRUCTIVE BUSH FIRES BY DESIGNING AND FITTING TO THEIR HOME A PROTECTIVE WATER SPRINKLER SYSTEM. A VERY CHEAP AND EFFECTIVESAFE GUARD.
- PORT LINCOLN. S.A. HAS BEEN DESTROYED TWICE IN PERENT YEARS, BY FIRE SO I SENT THEM A COPY OF DEALLS I HAVE MADE. I COPY OF THEIR LETTER TO ME 28 JAN, 2010 SAYSIT ALL.
- 1 HAVE YET TO MAKE HEADWAY WITHOUR LOCAL F. E. S.A.

 AND TO FURTHER MY EFFORT I MUST OBTAIN PHOTOS OF THE

 TOZER SYSTEM IN OPERATION WHICH BY LAW I CANT GET OFF

 YOUR D. V.D. I HAVE SEEN A NUMBER OF HOMES PROTECTED

 BY SPRINKLERS (FIXED) IN WA BUT NO RECOMMENDATIONS PRE

 NADE BY AUTHORITIES HERE TO THE PUBLIC.
- 40 PLEASE HELP ME BY PROUIDING THE TOZER ADDRESS OR SENDING THEM A COPY OF MY LETTER.
- 3 ONE SHED IN PORT LINCOLM LOST 3 MILLION WOATH OF BQUIPMENT. TIN THE LAST TO DAYS IN PEPTH - 73 HOMES LOST TO BUSHARE

Yours BINGERRLY

MR. C. DOUGLAS.
RET. BLEC. BNG.

8 JAN 2010

MINISTER FOR EMBRGENCY SERVICES
THE HON. R.F. JOHNSON, JP. MLA.
20 TH FLOOR. GOV. STIPLING TOWER.
197 ST. GEO. TCE PERTY, WA. GOOO.



DEAR SIR,

I HOPE YOU FIND THE ENCLOSED INFORMATION OF INTEREST IN VIEW OF THE RECENT HORREN DOUS BUSH PIRES AT TOODY AY, WA.

I HAVE SEEN SEVERAL HOMES IN WA WITH SPRINKLER ROOF SYSTEMS AND THEY ARE GREAT.

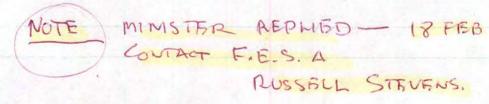
THE SPREAD SHEETS WERE ISSUED BY F.E.S.A-WA. AND PUBLISHED BY THE SUNDAY TIMES PAPER.

I HAVE TAKEN THE LIBERTY TO OVER LAY SUGGESTED DETAILS OF A HOME ROOF SPRINKEER SYSTEM - WHICH WOULD DEPEND ON SIZE OF BUILDINGS AND TYPE OF SPRINKERS USED.

I FIRMLY BEHEVE ANY SYSTEM THAT HELPS TO SAVE
THE HORRENDOUS COST OF HUMAN LIVES AND
FINANCIAL COST IS WORTH CONSIDERATION AND
INCORPORATION IN FIRE PRONE AREA BULDING.
POY LAWS.

YOUR SINGERELY

MRC. DOUGLAS.



SHEET 8

FIRE & EMBRGENCY SERVICES AUTHORITY ? FEB De 11 480 HAY.ST PERIH WA GPC BOX P1174 6844

ATT MR RUSSELL STEVENS DIRECTOR OF RESEARCH & MASION. Majos

DEAR SIR

RE FIRE CONTROL SYSTEM. SPRINGLERS.

I. AM SEEKING AN APPOINTMENT WITH YOU RECEPDING THE ABOVE, AND MY CONCERN OVER THE HORRENDOUS HONE AND PINANCIAL LOSSES EAUSES BY THE RECENT FIRES.

I HAVE DREPARED DETAILS OF RELEVANT INFORMATION SOME OF WHICH YOU MAY BE AWARE OF AND OTHER THAT I AM SURE WILL BE OF GREAT INTEREST TO YOU

TRUSTING YOU WILL AB ABLE TO GRANT MY REQUEST AND ADVISE ME OF A SUITABLE TIME AND PLACE

Yours SINTERELY

MR.C. DOUGLAS.

NOTE THIS LETTER MEVER ACKNOWLED GED BY F.E.S.A. 21/MARCH 2011

Don't

fire bans reduce fire ris

of extreme

res are
ies.
i as how
es and
ing a fire.
t is illegal
a fire.

ea where a

Total Fire Ban is in place you must not:

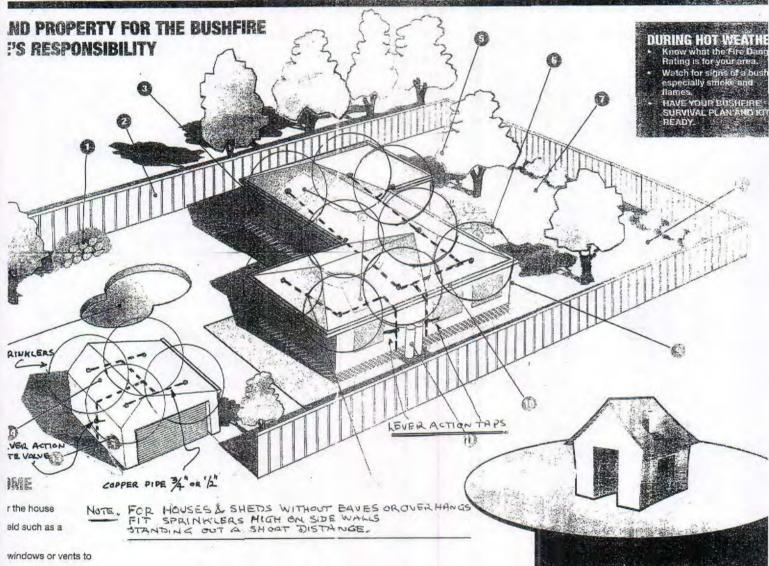
- · Light, maintain or use a fire in the open
- Carry out any activity in the open that causes or is likely to cause a fire
- · Cook on an open fire
- Undertake 'hotwork' such as metal work, grinding or the like unless you have an exemption
- During a Total Fire Ban people can still:
- Use a gas cooker or barbecue with an enclosed flame or an electrical stove at home
- or in a designated area. Many recreation sites within local government areas have gas or electric barbecues installed, which may be used at any time
- Use a chainsaw, plant or grass trimmer or iawn mower but it is best to postpone this work as it could still start a fire
- Smoke but put out your cigarettes or cigars properly, and safely dispose of the butt
- Undertake essential feeding and watering of your stock

You could be fined up to \$25 000 or jailer 12 months or both if you ignore a Total Fi Ban.

An exemption may be granted for indus if you can show you are taking proper step prevent any fire spreading, and can contriput out any fire that might start.

Exemptions can cover specific times an locations, and can be changed or cancelle any time.

Call your FESA regional office for furthe information or to apply for an exemption.



es, in the roof space, lights, evaporative air cladding

two metre gap between your house

er trees

under and between larger trees

y from house and grass is kept short

:laddings are sealed

ar of leaves and bark

- Keep LP gas cylinders on the side of the house furthest away from the likely direction of bushfires (where bush is)
- \$2. Block any gaps in the roof space
- 13. Hoses must be long enough to reach all parts of your house. Use metal hose fittings for taps as they are less likely to melt
- 14. Remove flammable materials and store them away from the house
- Make sure there is water :: is likely you will lose water and power supplies during a bushfire. It is important you have an alternative water supply. You will need a petrol, diesel or generator powered pump to draw water from dams, pools or a water tank

www.fesh.wa.gov.au

CIRCLE OF SAFETY

- Create a 20 metre circle of safety around your home and other buildings. This area needs to be cleared of all rubbish, long dry grass, bark and material that may catch fire.
- Prune lower branches (up to two metres off the ground) to stop a ground fire spreading into the canopy of the trees.
- Clear vegetation along the boundary of you property to create a firebreak. Make sure you meet your local government's firebreak requirements.

Cut long grass and dense scrub.

From: To:

Subject: Roleystone Fire Submission Sunday, 27 March 2011 6:44:14 PM Date:

Perth Hills Bushfire Review - Template for Submissions.doc Roleystone Incident.docx Attachments:

Please find attached submission for the Hills Fire Review, also sumary of my observations as a full time Station Officer involved in the initial fire attack forwarded to my superiors.

Regards

Tim Mills G.I.FireE

Submission to the Perth Hills Bushfire February 2011 Review

Submissions should be st	ubmitted electronically (preferred) to:	
or posted to:		
Perth Hills Bushfire Febru Locked Bag 10, Cloisters PERTH WA 6850		
wishing to make a conflodgement and the Inquir be aware that whilst ever	ceived will be made available on the Ir idential submission should make thi y will not publish those submissions. It y endeavour will be made to ensure conissions might be released in accordan	s clear at the time of lowever, people should onfidentiality, there is a
Contact Details		
Name:	Tim Mills	
Address:	_	
Email address:		
Telephone number:		
Organisation Details (Wh	ere Applicable)	
Is this submission presented on behalf of an organisation:		No
If yes, name of organisa	ition:	
Position in organisation	:	
Response to Terms of Re	eference	
You must address at lea		

I am a full time Station Officer at Success Fire Station.

I and crew of 3 Firefighters responded to the Roleystone incident with a Medium Pump and Light Tanker and were involved with the initial fire attack. (Refer attached observations forwarded to my superiors).

These views are my own and may not reflect those of my employer.

I also live on a 5 acre semi rural bushland block, though not in the hills, where prescribed burning is permitted.

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

While many of the properties we attended particularly in Bullockbush Road and Cannings Mills Road, south from Bullockbush to Grade Road had an excellent buffer between buildings and bushland. (ie, lawns, paving, garden beds, etc) The bush to the north and east of Bullockbush Road had I believe a sufficiently high fire loading to prevent the control of any bushfire such as the one we experienced, that is travelling up the hill towards the eastern end of Bullockbush.

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 believe a programme of controlled burning in this bushland could have made this fire controllable.

Secondly, while I agree with houses under threat being evacuated, I believe where a homeowner/occupant has suitable firefighting equipment, suitable ppe (including respirator and goggles) he should be allowed to defend his property. My attached observations show that in the early stages of the fire some homeowners had small petrol driven 5 or 6 horsepower pumps connected to either water tanks or swimming pools. These we used with great success by my crew myself and later other firefighters both Bushfire Brigade and Fire and Rescue, and were directly responsible for a number of houses being saved in Bullockbush and Canning Mills Road. They allowed us to quickly attack small spot fires around these buildings and prevent the fire spreading to property, which had it done so would have undoubtedly spread to neighbouring properties.

This also meant that we were able to return to this equipment at times when required and once again put it to immediate use, thus allowing us to save the water in our fire appliance tanks should a more vigorous attack be required, saving time in running out our own fire hoses, then making up that hose before moving to the next task and more importantly allowing us to continually attack the fire when required without the need to shut down each time our appliance water tanks ran dry, leaving the location to get water, the closest hydrant being on the corner of Grade and Roberts Roads, before returning some 10 minutes or more later.

Where a home owner/occupier had been home to man his fire pump I am convinced in the majority of instances he would have been able to successfully defend his

property and assisted by firecrews the outcome of this incident would have resulted in considerably fewer properties being lost.

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.

Apart from the obvious creation of a suitable buffer between properties and surrounding bushland, and the removal of all flammable material within that zone, homeowners/occupiers who are physically fit and competent and willing should be encouraged to provide their own firefighting capability.

Where he/she has adequate ppe (ie, sturdy long trousers, long sleeved shirt/jacket, gloves, sturdy boots, hard hat, respirator and goggles similar to that used by fire crews) a reliable petrol or diesel driven firefighting pump with suitable hose that can deliver a reasonable fire stream and adequate reliable water supply they should be exempt from evacuation and allowed to defend their property.

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

Local and State Fire Authorities should provide advice and training to assist home owner/occupiers with regard to fuel reduction around their property and the provision of their own firefighting capability, how to set up a simple system and operate it on their property.

Education and assistance from the authorities would I feel bare more fruit than enforcement regimes and penalties.

Note: People are provided with hose reels at their place of employment and one would assume it is expected they will use them in the event of a fire. So why not have a similar hose reel at home?

Roleystone Incident; 173393 6/2/2011

I have some observations with regard to the above incident:

1. Success Light Tanker 2.

Turned out at 1230 with an MDT which would not log on. (This was previously reported to IT and is still inoperable 15 days later)

This vehicle was moved to various locations during the incident, refreshments and crew break only made possible when it had to return to the main control point for mechanical repair to the pump which broke down. Crew reports incident comms was very poor and they had very little direction throughout the incident. Crew arrived back on station at 2200, 9.30 hours after turning out.

While this was an extraordinary event the second light tankers continue to often be forgotten during incidents, only being relieved and refreshed as an afterthought once pumps and first light tankers have been organised.

2. Success Pump and Light Tanker 1.

Turned out at 1300, reported to the control point at Roleystone Fire Station, tasked to report to sector 1 with Murdoch, SO Gill Sector Commander.

Proceeded to Bullockbush Road as we could see the fire front approaching in that direction. Reversed pump in to the driveway of the house at the end of the street with a mind to hopefully stop the fire at the boundary behind the house.

The fire front rapidly approached up the hill, jumping the house and ourselves, completely engulfing the surrounding bush on all sides.

Both pump and light tanker hastily left the area pulling into the property at the end of Bullockbush Road on the corner of Canning Mills Road which had a clear area of driveway, lawn and garden which looked defendable. At this point we were able to gain control of fires around this house and sheds.

3. Comms.

During our flight along Bullockbush Road I made an "Emergency Radio Message" stating our location and the fact that we were surrounded by fire and in danger. (During this time one of the rear duel tyres on the pump also burst and remained flat until we were relieved later in the night).

This message was transmitted on the Sector Channel which highlighted the following problems:

- a. Due to smoke in our eyes and rapid vehicle movement, it was not possible to change the main radio channel to either the Command Channel or 6AR.
- b. The portable VHF radios were not able to transmit any messages, the portable VHF is an unreliable unit and regularly fails during incidents, they have no battery indicator and despite batteries being reconditioned at the required intervals they run flat quickly and with little prior warning.
- c. Only 6AR records radio messages, therefore any emergency or priority messages are easily lost and there is no history of messages made. (See a)
- d. While the UHF is a more reliable radio over short range the batteries only last a short time and for some reason the pump battery charger has been removed, we were therefore unable to recharge discharged batteries as previously possible. Two batteries were later exchanged with the ICV which prolonged their use a little. They could not provide us with any charged VHF batteries.
- c. There was no phone reception in our location rendering pump phones useless.

I would recommend each pump be fitted with 2 VHF radios (changing channels or scanning, etc is often not possible when vision is impaired by smoke, BA visors, etc and at such incidents where time is critical and the priority is to prevent your crew becoming a casualty of the fire, firefighting operations become the sole focus, radio operations becoming secondary.)

VHF Portable radios must be replaced with a suitable working model ASAP, they are unreliable.

All crews should have personal UHF radios, I lost all communications with my light tanker crew for approximately 30 minutes when they started proceeding back up Bullockbush to investigate the possibility of saving properties. Due to the extreme conditions I could not be sure whether or not they had perished.

All VHF radio channels should be recorded thereby allowing the replay of any priority or emergency messages, (or an easy to use, reliable method of transmitting and recording emergency messages be put into place.)

MDTs served no useful purpose during this incident other than providing us with the initial address and Streetsmart map reference. The sooner these units are replaced with a competent reliable system the better.

4. Private Fire Pumps.

The property on the corner of had a small 5 or 6 horse power fire pump which had been left running by the occupants as they evacuated. As I had requested a tanker (2.4 or larger) I decided to use this and conserve the water in our pump tank until that arrived. The unit was connected to a domestic water tank with two hose reels running off it. This small unit was so impressive that it was all we needed to protect this property and allowed us to remain there until the threat of fire

spread to the structure was reduced sufficiently to allow us to commence working our way back up Bullockbush.

Later another similar unit was found at the rear of a property in being used by a Bush Fire Brigade crew. This unit was drawing water from a below ground swimming pool and again was directly responsible for saving the house. Later in the day we were able to restart this pump and once again prevent fire spreading from burning vegetation growing over a pergola connected to the house.

I am convinced that these pumps were a major contributor in saving many of the houses at this incident. Not only did they allow immediate fast response to an adequate firefighting jet, they allowed us to continue to fight the fire when our appliance water tanks would have required refilling thus preventing the delay associated with that and probable loss of the property.

The requested water tanker did not arrive during the incident, a hydrant was found on the corner of Roberts and Grade Roads.

5. Evacuation.

All properties had been evacuated where we were operating. This made firefighting operations a lot easier, particularly the decisions to pull away from a property once it became evident they could not be saved.

However I strongly believe that in most cases, where a property had good fire breaks, lawn, paving, etc around the buildings, one able bodied person with the correct PPE, including smoke mask and goggles, with one of the abovementioned petrol (or diesel) fire pumps would have been able to save his property.

While wearing BA I was able to break through adjoining property fences and found houses in the early stages of fire attack, at that stage these properties could have easily been defended by one person with a garden hose. However by the time I had been able to get crews to these properties at the end of Boondi Place two of them were going well and we were unable to prevent the fire spreading with the resources to hand to a third house as by this time LPG cylinders were exploding and open gas mains hampered our efforts.

I would strongly suggest that where a competent house holder has a defendable house with good fire breaks, good housekeeping, effective PPE and a fire pump he **should not** be forcibly evacuated.

6. Awards.

- a. SO Gill should be commended on his efforts as Sector Commander particularly during the early stages of this incident. His cool control of his Sectors Operations, despite the extreme conditions and being directly involved in firefighting was exceptional.
- b. Firefighters Sharp, Davis and Kirk I recommend for the highest award possible. Having become completely engulfed as the fire front jumped houses and themselves in Bullockbush Road coming

extremely close to themselves becoming casualties, they regrouped at the end of the street and proceeded to work their way back up the road resulting in all 6 houses being saved. They then proceeded down Canning Mills Road and their efforts greatly contributed to no loss of property until the house on the corner of Grade Road, which was well alight, was reached. They continued to work without a break until relieved by the night shift some 8 or 9 hours later.

While the efforts of all responding crews doubtlessly are worthy of praise, I would recommend these 3 for special consideration of praise from the highest level.

7. Other Considerations.

- a. After nightfall and on the following night shift with no lighting available singlehandedly manhandling a pump hose reel over debris and uneven ground while using a Dolphin torch to light the way is an unsafe practice given the availability in the marketplace of hands free torches. Hazard Report forms reporting this situation have remained without action for some years now. Many are now buying their own helmet torches, due to the inadequacy of the Dolphin torch, for safety reasons I will be purchasing a suitable torch and am considering purchasing same for my crew as I feel responsible for their safety and welfare.
- b. Consideration should be given to BA for light tanker crews. Wearing BA and driving light tankers, if possible, is unsafe. Suggest possibility of airline equipment be fitted. Problems with additional weight and space for equipment should not be the sole reason to discount this suggestion. Pump crews were able to wear BA at this incident, moving in and out of the appliance, while inconvenient was possible, this was not possible for light tanker crews working in the same location.
- c. While the ICV is a good concept, it or the IMT system often does not work as smoothly as it should. One example being on returning the following night by taxi to the control point and finding our vehicle, while my crew completed our vehicle inspections I presented our completed T cards to the ICV. I was told to come back in 10 minutes and that they knew where to find us if they needed us sooner. We were anxious to be tasked and start working, however all fuel tanks were below ¼ full which was pointed out upon my return at the suggested 10 minutes later. I was then tasked to report To Divisional Commander Millar who proceeded to abuse me on the RT and on reaching his control point for the delay in getting to him which was no fault of myself or my crew, why would we not respond in a timely manner?
- d. The taxi system in responding to relieve at incidents in this situation proved inefficient, I was promised a taxi at Success Fire Station on the following night shift at 1800. Despite calls back to Swan taxis at 1815 and 1830 the taxi didn't arrive until 1840! The ability of many of these taxi drivers not only to drive safely but to follow their own satnav is all to often questionable. Is their a more efficient taxi service we can use?

Submission to the Perth Hills Bushfire February 2011 Review

Contact Details

Name: Ed and Leonie Donnes

Response to Terms of Reference

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

We have lived on a semi rural property (1.89 Ha) in Kelmscott for almost 30 years. As our west boundary and immediately across Grade Road to the south is urbanised we have been extremely aware of the potential danger of bushfires to ourselves and our neighbours. In the past we, together with our neighbours on the eastern boundary who have a similar sized property, have arranged to have the fire brigade undertake a prescribed burn. Both properties were charged \$600 each for this to be done. In the spring of 2010 we again requested a prescribed burn for these two properties but it was unable to be undertaken before the start of summer. It was suggested that our request may be reconsidered at the end of summer.

2. The impact of land use, environmental and building laws, practices and policies in the affected areas on bushfire mitigation, prevention and response.

We have worked conscientiously to reduce the risk of bushfires impacting on our own and neighbouring properties. We do this as follows:

- Construction and maintenance of firebreaks in accordance with the requirements of the Armadale City Council.
- Awareness of the Fire Danger Ratings and the need for a total fire ban in the susceptible months of the year.
- Whenever possible we have grazing animals (generally sheep) to reduce flammable materials on the property. This time 17 sheep were grazing on the property from mid December until they were relocated post fire on February 11th.
- We have greatly reduced the number of trees and shrubs growing around the house area and particularly on the eastern side which is at greatest risk.
- We have replaced the wooden veranda and pergola with an aluminium construction. Our house is a brick and tile construction.

- We have installed 2 water tanks holding 10 000 litres and 2000 litres of water.
- We have installed a petrol driven fire pump.
- Due to our perception of an increased fire risk this season, the firebreaks were made wider to allow vehicles an escape route during a bushfire.

However all of these bushfire mitigation practices did not prevent serious impact by this fire on ours and neighbouring properties. We remain convinced that the only policy which prevented our house from being destroyed was our decision to stay and defend our home. Immediately to our east boundary two houses have been completely destroyed and three houses out from our west boundary have been totally destroyed. Additionally there were dozens of other homes in our immediate vicinity which were destroyed by this fire event.

We have subsequently learnt of several other people who chose to stay and defend their property. All were impacted by the fire but were able to save their homes.

3.The options available to landowners, residents and tenants to assist in bushfire risk management including vegetation clearance, use of air conditioners and the storage of flammable materials around dwellings.

- In Terms of Reference 2 (above) we have listed our practices to assist in bushfire risk management. Landowners and residents have a responsibility to minimise risk to their own property and to others.
- The use of evaporative air conditioners is complicated. When a fire is imminent we are instructed to turn off the fans in the air conditioners and keep the water running over the pads. Of course (as in this fire event) when the power is not available then the water will not be available unless it is manually sprayed by hoses onto the pads. We have 2 evaporative air conditioners and it was of major concern to us that the pads would ignite. Perhaps a recommendation from this review could be that manufacturers of evaporative air conditioners should use fire retardant materials or perhaps install an ember guard.

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

We were not visited at our home by police or any other emergency service until 8pm on Sunday 6^{th} February. We received a mobile phone SMS at 3.55 pm warning that we may be impacted by fire. The main fire front passed through our property at 1.30pm. This system of warning residents was clearly ineffective in our case.

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

We were prepared physically and psychologically to defend our home without the assistance of the emergency services. We understood that the fires at Red Hill and Brigadoon on that day had depleted the resources available to our district at the time the fire front passed through our area.

After the main fire front passed through there was constant vigilance required to control spot fires from embers at ours and neighbouring properties. There was one other neighbour and his son who had chosen to stay and who managed to extinguish countless spot fires on their own property and neighbouring properties. Unfortunately there were not enough people left in the district to prevent the destruction of so many properties. We were also told several times on various occasions from emergency services personnel that their policy was "we are here to save lives and not property" in response to requests for assistance to extinguish spot fires in the neighbourhood.

The fires continued to smoulder and burn for days afterwards mainly in the remains of trees and fence posts. Thus we decided to remain on the property to prevent further damage and to care for our livestock and poultry on two neighbours' properties which had all survived the fire unscathed. We were informed that if we left the property we would be prevented by the authorities from returning.

Whilst the needs of the evacuated residents were apparently being well met by a variety of government and volunteer agencies the needs of the residents who remained in the fire area were completely ignored.

Therefore we had no power (5days), no phone (10days), no access to fresh food, no access to medical supplies or medical attention, no information from any sources due to power outage and no access to counselling although we felt quite traumatised by the experience and the sight of the devastation surrounding us. We earnestly believe that this is the main area which needs to be improved.

Perhaps a record of such residents could be kept at the roadblocks and suitable identification (for example a drivers' licence or passport) could allow them to exit and re enter the restricted zone to access emergency supplies or medical treatment.

From: To:

Subject: Comments for review

Date: Tuesday, 29 March 2011 11:32:52 AM

I saw your ad in the local Roleystone paper for comments about bush fires in the hills area. I live on Contour Rd and have had significant problems communicating with local council, including several unreplied e-mails of which I still have copies. I would like to contribute a few points:

Lack of knowledge for residents in relation to who holds responsibility for vacant bushland

A lot of areas surrounding the houses on blocks such as , are owned by unknown authorities/bodies. It is difficult to have action in reducing dry fuel if ownership of the land is unclarified. E.g. I have written to the local council on more than two occasions in relation to overgrown trees behind my house, the only access I have in cases of fires/storms. I spend most weekends raking under trees that do not belong to me in an effort to keep the dry fuel down. The request made to council was for the trees to be taken down, or at least trimmed. I know I will have no access out of my property if there is a bushfire but there is little I can do if council, or whoever owns the trees do not respond.

Lack of amenities to help residents with their clean ups

Green waste verge collection in Roleystone is similar to that in suburban areas. Whilst rates are high, no extra services are provided for residents with their clean ups. Extra green waste verge collection would be useful in assisting residents with their own clean ups.

Lack of response/involvement from council

It would be good to have knowledge of plans by council to address the reduction of dry fuel, such as back burning, within 'bush areas' where there are houses. Lack of engagement with the local communities leaves a whole group of people vulnerable and helpless in relation to such concerns.

Overall, I know that if the wind had been blowing in the opposite way on the day of the last fires, I would experienced significant loss, and some of the responsibility does not lie with me. A list of who is responsible for empty lots of bushland would at least be a starting point in forwarding concerns to the right agencies/government bodies.

Thank you for giving us the opportunity to voice our comments.

Hannah.



26/3/11

Re Porth Hells Bushfire

Dear Sir/Kadam,

I raise to fellowing goints in commection

with the above !-

- (1) Smale & e incluees seemed actima in me and no doubt many withere. Why can't the weather forecaster on make | TV (expecially 7 pm) indicate " A burn off at so r so is planned for Tomomer?"
- (2) It should be passeille to have nevolving common solvented at strategie high jurishs (Planty in the Hills) and monitorized at a contral station. One obvious place is top of comming title Rol etc. It should be provided, even, to have sensible volunteess verilating the monitore, (Say 2-3 ft shifts no)
- (3) I wonder if it would be fearille to how very large sump of writer, underground, in some buck areas et they d'unper, or even in streets.

These could be could be a "door" and emalle allactment of hove I homp. They would be quiete in action, freezing up fire engines 4) Whatever it look, negular aerial surveillance to Tritat on high nich days i) I think it is foulish to see, on Wete, Commonwe will have a high fire danger " DVORY day in Summer has this see no need to kelp arrowinds! 6) Very severe sematter for aroon should be implemented and advertised of 10 pre fait (mandating) plus \$1 milion fine and a newword of 9 200,000 to any successful informant Your similarly Louis Mack Call to the second of the second The same of the sa The state of the second of the

From: To:

Subject: February 2011 Bushfires - Kelmscott/Roleystone
Date: Wednesday, 30 March 2011 5:16:40 PM

Greetings

Everyone is responsible for their own safety however I would like to make the following comments/suggestion regarding the February bushfires;

Suggestion

I would like to suggest that Sirens be erected around the area to advise residents there is a fire approaching.

I have lived in the Roleystone area for 50 years and at one stage we had a siren/s; when it went we all knew what it meant and what to do. (On the TV clips with the latest tsunami in Japan they alerted the population by sirens).

I understand residents may not want it near their homes due to the noise level however when you consider what the sirens alerts one to, it is a small inconvenience in the big picture and it is not as though they are left on, they are used in bursts.

Alternatively could helicopters be outfitted with a siren and as flying overhead have the siren active to alert residents.

Communication - Roleystone area

FESA's website advises communities to listen to ABC radio 7.20, in areas of Roleystone there is no reception. Calls from FESA are welcome but only for those who own a mobile phone which receives signal in Roleystone. Land blocks are somewhat larger in Roleystone and if outside the house you don't necessarily hear the telephone ring; if they are connected to an answering machine and there is no power the answering machine is useless.

Sirens overcomes all these obstacles.

Residents Responsibilities

I would like to see residents be held more accountable for the upkeep of their property especially in relation to debris build up. To assist with this perhaps the City of Armadale could make available bags (for a price) suitable for holding leaves, sticks and gumnuts which could be collected in the green waste collections. Presently you are required to obtain cardboard boxes which are not easy to obtain. In addition perhaps an additional green waste roadside collection could be considered.

At one stage it was a requirement for blocks of 2000sqm or over to have a firebreak even if a house is erected – this seems to have stopped why?

Local Government

For many years Roleystone has been neglected. Personally I would welcome a greater presence by the Local Government in the maintenance of their bush reserves and verges.

Thank you for your time

Regards

Myra Cornwell

M Cornwell



Perth Hills Bushfire 2011 Review.

· Firstly I thank all "people" involved in the recent "fighting" and in the recent "fighting" and "cleaning up" after the devastating

fires.

there is much literature to be read by residents re protecting homes, community support networks etc thank you

· My concern is related to the future review of Armadale Shire's current allocation of

tip passes (annual) and verge and green waste collections on an annual Suggestions: - consideration be given to increasing the number of tip passes por year le double. Rosidents will have an opportunity to "dump" rubbish legally and reduce possible Sources of 'fuel'. Overtime households accumalate rubbish' - one man's trash is anothers treasure - again a minimum of four greenwaste and two verge pick ups annually will again offlood the fuel loading which occurs over time.

I understand that the hills area is high priority (zone 2) and believe that Armadale Shire will need to re-assess the fire risks No doubt this may load to a rise in rates to compensate for extra resources, manpower ete but in the Scheme of things residents may if it moons take that an board environment. Iving in a safer Mark you. Kind regards, Frances Barrett (Mrs)

Mr Mick Keelty APM
Perth Hills Bushfire February 2011 Review
Locked Bag 10 Cloisters Square
Perth
WA 6850

23rd March 2011

Dear Mr Keelty

Perth Hills Bushfires February 2011 Review

I write concerning point no 2 of the terms of reference:

"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."

There is a very great need for local, state and commonwealth governments to attach much greater importance to bushfire safety when approving subdivision in areas of extreme fire risk.

We have had two serious fires in the environs of Brigadoon within 13 months, January 2010 and February 2011.

I refer to the Peet Ltd subdivision on the northern slopes of Brigadoon, abutting Walyunga National Park, which was approved in March 2010. The site has been rated extreme fire risk and mostly comprises dense forest with dense understorey. It is surrounded by steep escarpment on three sides and is subject to strong easterly and south westerly winds. The Brigadoon Progress Association and members of the Brigadoon Community met with Minister Johnson, FESA executives and volunteer fire fighters to discuss concerns the Brigadoon Residents had regarding bushfire safety issues.

In summary, the Brigadoon Residents expressed concern that standard bushfire safety measures had been compromised, with particular reference to the lack of a proper perimeter road surrounding the development, reduction of the buffer between the bushfire risk and the development from 100metres to 60metres, and reduction of the clearing of vegetation within the building protection zone. The developers, as a result of mitigation with the Commonwealth to preserve habitat for the Carnaby's Black Cockatoos, are now committed to plant 214,000 eucalypt seedlings over 214 lots of average size 1.8 hectares, in addition to the re-vegetation of 10 hectares within the road reserve, 50 hectares within the existing cleared areas and 100 hectares within the Parks and Recreation Reserve surrounding the development footprint.

Attendants from FESA included Craig Hynes and Alan Dawes.

We expressed our anxiety that the mitigation measures would greatly increase the fire risk to the current residents, the future residents, and the fire fighters on the ground in the case of a fire. The young seedlings in particular would add to the understorey, and increase the fuel for a fire.

We asked the question, "Why are FESA and the local authorities reducing bushfire protection measures at a time when global warming and the ensuing drought is increasing the fire risk?

Alan Dawes assured us that conditions in WA would never be anything like those in Victoria, and that FESA would extinguish any fire in Brigadoon with the use of helitacs alone, without even putting fire fighters on the ground, before night fall when the helitacs could not fly and the strong easterly winds got up.



The 2010 Brigadoon fire was not controlled for approx 36 hours, the Toodyay fire saw extensive loss of homes, the recent Roleystone fire was very sadly catastrophic, and the Brigadoon/Redhill fire was serious, and likewise not controlled for over 36 hours.

The volunteer fire fighters present at the meeting were totally aghast that a development was being considered on a site of such extreme fire risk. Following is an excerpt from an email sent to me by a local newspaper reporter who was present at the meeting.

"Just to clarify for you, I travelled half the trip with two SES workers (after the rival newspaper's photographer got my seat) who I wish I could have quoted!

The SES volunteer's comments went directly against what FESA's Allan Daw said, the women were local residents and when told of what the meeting was about said the following:

I said -

Peet want to put houses up here - what do you ladies think of that?

Their reply -

"What! Your joking right? That's what all of this (the convoy) is about? That's madness, we are battling to get up here as it is. If a fire happened?"

"God. They'd all have to get in a helicopter to get out. They'd (residents) be stuffed-we'd(SES) be stuffed. They would have to let a fire burn itself out up here."

I said - "But FESA have Helitacs right?"

SES volunteers - "Yeah, but in a fire storm pilots can't just fly anywhere. What about evacuation with one road out? I hope I don't get that call."

FESA outranks the SES as an 'authority', the SES volunteer comments were not permitted to be used for my article."

The Brigadoon community find it inconceivable that FESA executives have bent over backwards to facilitate a development, on a site which is rated extreme fire risk, a development which compromises standard bush fire safety measures, and which is subject to a massive revegetation program, as a result of mitigation with the Commonwealth Government to preserve habitat for listed endangered species.

This development, on a site which should never have been developed in the first place, and which has the added risk of the revegetation program, has raised the bushfire risk to the Brigadoon community, yet has been approved by FESA, the City of Swan, and WA Planning Commission.

Yours Sincerely

Gillian Lamont

Gillian Lamont, Past Chair, Brigadoon Progress Association

From: To:

Subject: Roleystone / Kelmscott Bush fires.

Date: Tuesday, 5 April 2011 8:15:43 PM

To Whom it may concern,

We are residents of Roleystone who had been away for 17 years & who returned to the bush in our retirement. We were away the day of the fire & after phoning a friend in the fire brigade were told not to return,. At no time did we receive an SMS to advise us of an impending bushfire as others did in the next street. My real concern is that residents need to know that there is a fire in their neighbourhood so they can prepare and react. Some residents did not know of any fire until they turned on the news at 6 pm. For many they received an SMS to evacuate 4 hours after they had been evacuated. I also believe that many residents received SMS's that had no text in them. Clearly something is wrong with our communication. We were extremely fortunate that their was no loss of life, but several came close to just that. We lived in Holland for 17 years & on the 1st Monday of every month at 1200 a siren sounds, this is just a test, but should it stay on everyone knows to check their television / radio. This siren would only need to be sounded in dire circumstances.

Residents in the hills need to be more responsible for their blocks, by keeping the fuel level down & by cutting / removing trees from around their home. Maybe we need an awareness program to that effect, perhaps a television commercial to reach the general public. Maybe we could have more than two green pick ups per year, anything to encourage residents to take advantage of this service. Maybe a system could be set up whereas a ranger checks on blocks & fines given after a warning if not complied

We feel very proud of our Roleystone Fire Brigade, of the ongoing education programs i.e. the phone tree, for one. In fact all the fire brigades involved were there when we needed them and made such a difference.

Finally if we are ever to learn anything from this disaster, the fire brigade needs to be allowed to do control burns and not be hampered by environmentalists and greenies, who at the moment are inconspicuous by their silence.

Yours sincerely,

Valerie and John Bell.

Perth Hills Bushfire February 2011 Review



Submission to the Perth Hills Bushfire February 2011 Review

Submissions should be so	ubmitted electronically (preferred) to:
or posted to:	
Perth Hills Bushfire Febru Locked Bag 10, Cloisters PERTH WA 6850	
wishing to make a conflodgement and the Inquir be aware that whilst ever	ceived will be made available on the Inquiry's website. People fidential submission should make this clear at the time of ry will not publish those submissions. However, people should ry endeavour will be made to ensure confidentiality, there is a missions might be released in accordance with the <i>Freedom of</i>
Contact Details	
Name:	Douglas James Brenkley
Address:	
Email address:	
Telephone number:	
Organisation Details (Wh	ere Applicable)
Is this submission pres	ented on behalf of an organisation: / No
If yes, name of organisa	ation:
Position in organisation:	
Response to Terms of Re	<u>eference</u>
You must address at lea	ast one of the Terms of Reference.

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

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

Item 1

In heavily timbered (forest) country it is observed a number of homes would be very vulnerable during high fire danger days

It appears many owners are ignoring the fire hazard they are in.

More frequent Prescribe burning would appear necessary.

Home owners need to undertake more protective burning on their own property.

Home owners in these Forest areas need to become involved with their local Bush Fire organization.

Item 2 & 3

Forest need to be cleared back at least four times the height of the forest trees.

Clear at least four metres of bare ground around the outside boundary of private properties. A CALM responsibility!

Property owner to comply with necessary fire break on their property

Any action to be taken off landowners property is the responsibility of Government organizations.

Property owners need to be very selective of type of native vegetation they chose to plant. Many native plants can burn very fiercely.

Evaporative air-conditioners householder should be encouraged to install metal fly wire around the cooling bats and on high fire hazards days be encouraged to turn on the water pump to keep the bats wet.

Check that the pump works without the fan operating.

Fires and the talk of phoning everyone in the area may well miss some people. The "smoke signal" is more obvious should be adequate. Get out and look around. Use your nose bushfires can be smelt if you are down wind go outside and have a look up and down wind.

Listen to your portable radio (keep spare batteries handy)

Listen to the weather forecasts and frequent updates. Wind forecasts of sudden change are very important for those at the fire front particularly if the strength is increasing. Half hour wind forecasts if changes in direction and strength are essential for fire fighters to be ready.

Be a member of the local Bush Fire organization. Include the family

Item 5

It is OK to turn sight sees away or travelling public to be diverted

Police and FESA refusing property owners access to their property can create a dangerous situation for property owners their family and livestock.

They may have family waiting to be removed from danger if required Denying them access may cause loss of life and unnecessary loss of property.

They may have adequate fire prevention in place and be able to safe quard their property.

They may have equipment to fight the fire with a water truck, machinery tractor and plough front end loader.

They may have livestock they can move to a safe area; denying the owner access may cause severe stock loss.

If their property is in front of the fire the use of their equipment is denied.

If the fire has passed their property they may be able to save some buildings that have just started to burn; this happened during the Hills Fire!! People who stayed knowing they could deal with the situation

They know how to access all areas of their property and no doubt places where fire fighter may get trapped

They can work well in front of the fire dealing with spot fire (up to 1 km in front of fire)

They may know where the nearest available water is.

Help fire fighters trying to locate nearest water supply

If the property is behind the fire (up wind) those five points are still relevant

They can extinguish the fire burning back against the wind (upwind side) often on the east and north side. The importance of this is very often overlooked;

Before the wind change there is a lull (often about midday prior to sea breeze) and those at the front appear to relax and forget about the other side of the fire.

When the wind changes to a sea breeze (often very gusty) the fire front completely changes to the other side.

This has happen on a number of occasions.

Local knowledge of the property owner is more important than the Police or FESA opinion or desire to show their often misguide authority.

Other comment

Angle grinder sparks often take 15 to 20 minutes after use to start a noticeable fire.

Poly pipe will catch alight and burn very slowly and may take a day to reach another flammable spot.

My experience

Farmer from 1946 to 2004
Shire Councillor from 1963 Mullewa President 1967 1990
Fire control officer
1947 to 1978 involved in clearing fires (none got away!)