

# Submissions to the Operational Review

Fire and Emergency agreed to release the submissions made to the Operational Review team by affected residents. Submissions have only been proactively released where permission has been given by the author.

## Redactions

Redactions have been made to the submissions to protect the privacy of the individuals who made submissions. These redactions are consistent with section 9(2)(a) of the Official Information Act to protect the privacy of natural persons.



Mr Alan Goodwin,  
Lead Reviewer,  
Independent operational review to Port Hills fires 2017.

## FEEDBACK ON CONFIDENTIAL DRAFT REPORT

Dear Mr Goodwin,

Thank you for giving me the opportunity to present evidence to the review process some months ago in Christchurch. In your absence overseas at the time I presented my inputs to Bryan Cartelle and Trevor Brown. They were courteous, had obviously read my inputs in advance, and asked intelligent and appropriate questions.

Thank you also for inviting me to provide feedback on the confidential draft report received by email on Thursday. I will therefore present my feedback in relation to the various summaries to page 9, referenced to headings, pages and paragraphs used in your draft report. With regard to the latter and larger balance of the draft report I will adopt more of a broad brush approach in order to comment on issues raised, or on issues conspicuous by their absence.

## ACKNOWLEDGEMENTS

The reflection on Lianne Dalziels quote is appropriate and tends to reinforce the same theme used in my inputs but attributed to Winston Churchill. **“Those who fail to learn from history are doomed to repeat it.”**

## EXECUTIVE SUMMARY

1. The first fire didn't break out “near” Early Valley Rd. The ignition point was in fluffy very dry grass close to the base of an 11 KV power pole situated on the southern side of the Early Valley Rd road reserve. In my inputs I have generally referred to this pole as the “ground zero” pole (GZ pole). The location of the GZ pole is 43d 37.027'S, 172d 34.674'E or thereabouts (WGS84 datum). The road reserve is the old 1 chain in width standard (about 20.12 metres). It is Crown Land but vested in Christchurch City & Selwyn District on the northern & southern sides respectively. Early Valley Rd is of course the territorial boundary between the two local bodies.
2. You record 9 dwellings destroyed. This seems to be at variance with other information recording 11 destroyed. I am unsure which figure is correct.

## Readiness

8. The comments regarding “instituting total fire bans” and the role of SDC in communicating fire dangers to communities are not supported by documentation. In my submissions I recorded that I checked the SDC fire restriction website on the evening before going on holiday. The posted fire restriction status on 8<sup>th</sup> February was “RESTRICTED” whereas it should clearly have been “PROHIBITED”. The posted information didn't go up a notch until day 3 of the fire! A “total fire ban” was not imposed in Selwyn until March 1<sup>st</sup> and I have the notice to prove it. In para 8 you also state that SDC held “six weekly meetings”. This requires clarification – does it mean meetings held six weeks apart, or does it mean six meetings held one week apart?

Paras 9 & 10. My comment would have to be too many management plans, acronyms & gobbledegook but not enough application of that increasingly rare commodity, common sense.

#### Initial Response

11. It is fair to say that NZFS units arrived on scene reasonably quickly. The primary emphasis on saving human life was of course totally correct. However two photographs looking in opposite directions along Early Valley Rd at 6.07 PM show several fire appliances and a water tanker but no fire fighting action. The same situation was very apparent in other images taken at 6.30 PM. One of those images is particularly interesting to us because it shows that the primary fire storm had gone up the hill and had headed southeast. A grass fire is advancing slowly westward across the top of our property, into a westerly breeze and should have been very easy to extinguish long before it got into lines of very old trees. The line of the well-mannered fire front is north-south and there was a tank containing 11 thousand litres of water available at the southern uphill end, and 50 thousand litres of water readily available at the downhill northern end. Nipping that very manageable fire in the bud there would have prevented its subsequent major spread over hundreds of hectares to south and west. The fire crews were still twiddling their thumbs on the roadside, presumably awaiting orders once it was sorted out which “general” was in charge. I therefore find the comment in para 11 that “the initial response to the Early Valley Rd (EV Rd) fire was appropriate and timely” somewhat lacking in credibility. I have subsequently spoken to a few professional and volunteer fire-fighters involved and they expressed disgust at not being allowed to do what they were trained for i.e. fighting fires. I do not participate in what is called the social media but I am reliably informed that very similar views have been expressed on those platforms, especially in relation to being stood down on the first night of the EV Rd fire.

12. My focus is entirely on EV Rd fire so I will refrain from any comment on Marleys Hill fire.

14. This seems to be a wordy way of saying that it was unclear which “general” was in charge.

15. The “Selwyn Gets Ready” email system has proved to be a useful tool for a range of predicted severe weather events, tsunamis etc but any mobile phone based system cannot be relied on in our area due to an abysmal lack of signal strength from all service providers. These problems were detailed in my earlier submissions. The final sentence in para 15 refers to confusion & bad communication “compounded by the darkness”. The alleged darkness issue cannot remain un-challenged. On February 13<sup>th</sup> 2017 sunrise was at 0646 and sunset was at 2042 NZDT. There was a further hour or so of reasonable twilight combined with light from the fires until the moon rose at 2151, and it set the following morning at 0948. The moon was just two days past full moon and the illumination factor was at 93.8% of full moon (solar & lunar ephemerical data from NZ204, NZ Nautical Almanac 2016/17 and US Naval Observatory). I got home from Northland about 6 PM on the Tuesday night and with considerable help from neighbours immediately commenced dealing with fires in trees and hot spots on very steep ground behind our houses on EV Rd and continued until about 3 AM on the Wednesday morning. There was plenty of light from the fires themselves and from moonlight in order to effect these fire suppression efforts safely and competently. Lack of light on the Monday night was therefore not a tenable argument for the standing down of NZFS fire teams on that night.

16. I agree with the opening sentence.  
17-24. All rather nebulous procedural stuff, when Rome is burning.  
25. I agree with the view expressed. The people on the ground and in the air at the fire fronts were excellent but leadership by the “generals” was mediocre at best.

#### Community

- 26-27. Very valid comment, especially “They felt there was a disconnect between rural and urban firefighters”.  
28. This is a reasonable comment on what is needed in the recovery process from any big event (not just fires).

#### Recommendations

My advice would be to dump all 12 listed recommendations and replace them by one very simple one i.e **Think laterally**.

#### PAGES 10 to 32 OF DRAFT REPORT

#### OVERVIEW

I have made a point of reading the draft report at least three times and very carefully. My overall impression is that there is far too much jargon and gobbledegook contained in it and I suspect that fire-fighters at the “coal face” would be similarly bamboozled by an avalanche of acronyms, management-speak, and the tyranny of obsessive OSH nonsense pervading the whole thing. The fundamental problem I have with OSH dogma is not the underlying principle of injury avoidance but that far too much of it seems to be based on the **possibility** of something happening rather than the **probability** of it happening. There is a fairly close parallel also in the concept of something being “failsafe” which I put to you is simply a naive, flawed belief irrespective of whether the thing that is supposed to be failsafe is a safety pin or a nuclear power station. Babies will continue to be jabbed from time to time by safety pins and nuclear power stations will do meltdowns from time to time despite zillions of dollars being spent on trying to anticipate every possible mode of failure. Three Mile Island and Chernobyl are proof of that reality. The specific problem I see in your draft report is that you are trying to put every possible permutation and combination of a fire scenario into an operations manual and it seems to me that management structure is far too hierarchical for that to actually work. Sadly it seems to be written in what I will call code.

Taking my own earlier advice of thinking laterally, let us start with establishing a few facts about the weather in the first 3 days of the fire, and from there let us move to a timeline of early events from about 5PM onwards on Monday 13<sup>th</sup> February 2017.

#### WEATHER FACTORS

From 5PM on the Monday through to about 2PM on the Wednesday a private weather station sited on the valley floor just 700 metres from “ground zero” recorded very light breezes from directions ranging from 240 to 270 degrees. Incidentally the data from this weather station is used by MetService as part of the “your weather” network. It was a hot day but wind speed at that location did not rise above 10KPH (5.4 knots) for the whole of this 45 hour period. In fact for about half of this 45 hour period the anemometer didn’t turn at all which made the “direction” indication default to zero degrees. At about 2PM on the



Wednesday an 18 hour calm period was replaced by an easterly quarter wind coming up which continued through to the early hours of Thursday. Recorded directions during this period ranged from 080 to 120 with average wind speeds peaking at about 22 KPH (12 knots). You were supplied with a copy of this weather station data many months ago.

The “ground zero” power pole is located on land that would be about 20 metres higher than the valley floor and our local experience is that wind along the road frontage there would typically be perhaps 20% stronger than on the valley floor. Anecdotally the wind at about 100 metres altitude upslope from the GZ pole was fresh NW, fresh enough to make a resident decide not to have a barbecue on the Monday evening.

The point of this detailing is that the natural wind at the GZ pole when the fire started a little before 5.40 PM was negligible and therefore must be rejected as an ignition element. Indeed the weather station record in the 5–6 PM period shows no wind above 6KPH (3.2 knots).

Once the fire got going it obviously generated its own anabatic wind as it roared up the steep slope. The fire was of course just a grass fire for the first 10 metres or so of upslope progress before getting to the high energy woody fuel supply.


#### TIMELINE

From data and images in my possession the early timeline for the fire looks like this:-  
All times are NZDT.

1739-1740. High current fault on 11 KV line feeding power to eastern end of EV Rd. Loud bang heard about this time by a few residents of EV Rd that was almost certainly one of the 11 KV fuses blowing. Voltage droops in 230 volt supply experienced by some residents at eastern end of EV Rd consistent with one 11 KV phase being absent. (One low voltage phase would have been about normal, the other two being around half voltage).

1740. Ignition of grass had probably occurred.

1744. First 111 call recorded.

1748. Three images show fire racing up steep slope above GZ pole about half way to the . Real fire storm look to it with high flames, towering white and black smoke.

1749-1750. Osterholts Rd 11 KV circuit breaker tripped so all 3 phases of 11KV power to EV Rd now switched off completely. Cause of tripping not known exactly but could well have been plasma flashover with very high energy woody wildfire then raging under Cass peak spur line.

About 1800. First NZFS fire engine arrived in EV Rd.

1807. Images looking east & west along EV Rd show several fire appliances and one tanker in place to E & W of start point for fire but no fire-fighting action. Zooming in on east-

looking image first confirmation that middle 11KV fuse on GZ pole had blown with drop-link fuse hanging on its carrier bracket.

1830. Images show the firestorm in our immediate area had been and gone (further east and southeast). A quiet grass fire with a north-south fire front is moving slowly westwards across our upper property into a light westerly wind. It should have been easy to extinguish with our 61 thousand litres of stored water above and below the fire front, or by helicopter or fixed wing aircraft such as a Cresco (2 ton water payload). Down on EV Rd fire-fighters were still obviously awaiting resolution of the issue as to which “general” was in charge.

1846. Very high quality image of GZ pole clearly shows fibreglass fuse tube hanging down on carrier bracket. Image also clearly shows long-term overheated joints between aluminium & copper conductors, and a link wire being completely absent on one 11KV phase. Denso tape wrappings on line clamp joints clearly blackened from long term resistive overheating of joints. Grass-fire charring of the GZ power pole doesn’t go any higher than about one metre but on the eastern side of the pole that charring had propagated along shakes in the timber as far as the lower edge of the aluminium possum band, which remained un-blackened. The general condition of that pole would not unreasonably be described as “huckery”.

2042. Image shows fire front at top of our property had advanced quite slowly towards the west from its 1830 position but was now into our eastern line of very old pine trees. The wind had obviously dropped to almost nothing. What this picture really emphasises is that the western advance of this fire front should have been halted when it was obviously easy and safe to do so at about the 1830 stage.

#### ANSWERS NEEDED

I am running out of time in a big way but a number of valid queries from affected people have not been addressed in the report.

1. Why were our stored water supplies not used by any fire unit for at least 24 hours? We had a total of 118 thousand litres available.
2. Specifically, why were venturi jet-pumps not used to access water through the large top lids of many big water tanks in the district in the early stages of the fire?
3. The urban NZFS units were first on the scene but seemed to be completely impotent in the absence of being able to plug into a 6 inch water main.
4. There is no mention of roadside housekeeping issues. You are probably aware from my previous inputs that the road frontage on the south side of EV Rd was mowed and tidy for much of its length, the exception being the rock strewn part from the air break isolator pole, past the Cass Peak spur line pole, and past the GZ pole. I am pleased to advise that this “tiger country” was tamed about a month ago and has been cleverly benched as two levels, and oversown with clover seed to reduce fire risk. It is a very nice piece of skilled earthmoving work which involved moving hundreds of big boulders before re-sculpturing the ground surface. It will now be easy to mow and it inescapably should have been done years ago by the lines company Orion, or its predecessors. The owner of the adjacent land asked Selwyn District to do this work but was given the ghost train run-around of a nightmare on every circuit, so paid for the project himself.

5. There is no mention of the obvious scarcity of commercial helicopters and monsoon buckets when they were needed in EV Rd from 5.44 PM onwards on the Monday. The reason for their non-availability is fully appreciated but I do think my idea of re-establishing an Air Force helicopter unit at say Burnham is well worth pursuing, not only for fire reasons, but also being mindful of this year being 300 years since the alpine fault last did a big move.
6. My checking just yesterday of the [checkitsalright.nz](http://checkitsalright.nz) FENZ website regarding fire restrictions, permits etc revealed an abysmal Selwyn map showing the region divided into just 2 areas one labelled Selwyn Hill & High Country, the other Selwyn Flats. I appreciate this has nothing to do with the Review document but please do something about the map quality (make it zoomable for detail), and please put all the hill territory between Gebbies Pass and Godley head as a special high fire hazard area (Selwyn & City Port Hills in other words).

Sorry, the deadline is looming so will close off now, unfinished.

Yours faithfully, [REDACTED]

31<sup>st</sup> October 2017

## FEEDBACK ON SELWYN DISTRICT PORT HILLS FIRE RECOVERY PLAN

Notes prepared by [REDACTED] Early Valley Rd, Lansdowne, RD2 Christchurch 7672

### INTRODUCTION:

1. Call it part of the grieving process if you like but I think it is appropriate and important to give a personal account of the first few days of our involvement with the fire before moving on to comment on the Draft Recovery Plan itself. The notes immediately below should clearly indicate that my involvement with actively fighting the Early Valley Rd fire commenced about 24 hours after the fire had started so it follows that any of my comments on the first 24 hours are not first-hand but were gleaned from conversations with friends, family and neighbours who were there.

### BACKGROUND NOTES:

2. My wife [REDACTED] and I had gone on holiday [REDACTED] [REDACTED] [REDACTED] booked air travel to return to Christchurch on March 1<sup>st</sup>. Being about 1000 km away we therefore felt powerless when we received a text message at about 1750 NZDT on Monday 13<sup>th</sup> February advising us that a fire had started just above Early Valley Rd about 100 metres east of our boundary and was advancing rapidly up the hill. We were stunned but didn't panic – we simply assimilated the bad news and sorted out priorities as best we could from a distance. We took the decision to abort our holiday and get back home as quickly as possible. I arranged to fly back from [REDACTED] to Christchurch [REDACTED] on the 14<sup>th</sup> and [REDACTED] managed to get home two days later on Thursday the 16<sup>th</sup>. Incidentally the flights home at short notice cost us in excess of \$1000 and a few bottles of appreciation for special help in [REDACTED]. The cheap flights home scheduled for March 1<sup>st</sup> simply had to go to waste.

3. Within a few minutes of receiving the text message we had made contact with our daughter [REDACTED] who was in [REDACTED] at the time to suggest priorities if she had any safe opportunity to give effect to them. I also checked that she had taken on board the fire safety briefing I had given her two days before we had flown north on holiday. This included a quick tour of hydrant locations around our property, especially those in the main house and garden block. Some indication of the importance we place on being able to suppress a fire can be gauged from the fact that before the fire our water reticulation system consisted of twelve 1.5" BSPP hydrants and fifty seven 1" BSPP hose taps supplied by 118 thousand litres of stored water. My safety briefing to her had been precipitated by the obvious extreme fire danger which existed in our area from mid-January onwards. As part of that briefing I thought it essential for her to be familiar with our fire pumps so I got her to start both motorized fire pumps. She has a phone record of that. They were fully fuelled, ignition on, throttle set, choke on, and already coupled up to the two outlets on the full 900 litre water tank on the back of our old "first response" ute. Delivery hoses and nozzles were also ready for action. Included in our total stored water resource of 118 thousand litres of water there are two resources right on our northern boundary onto Early Valley Rd. The first of these is a 25 thousand litre tank fitted with a 1.5" BSPP fitting right on the front fence with alternative direct suction access through the large top lid. Also on the road frontage is an elevated 1800 litre dump tank which delivers the first thousand litres in 50 seconds. Rapid refill is achieved with a 40mm water main sourced from 50 thousand litres of stored water in uphill tanks. The existence of these significant resources was communicated to fire units

at an early stage by [REDACTED] but none of those resources were utilised by any brigade unit for at least 24 hours!

4. Sadly I find it necessary to record that on the evening before going on holiday I checked the Selwyn District Fire Restriction website and was appalled to find that we were only in a RESTRICTED fire season whereas it was obvious to anyone with a bit of common sense that we should have been in a PROHIBITED fire season. I further record that the website posting was not changed to prohibited status until at least day three of the fire. The significance of this is that when the fire season is posted as PROHIBITED there is a greater level of general awareness, and the level of preparedness of fire fighting units goes up a notch. In the case of the Early Valley Rd fire ignition could have occurred from the ejection of hot eutectic fuse link alloy at a minimum temperature of 620C from a medium voltage (11 KV) expulsion fuse system. Okay if we accept this as a tentative ignition thesis then the fire would still have started irrespective of whether the fire season was designated RESTRICTED or PROHIBITED, but what changes is the response. Although I was 1000 km away when the fire started it seems not unreasonable to suggest from available information that the initial resources applied to fighting the fire were clearly **too little** and **too late**. The posted fire season status being one step down from what it should have been also clearly indicates that the Principal Rural Fire Officer for Selwyn was negligently unaware of just how tinder-dry the Port Hills portion of his kingdom was from mid-January onwards.

5. Compounding the inescapable negligence of fire season classification was that in Selwyn we didn't move to TOTAL FIRE BAN status until March 1<sup>st</sup>. Old sayings as to closing barn doors after the horse has bolted inevitably came to mind as I printed out a copy of the notice with a view to framing it. The notice had been signed off by the Principal Rural Fire Officer for Selwyn on 1<sup>st</sup> March.

#### EARLY EFFORTS:

6. My fire fighting efforts started within minutes of getting home on the Tuesday evening and continued until about 2 AM on Wednesday 15<sup>th</sup> with massive assistance from neighbours and our daughter. We were mainly dealing with hot-spots, especially burning tree roots etc. It was full on that night but I was fortunate in being able to devote some of my energies to the bigger picture of restoring water reticulation and storage, fire pumps, hoses etc and co-ordinating our overall effort. By 2AM on the Wednesday we had fires close to our house and adjacent houses in an apparently extinguished state, the breeze had died to more or less calm, and we were all exhausted. We were of course mindful from previous experience that underground fires have a tendency to start up again so from 2AM to dawn we set up a fire watch system not unlike the watch kept on a yacht on passage, thus allowing some fitful sleep. Fire fighting started again at 6 AM on the Wednesday with a flare-up high in a pine tree sited about 50 metres uphill from our house & garden block. Burning cones falling out of the tree acted as incendiary grenades which started a new grass fire which spread steadily down towards our house & garden block. As soon as we were aware of the flare-up my daughter phoned 111 for professional assistance suggesting a helicopter option as the primary fire was high in the tree. Meanwhile I rigged up our small motorized pump and kept the grass fire at bay until ground crew and the helicopter arrived a few minutes later. The chopper put 4 monsoon buckets of water on the burning tree and ground crew used previously laid out hoses to extinguish the expanding grass fire. The air

and ground response to that flare-up was faultless, a real contrast to what has been reported as the ego-driven shambles of the first few hours of the fire on the Monday evening.

7. After that little early morning drama, which obviously had the potential to take out our house and those of neighbours, we did a very careful check of that immediate area, then focussed our efforts on hot-spots on the upper property (100 to 140 metre height range). Until deciding to evacuate from the hill at about 3 PM we took a total of 5400 litres (6 ute loads) of water up there and used two motorized pumps to deal very effectively with major hot-spots in tree roots and some elevated fires in trees. Our high pressure multi-stage pump was particularly effective in the latter role with a 9 bar pressure capability. Of the dozens of hot-spots dealt with that day I am pleased to note that only one of them came to life again.

8. My decision to bring our team down from the hill was taken when it became obvious that the fire direction of travel had re-curved back in a westward direction when the wind freshened from an easterly quarter and the firestorm escalated. The pasture area we were working in had already been burnt on the Monday night so it wasn't going to burn again two days later so my decision to evacuate was based on asphyxiation risk, a wish to be close to "bombproof" escape routes, and prioritizing the defence of our houses down on the road frontage. Having taken that decision we were gathering up the hoses we had been using when we were formally ordered to evacuate the hill area. My intention in coming down from the hill was simply to man the pumps at home if necessary as long as it was safe to do so. Our house is only a 10 second sprint from the escape route of Early Valley Rd or the alternative that existed of low flammability paddocks on the far side of that road.

9. I did what I was ordered to by immediately evacuating from the valley but that process was absurd. We were not permitted to stop at our house to pick up anything! I would have only needed two minutes to grab [REDACTED] medication, spare clothes, identity documents, credit cards, money, etc. I had to leave the valley empty handed, in the filthy clothes I stood up in, leaving our house completely unlocked, and unable to change our well pumping manifold over to better purpose than wasting at least 30 thousand litres down the roadside ditch until about noon on the Thursday.

10. After our evacuation on the Wednesday afternoon many of us attended a totally uninspiring meeting more or less led by the Principal Rural Fire Officer for Selwyn. The meeting was held in a large barn kindly made available for the purpose by McCarthy Contracting in Osterholts Rd. Having slaved my guts out all day on hot-spots in fully burnt areas the low point of that meeting was to be insulted by the Principal Rural Fire Officer to the effect that we who had slaved our guts out had not been wearing proper clothes for the job. In view of the fact that we had been dealing almost entirely with underground fires in an otherwise burnt out area the application of common sense to the issue would have indicated that stout boots were the only critical item of apparel. His patronizing remarks caused a number of people to walk out of the meeting in disgust.

11. That absurdity of not being permitted to stop to collect anything on the Wednesday afternoon evacuation was compounded the next day (Thursday) with a point blank refusal to allow anyone past the Osterholts Rd checkpoint back into the valley. I was eventually

allowed back for five minutes under police escort at about noon that day after a lot of negotiation. It was a classical case of the nanny-state gone completely mad but I will say that the policeman who escorted us was a very good man for the task. His policewoman wife did the afternoon shift after him and she too had really outstanding people-skills. The reality of conditions on the Thursday morning was that the wind had died to almost nothing and that the fire had not revisited “ground zero” on the southern side of Early Valley Rd. In my view the Wednesday afternoon evacuation was prudent but the mindless total blockade on the Thursday was in reality unnecessary. I have no argument with keeping rubberneckers and other idiots out of a disaster area but it was absolutely crazy stopping competent locals from going back to look after their own patch and helping the general effort.

12. [REDACTED] was collected from Christchurch Airport after midday on the Thursday but we couldn't do anything useful on the home front until allowed back in on the Friday morning. We both stayed in town with family on the Thursday night as I had also done the previous night. Our son [REDACTED] arrived from [REDACTED] on the Friday evening to help out over the weekend so between us all we managed to achieve a fair bit in the way of restoring water pumping lines to the top of the property thus restoring water storage up there to the pre-fire level of 11 thousand litres. The stored water and the ability to get it there by pump made it a lot easier for us and for rural fire units still dealing with hot-spots. We also managed an interim restoration of water reticulation to two badly damaged native planting areas on the eastern boundary and on the southeast corner of the property. We haven't done an exact count of native trees and shrubs destroyed but it would be between four and five hundred plants. We are pleased to note that a few of these are recovering as a result of frequent watering enabled by our timely interim repairs of water reticulation systems. About 1500 metres of boundary fence was destroyed in the fire and a similar length of subdivision & amenity fencing was also lost or severely damaged. We are still waiting for our fencing contractor! As for insurance we remain totally underwhelmed at this time, which put bluntly means we haven't yet had a meaningful assurance of any re-imbursement whatsoever!

13. From then on for at least a month it was dawn to dusk work every day by my wife and I trying to get some normality back into our lives, all this when we should have been on holiday. This toil involved removing destroyed fences, fallen trees, damaged pipes, dealing with insurers, bureaucracy and all those other dreary things. At the end of that month or so we took our first half day off on a pleasant Sunday afternoon and made a point of getting completely away from our disaster zone and chose to visit friends at [REDACTED] and in the [REDACTED] area. There is no point in attempting to detail that month or more so we will move on to other matters.

#### EVOLUTION OF A RECOVERY PLAN:

14. In dealing with a natural or manmade disaster people react in many different ways. During a quake or storm or fire or flood or war or terrorist attack or whatever some people will go to pieces, others remain cool, calm & collected. Quite often it is the aftermath of that event that is harder on the individual than the event itself. The Christchurch earthquakes illustrate that point. The first big 7.1 magnitude event near Darfield only lasted about 35 seconds and is something that I will never forget but it was the ongoing barrage of aftershocks in the hours, days, weeks, and months that followed that were more stressful

and exhausting. Everyone knew someone who had been killed or seriously injured, in my case that “tally” was one dead, and one seriously injured. The level of damage suffered by us in all those quakes was fortunately minimal so we didn’t have to suffer the mental torture that thousands in Christchurch did of having to deal with liquefaction, lateral shift, shonky insurance companies, a capricious EQC, defective repairs etc for years after the first quake. Worse still is that many people are still not out of that nightmare.

15. Wildfire ignition can be by natural process if caused by say, lightning strike, asteroid impact, spontaneous combustion, bird strike etc but lightning is usually seen and heard, asteroid impact leaves a crater and a sonic boom, spontaneous combustion needs moisture and fairly compressed vegetation, and bird strike usually leaves behind a dead bird. None of those requirements seemed to be satisfied on the evening of 13<sup>th</sup> February 2017 in Early Valley Rd to account for ignition.

16. The more common sources of ignition are deranged or criminally wilful persons, negligent person, or negligent corporate entity. That really boils down to man or corporate entity as the cause of our fire and it is reasonable to expect vigorous police investigation into both options without political meddling. It was therefore extremely disappointing to hear Prime Minister English announce to assembled media at the Osterholts Rd blockade point on 16<sup>th</sup> February that the Early Valley Rd and Marleys Hill fires were both started by arson. The “alternative truth” comes to mind if he had the answer in 60 hours whereas at the time of writing we are still waiting for the results of enquiries some 100 days after the event. The bottom line is that with the tragic death of a helicopter pilot and millions of dollars in material damage we need to know who to blame with a view to reasonable compensation.

17. Returning to the evolution of our recovery plan two basic approaches may be adopted. Option one involves warm fuzzy feelings and only looking forward. With a science and engineering background I prefer option two which is that you must look at past mistakes carefully in order to avoid making similar mistakes in the future. I prefer straight facts, complete honesty, and an absence of corporate crap. I like to call a spade a spade and I prefer to say that someone has died rather than the warm fuzzy option that someone has passed away. Winston Churchill put option two fairly succinctly when he stated “Those who fail to learn from history are doomed to repeat it”. I therefore have serious concerns about the draft recovery plan because right from the outset, and at all points of contact at meetings etc the don’t look back philosophy has dominated the process to date.

18. Consistent with my philosophy of looking back before going forward let us start with an analysis of very basic facts about the fire:-

**Where did the fire start?** In the very dry grass on the road reserve on the south side of Early Valley Rd under a power pole with a 3 phase Medium Voltage (MV) Fuse Switch Disconnect (FSD) assembly on it. The power pole at the time of the fire was installed about 9.1 metres south of the white line on the road. The replacement pole is numbered BR508 and the MV FSD system on it serves the same purpose as previously i.e. current limiting of line HA2/117. The replacement pole has been installed about 1.6 metres closer to the road centre line than the previous one. Approximate GPS position of replacement pole is 43d 37.027’S, 172d 34.764’E (WGS84 datum, HDOP factor 1.11).



**What evidence supports the start location?**

19. The most significant evidence for the start location is a video clip taken by a resident returning home during the quite early development stages of the fire. It was then posted on Facebook at 1801 NZDT. The clip shows the northern edge of the fire creeping quite slowly down towards the road edge from a burnt area in the vicinity of the pole. All residents spoken to who saw the early stages of the fire confirm the start location.

**When did the fire start?**

20. The fire may have started as early as 1730 NZDT on 13<sup>th</sup> February 2017 if the timing information I have been given is reasonably accurate. I am still awaiting information from the 111 emergency system as to the timing of receipt of earliest 111 call, and other information from Selwyn District Council in order to refine various times. The delays in obtaining this basic information are quite unreasonable, especially the absurdity of the 111 call timing information requiring a formal Official Information Act request by me! To express my current unease over the current obstructive information access process I think it is appropriate to re-quote what I wrote in a very short letter to The Press on 13th May 2011. It was headed GERRYMANDERING and I quote.

“In your report by Paul Gorman 12<sup>th</sup> May it is pleasing to note your Official Information Act request for copies of GNS internal discussion papers. It makes me uneasy to be informed that the nanny state is in no hurry to release information on the location of fault lines between Rolleston and the Port Hills.

The notion of solid scientific information being managed, massaged, delayed, manipulated, or even suppressed could perhaps be summarised by the word Gerrymandering.”

**Wind conditions?**

21. Contrary to many reports in the media and from some who were trying to justify performance or lack thereof after the event claiming strong winds as a major initiating factor in the fires the reality is rather different. Measurements indicate that ordinary pressure gradient driven winds for most of that period were in fact very light as measured at the closest recording weather station on the floor of Lansdowne Valley just 700 metres from “ground zero” of the fire. Reference to the attached graph show that wind speed at that site measured with the anemometer at standard height did not exceed 10 kph (<6 knots) between 1800 on the 13<sup>th</sup> until about 1430 on the 15<sup>th</sup>. Wind speed from then to 0000 on the 16<sup>th</sup> ranged from about 12 to 20 kph (7 to 11 knots). In nautical terms 10 kph is termed a light breeze and the 12 to 20 kph range would be described as a gentle breeze just touching moderate breeze at the 20 kph figure. However wind strengths against the hill are usually a little stronger than on the valley floor and local wind direction in northerly breezes is usually slanted a bit more clockwise into the NE quarter. The recorded wind direction should be treated with caution when there is just a light breeze. Nautical stations usually resort to the term “light variables” in such conditions. If there hadn’t been a fire the correct description of the wind in that period would have been “light northerly quarter breezes until mid afternoon on the Wednesday turning then to easterly quarter moderate breezes, then dying out in the early hours of Thursday”. The reality was of course that the strong winds experienced as the fire escalated were generated by the fire itself as an anabatic or upslope wind and was probably gale or even storm force at times. The key point here is that the fire

and the failure to get it under control early was not caused by strong wind. The natural (non-anabatic) wind was inescapably just light variables from a northerly quarter! Incidentally the day was hot.

**How did ignition occur?** There is no straight answer to that question at this time but the following possibilities and probabilities need to be considered:-

22. Natural causes: It clearly was not caused by lightning or asteroid impact. Spontaneous combustion in the grass under the pole has to be ruled out as well because the long grass and layer of tinder under it were far too dry & fluffy for spontaneous combustion to occur. Bird strike of MV (11KV) power lines by say magpies or native pigeons would be a possibility but as in any murder thriller the absence of a body casts doubt on that thesis.

23. Negligent or stupid person: A burning cigarette butt tossed out of the window of a car by the driver. It seems unlikely because the fire clearly started above the road, not at the road edge. It would have required very athletic butt throwing to get it anywhere near the power pole which was about 9 metres south of the road centre line. In any case, not many people smoke these days. The broken remains of a discarded glass bottle acting as a lens would be a possible ignition source but if so ignition would almost certainly have occurred much earlier in the day when the sun was much higher in the sky. In any case the “solar lens” would have been found in the police close search of the area in the period 16 -23/2/17. Electric fences are also a potential source of ignition of dry tinder but there was no electric fence in operational condition or energised near ground zero. Therefore none of those possibilities look very promising as to ignition source.

24. Deranged or criminally wilful person: Consideration has to be given to the possibility of arson but there seems to be no clear evidence in support of that thesis. It requires more than just a deranged person to account for a fire starting close in to the base of the power pole at ground zero. The three other conditions that would have to be met are:- 1. The bogey-person would have had to clamber up the slippery steep road edge bank in order to start the fire somewhere near the power pole. The alternative would have been to go up the bank 20 metres further west where there is an easier route except for the problem that at the time there was a large hawthorne tree blocking that access. 2. Maximum road traffic time on Early Valley Rd is undoubtedly between 5 and 6 PM on weekdays so any bogey-person doing strange things above the road edge would be very noticeable to passing residents. 3. Why pick such a specific location under the power pole at the start of the eastern end of the Early Valley Rd MV line? The combination of precise location chosen, slippery access, maximum traffic going past, and contemporaneous deranged motivation required would suggest very long odds for the arson proposition. It also needs to be pointed out that the police did a very thorough search of the ground zero area to archaeological standards in the period 16 – 23/2/17. They found a blown MV expulsion fuse but haven’t reported finding anything that would have made the arson thesis credible.

#### **Possible corporate negligence?**

25. The lines company Orion New Zealand Limited was formed in December 1989 by splitting its predecessor Southpower into the lines company Orion and the electricity generator & retailer Meridian. The shareholding of Orion is roughly speaking 89% Christchurch City Holdings Ltd and 11% Selwyn District Council. In the last set of annual

accounts that I have seen for that company it paid a dividend of \$32M to its shareholders. The ultimate owners of that company are of course the ratepayers of City and Selwyn. I think that people affected by the Port Hills fire should have been made more aware of possible conflict of interest arising out of the ownership structure of Orion, especially as both owner councils are running more or less parallel Port Hills Fire recovery plans.

26. I was informed on the 23<sup>rd</sup> of February that an MV expulsion fuse had been found on the ground close to where the pole had been on which was mounted the FSD cluster of 3 fuses. I was also informed that the eutectic alloy used in those expulsion fuses had a melting point of 620C but that expulsion products would probably hit the ground at about 600C. It also needs to be noted that the metal expulsion products will only be at 620C when the fuse failure has failed in what might be called a slow droop failure (small overcurrent for a relatively long time), say 10% & 10 seconds respectively. If on the other hand the fuse failure is very rapid such as would happen with a downstream short circuit the expulsion products will be much hotter than 620C perhaps in excess of 1000C.

27. The function of that FSD assembly was coarse over-current protection on the HA2/117 line supplying MV power to the second half of Early Valley Rd. Residents reported that the low voltage (230 volt) supply dipped erratically, then failed contemporaneously with a loud bang reported by just two residents at about 5.40 to 5.45 PM. It would seem logical that power failure, bang, MV expulsion fuse failure and fire ignition must have all been connected but some residents were convinced that the fire had started perhaps as early as 5.30 PM and report 111 calls being made at the same time. If those observers are right as to the timing of the 111 calls then there is a timing discrepancy of about 15 minutes to be accounted for.

On the other hand if the first recorded 111 call timing reasonably matches the 5.40 to 5.45 PM bang, power loss etc time slot it seems highly probable that the failure of the MV expulsion fuse caused the bang, power failure and fire ignition. We must then await the ponderous deliberations of the Official Information Act request process as to 111 call timings to clarify this important point.

28. Before leaving this simple explanation of the expulsion fuse causing the other events it is important to note that the track record of fires started in this valley by expulsion fuses is not good. My wife's old five year diary records a 1988 fire on the roadside under a pole just 20 metres west of where this fire started. Her diary records the date as Tuesday 13<sup>th</sup> December 1988. The entry shows "11.15(PM) Awoken by FIRE 100 yards up the road from sheeppards. Caused by heated fuse dropping to ground. Evacuated [REDACTED] to [REDACTED] and by then fire put out by locals & brigade." It was a hot summer night with little wind. My wife and I both think that the 11.15 PM recorded in the diary was when it was all over, rather than it being the start time of the event. The diary entry regarding the fire brigade is slightly wrong. They arrived late on the scene after we locals had put out the fire. They had gone to Lansdowne Terrace in Bowenvale instead of Lansdowne Valley! We had formed our Lansdowne Valley Fire Group not long before that fire and had started to accumulate fire-fighting resources to good effect. A number of us were at that fire within minutes of being alerted to it by the [REDACTED] at [REDACTED] Early Valley Rd who had seen the flames when they were seeing off dinner guests. The potential of that fire to escalate up the hill through woody gorse was exactly the same as with the February fire. The difference was we were

lucky by being alerted to it relatively early and the resources we applied were **not too little, nor too late!** The source of that fire was revealed with my spotlight without any need to obfuscate for in excess of 100 days as to cause. The drop-link fuse holder was hanging down empty and the fuse itself located on the wetted burnt patch under the pole. The remains of a possum found next day on a pole further up the spur line pointed to primary fault cause. The function of that FSD cluster was the over-current protection of line HA2/27, the spur line serving the Cass Peak radar station and hill residents.

29. Going back further again to my grandfather's time (early sixties probably) the transformer supplying power to our local group of houses was pole mounted right in front of what is now our place. One of the fuses in the MV supply to the transformer primary dropped into the macrocarpa hedge below starting a fire. The fire was extinguished by my grandfather [REDACTED] and a neighbour using buckets of water.

30. In the interests of relative brevity I am going to opt for all events being connected to each other in the 5.40 to 5.45 PM time slot as the most probable. However if the 111 call timings do come in a lot earlier than this there is an alternative explanation involving the development of a cross-arm track-over between 11 KV phases that needs to be explored. Let us get the 111 call timings right first. I think Orion staff must have been exploring the track-over option in mid March when they were making a very close examination of all MV cross-arms and insulators along the full length of Early Valley Rd. They were using the services of a specialist company HELICAM PRO Ltd over several days using a drone fitted with a high resolution camera. Looking at the high quality images on their monitor screen down on the roadside I was a bit shocked at the amount of lichen on the cross-arms and the condition of some insulators.

#### **Comments on various meetings.**

30. The first meeting of residents in the immediate aftermath of the fire was held at [REDACTED] place on the first Saturday after the fire (18th) and was very useful. The meeting reinforced the cohesiveness of the valley community and explored a lot of options for re-establishment of vegetative cover on the hills, fencing, water, abysmal telecommunications etc. [REDACTED] of Craigmores Farming proved to be an outstanding contributor at the meeting and followed through in arranging timely and cost-effective re-establishment of hill pasture by helicopter application of seed and kick-start fertilizer. In my view [REDACTED] should be given some sort of recognition for an outstanding contribution to the recovery process in Selwyn.

31. The next meeting that we attended was at [REDACTED] packing shed in Potters Lane on 8<sup>th</sup> March. It was very pleasing to have [REDACTED] and [REDACTED] there on behalf of the Selwyn Council. They had the unenviable task of advising our meeting that the Council had initially decided at a meeting that day to do almost nothing for us. It is however pleasing to note that the Council position subsequently softened to a more reasonable one, presumably as a result of representations made by [REDACTED] and [REDACTED]. I thought they were quite brave in fronting up with bad news to what could have been quite a hostile group but the dialogue turned out to be civilised and constructive.

32. The next meeting that we attended was the large one held at Lincoln on March 29<sup>th</sup>. In my view the structure and format of that meeting was seriously flawed. Perhaps the worst aspect of it was that the Principal Rural Fire Officer for Selwyn chaired the meeting. He should have been there as a contributor and respondent, not as chairman. The meeting had been opened by the Mayor and at the end was closed by him. The principles of democracy would have been better served had Mayor Broughton presided right through the meeting. There was some very practical input from [REDACTED] including advice as to the scarcity of helicopters & monsoon buckets on the day, some quite interesting stuff by others on wildfires etc. However the big question of how this fire became a wildfire was definitely not up for discussion. In other words the **too little, too late** question was emphatically not addressed. The “Dad’s Army” style of command structure that obviously existed in the early stages of the fire needed to be examined. Who was in charge? Was it Captain Mainwaring or ARP warden Hodges? We have the greatest respect for all the fire services men and women who were fighting the fires but there appeared to be a problem as to which “general” was in charge. Those major defects require analysis. It is all warm & fuzzy to just think of going forward. Lemmings do that on their way to the cliff edge. I prefer to heed the advice of Winston Churchill and I make no apology for repeating it. **Those who fail to learn from history are doomed to repeat it.**

#### **Telecommunications:**

33. Landlines serving Lansdowne Valley comprise a 100 pair copper line from the Halswell telephone exchange to a cabinet at the junction of old Tai Tapu Rd and Early Valley Rd and a branch line from that cabinet of not many pairs going up Early Valley Rd. The 100 pair line was laid using a mole plough back in the sixties or seventies which damaged some of its capacity and integrity right from day one so it could no longer be regarded as a 100 working pair line. From time to time it suffers from excavation incidents, water ingress, cross-talk, noise problems etc. The best way to describe present condition is to use the simple word stuffed. The Early Valley Rd underground copper line is of broadly similar vintage and performance. The cable distance to the exchange from our place is about 5 km which even if the copper cables were new would constitute a marginal distance for broadband use. We are on ADSL1 which just staggers by most of the time but ADSL2 is completely hopeless here. My wife and I are not interested in streaming movies or other trivia so our broadband problem is not speed, it is reliability of access that matters to us. I think it is about time that we had fibre in our district.

34. Cellphone coverage in the valley is very patchy, probably best described as abysmal, and that is dangerous. We all have to do the “half lambda dance” and by that I mean move half a wavelength or sometimes many wavelengths in some direction when our phone rings in order to establish voice contact with the caller. There just isn’t enough signal strength from any mobile service provider (Spark, Vodaphone, & 2 degrees). Avalanches of aggressive marketing bunkum by so-called service providers are not a substitute for signal strength. Perhaps the Council could lean on one or more of the cellsite providers.

35. When we formed our Lansdowne Valley Fire Group back in the nineteen eighties we looked around at alerting options such as motorised and electronic sirens. We tried out a few options and basically they had to be huge & expensive in order to be audible over all the area. Sirens can be useful but they also have side issue problems such as making

livestock panic. The other problem with sirens is that when they go off you know there is a fire but where is it? We eventually settled on using very small pager units and the Telecom public telepager service that then existed. It was a very good system. We had 6 pager units held by active members of the fire group. All residents were given a valley contact list which had on it the instructions for alerting a fire emergency. First priority was to ring 111, then using any landline or mobile phone the resident dialled [REDACTED] then followed the prompts to insert the phone number as to where the fire was, followed by the hash key. If the fire was at your place you obviously put in your phone number, if it was seen to be at Fred Bloggs place you put in his phone number after consulting the contact list. The signal came straight through to the pagers carried by active members of the group with the relevant phone number displayed on the screen. That active member consulted the contact list establishing very quickly that the fire was at Fred Bloggs place and responded to the callout. The pager units carried by active members of the group weighed just 42 grams (battery included), were about the size of a match box, had a battery life of about 3 months (one AAA alkaline cell), and made a very distinctive call tone when triggered. Using that pager system to alert us we put out a number of fires or had them well under control before the brigade arrived.

36. Telecom became Spark and their bean counters closed down the public telepager system on March 31<sup>st</sup> 2016. It saddens me to note that the Telecommunications Minister at the time the plug was pulled on the telepager system was our local MP Amy Adams. From April 1<sup>st</sup> last year fire services, ambulance services, doctors, midwives, veterinarians, trades people, lines companies, and many others right around the country were faced with the loss of a critically important very effective communication system. Professional fire services had the same problem as us but I understand that part of the telepager service was reinstated for fire service use. It follows that our fire group need to regain telepager access because it is far superior to any form of cellphone voice, data, or texting system. We ask for political help from the Council to achieve this.

#### **The ethics of corporate self-analysis:**

37. While twiddling my thumbs at the Osterholts Rd blockade point awaiting access consent to do useful things at home on the Thursday of the fire I struck up a useful conversation with a lady from outside our district. Upon enquiring as to her role she made it clear that she had been engaged by Orion to gather factual background information about the fire & historic fires and also asked if I was aware of any line maintenance issues. I wasn't able to be of much use as to the early stages of this fire because I didn't get back from [REDACTED] for 24 hours but was able to advise of historic fuse link fires and some maintenance issues. My fairly recent understanding is that she was one of two private investigators engaged by Orion on the Tuesday of the fire.

38. That evening while contemplating the frustrations of that day the penny dropped for me in that Orion, the lines company owned jointly by City & Selwyn councils, was investigating itself and that there didn't seem to be any balancing investigation being carried out by a neutral party such as police or by an investigator acting on behalf of all of us who had suffered incredible stress and loss. By Friday some balance was apparent in that police had cordoned off the "ground zero" area as an investigation scene and a very competent fire investigator was in the valley area working on behalf of IAG insurance clients.

39. So what was the role of the PI's? Were they investigating to find out what happened or investigating to **not** find out what happened? Flight TE901 to the Antarctic on November 28<sup>th</sup> 1979 came to mind. In the days that followed the tragic crash on Mt Erebus Air NZ CEO Davis sent two senior pilots down to the crash site to "help" with the investigation. Two critical pieces of documentary evidence disappeared from the crash site at about that time. The rest of that story is fascinating but not immediately relevant to our fire. The key issue was that Air NZ was quite improperly investigating itself with the intent of blaming the crash on the pilot, and important evidence had magically disappeared.

40. I accept that Orion had to get the power back on as soon as possible and that involved major reconstruction of the Cass peak line and some replacement poles on the road frontage including the two poles with FSD clusters on them serving the HA2/27 line to Cass Peak and the HA2/117 to the eastern end of Early Valley Rd. The two poles that had been replaced lay on the ground for about 10 days. When I first drove past those removed poles on the Wednesday morning (15<sup>th</sup>) on my way to dealing with hot-spots up the hill I took more than a casual glance at the FSD assemblies because of my previous encounters with drop link fuses causing fires. I was therefore surprised that all six fuse holders were empty. In other words all fuses that had not dropped out had been removed. I would have expected to see four or five intact fuses still in their holders. When were those surviving fuses removed, why were they removed, who ordered their removal, and what colour were they (brown or white)?

#### **Role of Lansdowne Valley Fire Group over the years:**

41. I haven't had a chance to check exactly when we first formed the group but it was probably no later than 1987. I have been an active member of the group right from its inception. In that period the group has dealt with about ten significant fires including a couple caused by lightning strike and a few trivial ones. Let us look at the 3 most significant in terms of damage potential. Of the significant fires two were only a whisker away from escalating into large scale Port Hills firestorms not unlike what we have just been through in February.

42. The earlier of these two fires was at 11.15 PM on 13<sup>th</sup> December 1988 as recorded in my wife's 5 year diary. Location was immediately under the expulsion fuse system at the start of the Cass Peak spur line. About 10 square metres of grass was burnt stopping just short of the road boundary fence with thick gorse just beyond it. The cause of the fire was obvious with a drop-link hanging down from above and blown fuse link found below on burnt area after putting out fire. Fire brigade arrived after we had the fire out. They had gone to Lansdowne Terrace in Bowenvale instead of Lansdowne Valley.

43. The second fire with obvious firestorm potential was started by children playing with fireworks on the road outside [REDACTED] Early Valley Rd on 4<sup>th</sup> November, probably 2006. The fire spread along grass on the southern road edge and went through the road boundary fence on about a 10 metre front heading towards about 50 acres of thick gorse above. Total area burnt was about 20 to 30 square metres. Because it was the Guy Fawkes season we were on full alert and the pager system enabled a very quick response from [REDACTED] and me. We had the fire almost completely out when the fire brigade arrived. Using thermal imaging equipment they declared it out but [REDACTED] stayed in attendance while I got another

900 litres of water from my dump tank and returned to find it needed further dousing. It was an extremely effective & timely response.

44. The third fire response I need to detail was in November 2000 on the day before Guy Fawkes day. Fireworks were put down a mail chute behind the [REDACTED] residence at the start of Early Valley Rd. A fire started then spread into a line of macrocarpa trees on the road edge right behind their house. We achieved an initial level of control quite quickly using 900 litres of water in the tank on the back of my old ute and a similar quantity from the fire group trailer tank and motorised pumps. This bought us time while [REDACTED] rigged a much bigger pump to get water out of the creek and ran bigger hoses. We had achieved our purpose of an effective first response while awaiting the arrival of the fire brigade. It had saved the house from going up in flames and once again the pager system had proved to be essential.

45. It always seems odd to me that in NZ we continue to celebrate the unsuccessful blowing up of the House of Lords in London, England on 5<sup>th</sup> November in the year of 1605, some 164 years before Captain Cook had visited NZ shores on his first visit. If fireworks are so important to our national psyche perhaps we should consider changing the annual celebration to a less inflammable time of year, say the shortest day or perhaps Matariki in a similar time slot. I suspect that cats and dogs and firemen would prefer the celebration to cease altogether, as indeed I would. The moral of the story seems to be that fireworks and drop-link fuses are bad news and that pagers **were** good news.

46. In our fire group the basic philosophy is simply first response until the professionals arrive and to be of assistance to them when they do arrive with access knowledge, water supplies etc. Our priorities are to be sure that people are out of the danger area but no stupid heroics in the process, be prepared, get there quickly so that the resources applied have not been too little - too late, and in the case of vegetation fires fight them only from the upwind burnt area. From time to time we have had some very useful exercises with professional brigade units and we look forward to a greater level of co-operation in this area in the future. Some of us are getting a bit long in the tooth but it is pleasing to note that competent fitter younger new residents are joining us and had started to do so before the February fire.

47. Our fire group had a meeting on 1<sup>st</sup> February at [REDACTED] house. [REDACTED] had been our chairman for many years and his wife [REDACTED] had acted as contact person in fire events as well as in a secretarial role. With [REDACTED] having recently left the valley for a [REDACTED] we needed to elect a new chairman and persuade someone to take on the contact/secretarial role. [REDACTED] was elected chairman and we hope to confirm the contact/secretarial role at our next meeting. We also discussed the extreme fire danger that existed and the state of readiness of group and private resources for fire fighting. A refresher tour of access routes and available resources at a number of properties was organised for Saturday 4<sup>th</sup> February and was executed as scheduled.

#### **A few final fire event notes:**

48. The good news is that on day one of the fire no people died. The majority of hill residents above Early Valley Rd self-evacuated, mainly to the Summit Rd but one family was



evacuated by helicopter. Early Valley Rd residents were ordered to evacuate, most did, some very reluctantly. On the Tuesday, helicopter pilot Steve Askin was tragically killed when his machine crashed near the Sugarloaf TV transmitter site. The good news is that from Tuesday onwards no-one lost their life in the fire.

49. In the Lansdowne Valley area two houses were destroyed by fire on the Monday and a third late in the afternoon of Wednesday when the natural (non-anabatic) wind changed to the easterly quarter and freshened.

50. I don't intend to say anything about the Marleys Hill fire other than to observe that anabatic wind delivered ignition seems highly probable.

#### WHERE TO FROM HERE? SOME SUGGESTIONS AS TO CHANGE

##### **At the Council:**

- 1/ Take a long hard honest look at what went wrong and learn from those mistakes.
- 2/ It must be clearly recognized that the potential for wildfires on the Port Hills is very high.
- 3/ As part of that recognition process I would suggest that the Port Hills portion of the Springs Ward be given its own fire zone identity. It isn't rocket science to observe that most of Springs Ward is flat and irrigated whereas the Port Hills bit is the opposite.
- 4/ Give consideration to creating a joint Port Hills fire zone in conjunction with the City but only after working through the process thoroughly so that we don't have a repeat performance of which general is in charge at a fire event.
- 5/ Prohibit the lighting of all fireworks in the Port Hills zone unless the fire restriction level at the time is down to "open season" level, and work towards a complete national ban on the sale of fireworks to the public.
- 6/ Recognise that medium voltage (11KV) power lines are a fire hazard as well as an obvious electrocution hazard.
- 7/ Require lines companies to get out of the stone age with their fuse technology and line maintenance procedures in the Port Hills zone. In other words fire suppression chokes fitted to FSD systems, fuse systems brought up to date. For example, at the time of writing about 30% of the MV fuse links fitted to FSD systems along Early Valley Rd are the old brown double vented fuses that are notorious for ignition of vegetation fires. The Australian code of practice directive with regard to those fuses was that from 2004 onwards they were to be replaced on sight even when not blown. That was thirteen years ago.
- 8/ Insist on better "housekeeping" by lines companies to reduce ignition risk with a bit of ground levelling under fuse systems etc so that adjacent landowners and we as neighbours could keep those road frontage areas mowed. The rock strewn road frontage to the east of where we and the [REDACTED] regularly mow is "tiger country" and needs a bit of work with a digger to get it up to a reasonable mowable standard.
- 9/ We have never planted a pine tree in our life but we did inherit the dubious legacy of lines of pine trees up our hill that were probably planted around about World War 1, well before granddad bought the place in 1932. Okay the shelter provided by them has been good but they are emphatically past their "use by" date. About 20 of these trees are in fact located on Burkes Bush Rd, the paper road at the top of our place. Most of them are in the process of dying after being burnt or severely scorched in the fire. As these ones are basically on Crown land administered by Selwyn what are the prospects of assistance with

heavy machinery in removing them? Our present approach is just to wait until they bowl over when a gale comes along.

10/ Telecommunications.

The old copper landline cable serving our area is fundamentally stuffed so political help from Council to bring us fibre would be extremely beneficial.

Cellphone coverage is dangerously inadequate. The key issue is a lack of signal strength and a lack of signal footprint especially at the eastern end of Early Valley Rd. If just one of the three service providers would install a small cellsite with a good signal footprint into the valley the problem would be solved and customer loyalty would switch to that provider. A little nudge from Council would be beneficial.

Pager non-service. As detailed in previous notes the public telepager network that existed until the plug was pulled on it at 31<sup>st</sup> March 2016 was a vital alerting system for our Fire Group. We need political help from Council to restore the telepager system, or at the very least to enable us to ride piggyback on the semi-restored part of it used by the fire services.

11/ There are probably a few issues that need tidying up in the next review of the District Plan. Although there probably won't be any great appetite to replant forestry blocks on the Port Hills there probably needs to be some lateral thinking as to whether forestry should be part of the future vision for that area.

In order to avoid ambiguity and confusion in the future with things like fire zones I would like to see the planning term "inner plains" confined strictly to those flat areas that are in fact alluvial plains. There is no need to change the status of areas such as our northern lowest slopes adjoining Early Valley Rd, just change the name to something that doesn't have the word plains in it.

### **Fire Service issues:**

12/ When a shiny big red Metropolitan fire engine attends a callout in Early Valley Rd it will probably only be carrying about 1300 litres of water which is just enough for a few minutes squirting. To put that 1300 litres into perspective it is only one and a half times the amount we keep & carry on the back of our old ute. In many ways a Metro machine is a bit like a fish out of water unless it can plug into a standard fire hydrant, an alternative local water source, or be backed up by a large water tanker. It is probably a case of waiting and seeing what happens from July 1<sup>st</sup> with the major re-organisation of metro, volunteer, and rural services. At this stage it has the look of an "arranged marriage" so it may work well or it may not. One problem we have in Lansdowne Valley is that Early Valley Rd is the territorial boundary between City & Selwyn so who responds to the call and who is in charge? There is a mix of semi-urban, lifestyle, and rural living on both sides of the road but there are really no big supplies of reticulated or stored water available. We take it a bit more seriously than most but our current maximum storage is a shade under 120 thousand litres and we have a reasonable array of 1.5" BSPP hydrants around the place and we still have about fifty 1" BSPP hose taps operational out of the fifty seven we had at the commencement of the fire. The impotence of big red fire engines in our locality could best be solved by the installation of say a one million litre reservoir up the hill a bit and while we are about it why not add say a 6 inch water main up the road with fire service hydrants at the standard spacing of about 200 metres. Metered 15 mm domestic supplies could also be supplied by that main. Food for serious thought?

13/ In the meantime we need to sort out why our 1.5" BSPP hydrants throughout the district are not able to be accessed by the metro units. I note that the Selwyn rural units are all fitted with 1.5" BSPP options as well as the bigger 70 and 100 mm dedicated quick-connect fittings so there should have been no problem for them to access our water. It is not as if we settled on a 1.5" standard on an arbitrary basis – we did it after consulting with fire service people and with those services that have a 1.5" BSPP standard such as DOC and the City Reserves section. From time to time we have checked that the big boys were happy with our choice and they were. Why then the problem of not being able to access our reserves back in February?

14/ We just cannot have a repeat of the ego-driven shambles of the early stages of the February fire while trying to sort out whether captain Mainwaring or ARP warden Hodges was in charge.

On that note I rest my case, for the meantime anyway.

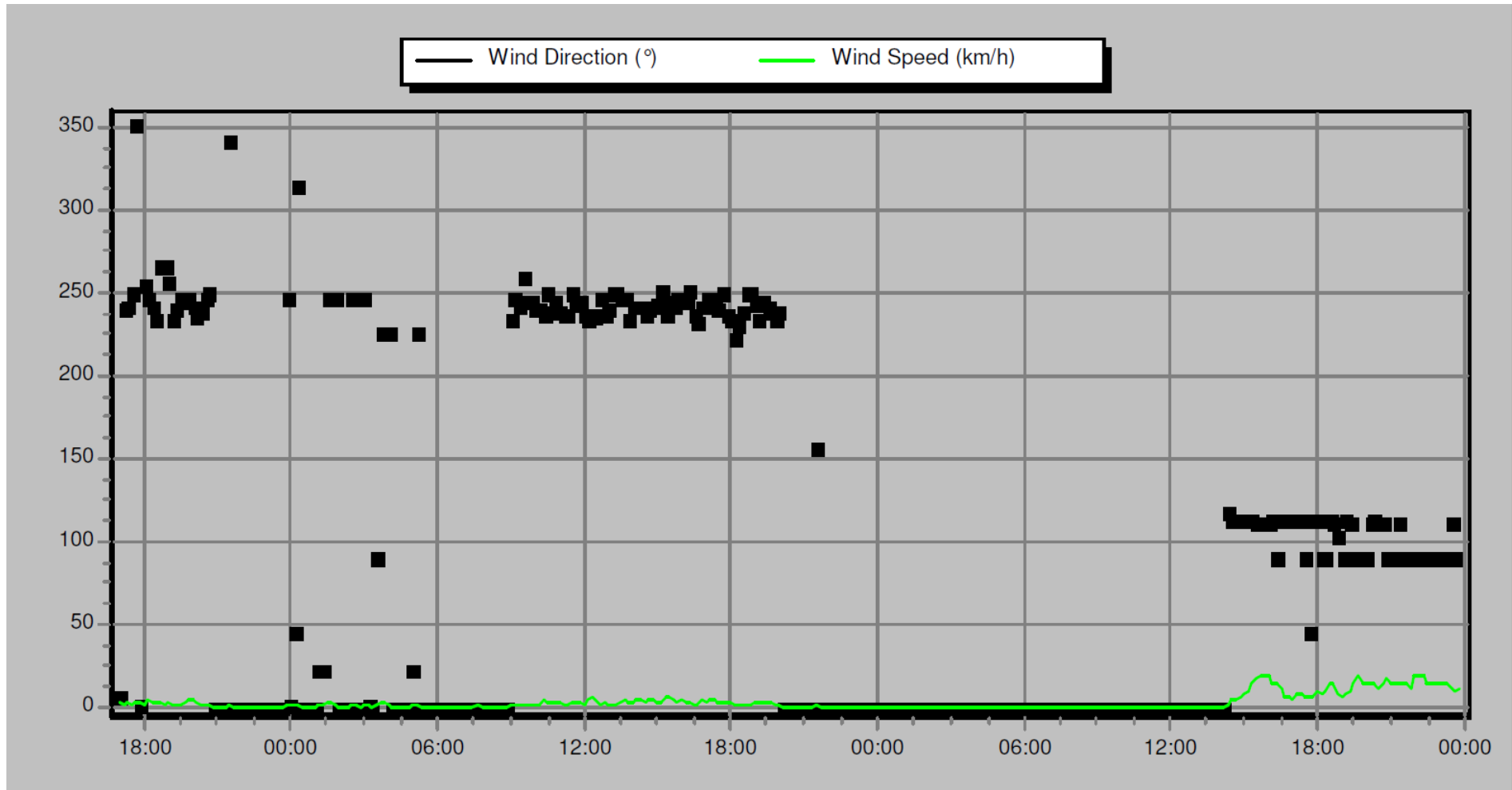
Acknowledgements: Thanks to [REDACTED] at the Council. Special thanks to [REDACTED] of Craigmore Farming for all his reseedling project inputs. Thanks also to all those residents of our district who helped fight the February fire and who have been so forthcoming in providing information for this bit of feedback. Special thanks to [REDACTED] for his weather station inputs and for his other observations. Special thanks to all our Lansdowne Valley Fire Group members and to our friends and neighbours for battling away fighting fires, and to [REDACTED]. Finally very special thanks to my dear wife [REDACTED] and to our children [REDACTED], and granddaughter [REDACTED]. Thanks to the troops, the men & women of the various fire services who fought the fire, and to all the helicopter pilots & crew for their outstanding work.

Attachment: Weather station wind data graph for the period 1700 13<sup>th</sup> February to 0000 16<sup>th</sup> February 2017.

Dated 30<sup>th</sup> May 2017

Wind Speed and Direction at Weather Station on Lansdowne Valley floor 13-15 February 2017

Graph courtesy of Paul Sintes



FURTHER NOTES ON EARLY VALLEY RD FIRE OF FEBRUARY 13<sup>th</sup> 2017 BY [REDACTED] OF [REDACTED] EARLY VALLEY RD.

These notes need to be read in conjunction with my 17 page submission to Selwyn Recovery Plan, a copy of which was received by you on May 31st.

AN OMISSION: I wish to apologise for a significant accidental omission in my list of possible ignition sources under what is now para 23 on page 7 of my submission. I had the subject matters of ignition by vehicle or small engine exhaust and stone/blade impact listed on a piece of paper to include in my submission, but I neglected to include it in the final draft. That sort of thing happens when one is burning midnight oil. Para 23 was headed (ignition by) Negligent or stupid person:

In fact that omission is of no consequence for two reasons. 1. There clearly weren't any mowers, chainsaws, scrub-cutters, line trimmers etc in use near ground zero that evening, and 2. If you tried to use any of the aforementioned machinery on the ground near those power poles you would ruin that machinery on the rock strewn tiger country that it is. However it is important to raise these possible ignition sources in that from late January onwards we were only prepared to use mowers etc on our place or on the roadside with hoses already coupled up, or at the very least a knapsack tank of water at the ready. Our reason for those precautions - the obvious extreme fire danger existing at the time.

Moving to other matters I am unaware of the terms of reference applicable to this inquiry but I am hopeful that you will be prepared to call a spade a spade whenever necessary. I am also hopeful that you will apply some lateral thinking to most of the topics that follow.

TOO LITTLE -TOO LATE: The Lansdowne Valley Fire Group was formed in about 1987 with the intention of being able to deal promptly with small fires while awaiting the arrival of professional fire units. The problem was that a small fire could become a big one in the 20 or 25 minutes that it was typically taking for professional resources to arrive at the scene. It is instructive to look at a handful of fire events in our locality in order to assess the value of our group. If you refer to my submission paras 41 to 47 inclusive on the role of our Lansdowne Valley Fire Group you will note that we managed to extinguish two fires that clearly had the potential to escalate into something not dissimilar to the February firestorm.

The December 1988 fire was inescapably caused by droplink fuse ignition (see para 42 and earlier detail in para 28). The Guy Fawkes season fire in 2006 was clearly caused by unsupervised children playing with fireworks. Both of those fires came within a whisker of taking off into large areas of old woody gorse. We succeeded in putting out the 1988 fire because we were lucky as to early warning and we had gathered together enough resources in the preceding months to do something useful. One lesson that came out of that fire was to never use the casual name Lansdowne Valley Rd in describing fire location because the fire brigade went to Lansdowne Terrace in Bowenvale before coming to us! At the time there were two signs at the end of our road - one read Lansdowne Valley Rd, the other Early Valley Rd, not a good idea.

With the November 4th fire at [REDACTED] Early Valley Rd in 2006 we were on high alert because of previous experience of people doing stupid things with fireworks. Two of us responded in a fully resourced manner within about two minutes, and others followed soon after.

The third fire response that I detailed in para 44 had much the same ultimate potential to escalate on to the hills on the south side of the road but the fuel supply for that potential escalation had a much lower calorific value than the dry woody gorse available in the two earlier ones detailed. Fortunately that fire did not cross the road but it did come within a whisker of the house burning down, an event that is normally regarded as fairly serious. Again, the ignition source was fireworks, celebrating something that failed in England in 1605!

I chose those three fires out of a total of about ten events effectively dealt with because the cost consequences could easily have been in the millions for the first two detailed. Although the third one detailed had similar ultimate cost potential the probability of that happening was lower. However if the house had burnt down the replacement cost would have been something like \$500K. Those fire suppression efforts inescapably succeeded because they were timely.

I think what we want out of this is for the professional fire services to recognise that despite our relatively primitive self-funded resources we have been instrumental in putting out a number of potentially very significant fires in our area. We want to be respected by those services and to work in co-operation with them. After all we have local knowledge as to access routes, water sources etc. We also need our pager system to be re-instated or alternatively can we somehow run piggy-back on the pager service that was reinstated for them subsequent to the foolish canning of the public telepager network on March 31st 2016.

I trust that you will leave no stone unturned in investigating why it took such a ridiculous time to get effective quantities of water on to the Early Valley Rd fire in February in the early stages of the fire and why various units were stood down on that first night. In other words get to the bottom of why the resources applied were clearly TOO LITTLE - TOO LATE.

COMPARISON OF REAL FIRE COSTS AND PREVENTATIVE MEASURES: What is the real total cost of the February fire? I have found it interesting but depressing doing a rough tally of our direct costs. About 10 of our 12.4 hectares were left a blackened ruin but we were fortunate in that our house, sleepout, cottage, sheds, immediate garden and landscaping areas were saved. A rough tally of costs already incurred or looking inevitable in the future looks like this:-

Shared boundary fencing 1500 metres at 50% of \$16.50/ metre + gst =	\$14231
Subdivisional & amenity fencing 1500 metres at 100% of \$16,50 + gst =	\$28462
Relocation from [REDACTED] travel costs on urgent basis	\$1100
400 native trees & shrubs at an establishment cost of say \$25 each =	\$10000
Re-vegetation (helicopter based and manual additional spread)	\$3440
Our fire suppression costs (materials only). Water reticulation repairs, fuel, machinery consumables, vehicle costs, etc	\$2500
Removal of fire damaged pine trees (many 100 plus years old).	At least \$10000
What are our labour costs? (2 people for 30 x 12 hour days)= 720 hours at a very modest \$20/hour (no overtime rates either).	\$14400
Stress of aborting holiday and having to start again with planting etc	\$?????????

The sum total of that little lot is \$84133 and that is only taking into consideration our efforts in the first three weeks since the fire started. That sum is a huge amount for a couple of pensioners to find, not to mention one hell of a lot of stress. The fencing costs are huge, some are deferrable but boundary fences aren't.

The total area burnt in the Port Hills fire was about 1645 hectares or thereabouts. That is about 165 times the area that was burnt on our place but if we apply our 10 Ha costs as a rough template that would suggest that property losses (excluding buildings) suffered by landowners or their insurers in the whole burnt area would have been of the order of say 14 million dollars. That \$14M figure is also ignoring the cost of 11 homes lost to fire at say \$500K to \$1M per house, scorched house repairs, sheds, barns, damage to utilities and infrastructure, bureaucracy costs, emergency housing, and the cost incurred by fire services in fire suppression costs. When all these costs are taken into account the overall figure has to be at least \$30M.

One thousandth of that \$30M sum would have paid for the installation of water storage of say 300 thousand litres and the provision of a connecting water main to the road edge fitted with a couple of 100 mm standard fire service fittings. That would have enabled a metropolitan fire engine to squirt water on for about 230 times as long as it could on its own meagre stored water capacity. Think a bit bigger again, and above all laterally, to say one million litres of stored water and a 6 inch water main along the whole length of the valley road. In our real world, leaving out the consultants, that could probably be done for not too much over \$100K which is still pretty cheap in comparison to the real cost of this fire. Wouldn't it make sense for City and Selwyn councils to put in half each, after all it is a shared territorial boundary on Early Valley Road. Alternatively, the lines company Orion jointly owned by those councils could perhaps spare a bit of petty cash to effect this project. The sum involved is fairly small in comparison to a recent dividend of \$32M to those councils as shareholders.

**INSURANCE AND THE FOREST AND RURAL FIRES ACT:** We are "insured" with a prominent rural insurance company and thought we had reasonable cover for fire events because we had \$1M of Forest & Rural Fires Act liability cover including something rather nebulously called "fire suppression costs". We also have the usual range of cover on house, cottage, shed, contents, vehicles, boat etc, none of which suffered any significant damage. Premiums paid to that company in the years we have been with them probably total about \$120K. Only one (vehicle) claim was made in that period which was totally reimbursed by the insurer of the other party. Offers of reimbursement to us in relation to fire so far nil, nought, zero - you get the picture. Why were we not informed in representations by our insurer in periodic reviews that 1. Boundary fences were not covered, 2. Fire suppression costs relate only to re-imbursement of costs incurred by fire services, not by us. My overall impression of insurance when it comes to claiming is that we have been sold a product known as personal lightning strike insurance, but the fine print specifies that a claim can only be made by the person struck by lightning, not by his or her estate.

Moving on from the obvious shonkiness of insurance it would seem that a major overhaul of the Forest & Rural Fires Act is overdue and the issue of replacing boundary fences destroyed by fire not originating in ones own property needs to be top of the list. The present system seems to be fundamentally iniquitous because it only looks after the interests of insurers and fire services. Incidentally we are not alone in being caught out by the fine print of insurance - most of our neighbours have been similarly burnt to varying degrees, especially regarding totally destroyed boundary fences.

**INABILITY OF URBAN FIRE UNITS TO ACCESS OUR STORED WATER:** In all previous joint contact with urban fire services we always raised the question as to whether they were able to access our bigger stored water sources. The answer was always yes they could and the proposed method was just to put a venturi jet pump such as a Firemaster Ejector Pump in through the top lid of our tanks. Yes that made sense because it didn't require an expensive 100 mm female suction line fitting on our many tanks and the to and fro lines to the ejector pump were in fact pressure lines, not suction lines.

Why then the contempt for the 25 thousand litres of stored water available to the urban units right on our front road boundary and sited just 150 metres west of ground zero for the fire? That tank of ours serves no other purpose than as a fire fighting reserve! We need answers that are consistent with previous advice given to us. I note with some distaste that at the Lincoln public meeting on 29th March (para 32 in my submission) it was suggested that our fire group had got it wrong because we hadn't installed highly expensive 100 mm female suction line fittings on all our bigger tanks! In other words it was a crude attempt to pass the buck of blame after the event.

If this nonsense of urban units not being prepared to use our readily accessible stored water supplies is part of some unstated policy then the only alternative is that public water supplies **MUST** be provided by City and Selwyn councils, preferably from a street water main with standard fire service hydrants dotted along it at about 200 metre intervals.

#### **THE PERFECT STORM, LESS ONE COMPONENT:**

**FUEL:** The grass on our north-facing slopes in mid- February is normally very short and more or less dead. Obviously it can still burn but the fuel supply is minimal and the calorific value is low. This February the grass on our place was ridiculously long due to a real growth spurt following spring rains and not being grazed in the spring and summer in accordance with our normal pattern. In basic terms we had been badly let down by the person who had run his sheep on our place for a number of years. In the peak of spring growth he left a voicemail message to the effect that he didn't need our grazing any more but he didn't bother to inform us that he had sold all his stock months earlier. I am told that he is now in the [REDACTED]

We then arranged for another person to graze sheep on our place but in reality the grass was too tall by then for sheep to cope with. Cocksfoot and fog grass got up to 3 feet high during this period, then the season went dry and the rest as they say is history. It wasn't just our grass that went crazy at that time - it was more or less a universal problem on the Port Hills.

Regarding gorse, sometimes known as the "lifetime mortgage", we have been dealing with our gorse every year for 45 years to good effect. We work on the principle of stopping any that emerges each year from seeding so that our control efforts in recent years have only required a couple of knapsack tanks of herbicide each spring. We do however expect a pulse of gorse growth in the aftermath of this fire but we will be ready for it. Therefore our fuel supply for the fire comprised zero gorse, very tall dry grass, and lines of ancient pine trees that were planted about 100 years ago. They gave good shelter but we have always regarded them as liabilities, not assets.

Before leaving the subject of gorse my respect for its calorific value as a fuel was reinforced by fire group callouts to lightning strikes touched on but not detailed in para 41 of my submission. Unlike in Australia where the dry lightning strike is quite common we are comparatively lucky that lightning strikes here are usually associated with drenching rain. On



the first of those callouts to a fire in gorse caused by lightning I was quite ho-hum about it thinking that the heavy rain (probably 20 - 25 mm/ hour) would quench it. I was quite wrong in my assumption. The fire didn't go mad but it showed no sign of being doused by the rain. It had to be put out by a fireman using our smoke chaser rig. The irony was the brigade couldn't get their appliance close to the scene because of concerns over the load bearing capacity of a cattle stop and we couldn't get into the centre of the gorse patch to deal with it because our overalls weren't thick enough to avoid being badly spiked by the gorse prickles. Teamwork did the trick - fully kitted fireman using our smoke chaser rig! Gorse as a fuel was obviously a key element in the ferocity of the February fire.

**POSSIBLE SOURCES OF IGNITION:** This has already been dealt with fairly adequately in my submission (paras 15 to 16 and 22 to 24) but a timing update does seem appropriate. The information I have been given by the NZ Police is that the first call to the Fire Service was recorded at 1744 and that the first call to the police 111 system was at 1752 on February 13th. You will have been well apprised of those timings for some time but I had to go through an Official Information Act request to obtain that information.

**SLOPING GROUND:** A fire on a hill slope obviously generates its own anabatic or upslope wind. A front page photograph published in The Press taken from an aircraft overflying Christchurch shows a huge pyrocumulus cloud towering thousands of feet above the Port Hills. The anabatic winds that generated that pyrocumulus cloud would at times have been of gale or storm force. Vertical lift rates in the that cloud would have been at least a thousand feet a minute. Ash and hot debris rained down in the Tai Tapu area in the early stages of the fire when the natural breeze had a NE slant to it. As the fire developed its own anabatic wind the fallout zone moved more towards Marleys Hill, Governors Bay, Rapaki, Cass Bay, Lyttelton, and even Diamond Harbour.

**WEATHER FACTORS:** It was clearly hot on the evening of February 13th and the fuel supply was obviously tinder dry. However it is now very clear by reference to wind data from a recording weather station on the floor of Lansdowne Valley sited just 700 metres from ground zero that the natural isobar driven wind was very light when the fire started and remained so for about 45 hours.

This wind data is detailed in para 21 of my submission. The key thing here is that the natural wind or rather light breeze that existed from before the fire started and for another 45 hours cannot be considered as an initiating factor in the fire. In other words the wind around the ground zero power pole just prior to ignition occurring was in fact very light.

#### **DISPELLING A FEW MYTHS:**

Therefore it wasn't quite a perfect storm for a fire to start because it lacked the one vital component of wind. Establishing that fact also clearly eliminates a few other myths such as 11 KV (MV) wires banging together, trees falling or nodding on to MV wires, and one I recently heard suggesting that a scrap of discarded electric fence tape had been lifted off the ground by the wind and had shorted across between MV phases. Those three MV hypotheses can obviously be discarded but other aspects of Orion's MV system do require analysis.

**MV FUSES:** It seems reasonably certain that a bang was heard by a few residents contemporaneously with failure of MV and low voltage (230 volt) power supply to the eastern end of Early Valley Rd in a time range estimated as 5.40 to 5.45 PM. I suspect that the myths have arisen by people trying to "connect the dots" based on invalid assumptions. In view of the fact that a blown expulsion fuse was found by police under the pole-mounted MV

fuse system it seems very probable that fuse failure, bang, and power failure were in fact just the one event. For a MV fuse to go bang it isn't necessary to assume that a short circuit (very high current) fault has occurred. When a MV fuse does blow it is normal practice for the faultman attending the failure to go looking for an obvious problem such as a tree over the line, or perhaps a possum as it was in our 1988 fuselink fire. Yes a MV fuse will go bang with a crowbar downstream fault but it will also go bang at modest prolonged overload. They can and do also go bang at below rated current due to corrosion of the fuse element itself or from localised heating at either end of the droplink carrier caused by corrosion or an imperfect connection. A hill resident connected to the Cass Peak line experienced a persistent intermittent form of the latter type of problem just last year. The reason they go bang is that when they fail they are abruptly interrupting the flow of energy to the downstream load. As the metal in the fuse melts or vapourises the metallic conduction path is replaced by a plasma arc path so the whole process is a bit like lightning on a smaller scale. I don't know what rating the fitted fuses were but if they were say 32 amp links the power that was being interrupted at 32 amps is about 203 kilowatts (about 272 horsepower) for that MV phase! The bang was heard at about the time peak domestic load would have been expected (meals cooking, air conditioners on full blast, swimming pools, refrigeration, water heating etc, electric car fast charging etc).

**MORE ABOUT FUSES:** Contrary to popular belief, fuses do not just drop out cleanly at precisely their rated current. Way back in the nineteen sixties one session in the electrical engineering labs at Ilam was on fuses. We were just using small fuses (probably 1 amp rating) for our lab work. The first test was to see how long it took for the fuse to blow as the downstream load current was gradually increased until failure occurred. It took about 10 seconds at 10% current overload for this to occur. The next test was to monitor the peak current and the time to failure when a crowbar short was applied downstream. Obviously after all this time I cannot recall the exact figures but in general terms the peak current before fuse failure was well in excess of 100 amps for our 1 amp fuse but the time to failure was less than a millisecond. Fuses are made in a range of configurations to suit the application. You can have fast or slow blow, spring loaded, powder filled, self quenching, motor protection fuses etc. Motor protection fuses are a good example. If we have an electric motor with a running current of say 8 amps it will probably have a starting current of 25 or 30 amps. A 10 amp HRC motor fuse would provide reasonable protection for that motor because it won't blow in ordinary running at 8 amps, nor will it blow during the start-up surge. However if you mechanically overload that motor so that it is drawing 11 amps the motor fuse will probably fail after 5 or 10 seconds. The time characteristics of MV expulsion fuses are broadly similar to motor protection fuses in order to cope with the reconnection surge.

**ROADSIDE HOUSEKEEPING ISSUES:** My understanding is that the owner of a property has responsibilities that extend beyond his/her road boundary perhaps to the centreline of a dedicated road. Within reason that is accepted and practised not just because we have to, but it is clearly in our own interests to keep a road frontage reasonably tidy for reasons ranging from pleasure at seeing it that way, to fire danger. As you drive into Early Valley Rd almost all of the first kilometre of the road reserve margin on your right is tidy and mowed. We residents keep it that way. The exception to that is the "tiger country" that starts at about the Air Break Isolator (ABI) pole and continues past the branch line power pole and the "ground zero" pole. The [REDACTED] at number [REDACTED] mow as far west as they can to the eastern edge of the rock-strewn tiger country. Similarly we or the [REDACTED] mow as far east as we can along the road frontage. The rock-strewn bit on part of the [REDACTED] road frontage cannot be reasonably construed as their responsibility unless it is first brought to a manageable standard by either

the Selwyn District Council or the lines company it part owns, the point being that the lines company or its predecessors established the significantly hazardous activity on that short bit of road frontage. They should use a digger or similar machinery to remove the large rocks or use them as a sort of retaining wall base and grade it off smooth and seed it with something of low inflammability such as clover or perhaps ice-plant. It would literally only take a couple of hours work by a competent digger operator. To reinforce that point, when other hazardous utilities such as Transpower high voltage lines, major communications cables e.g. Southern Cross, fuel, oil, or gas pipelines cross a road the road margins are made safe and tidy by that utility without exception. Once our tiger country is tamed it will be kept tidy by locals. The proof of the importance of roadside housekeeping was in the February fire; the fire didn't propagate along any of our previously mowed road margins and I have digital images to prove it. If that Orion area had been mowed like it was on either side of it there is every chance that ignition may not have occurred, or if it had the initial fire spread rate would have been much lower and able to be contained quickly.

**FENCE AT THE TOP OF THE CLIFF OR AMBULANCE AT THE BOTTOM?** In the years preceding the September 2010 first big quake it is clear that lines company Orion under CEO Roger Sutton did some really good preventative maintenance work in the area of making the City distribution network a lot more robust both in terms of seismic integrity and diversity of supply routeing. That turned out to be very effective and timely when the barrage of quakes started.

However out here in the rural margins I suspect that the approach to maintenance has tended to follow a "fix it when it fails" philosophy. A few examples will demonstrate that point.

A. If we look back to our 1988 fuselink fire it needs to be recalled that a possum up a pole some distance up the Cass Peak spur line was the primary cause of the fuse dropping out. We were lucky on two counts. 1. We were alerted to the fire early, and 2. that the charred possum didn't start a second fire. The thing is of course that the possum got to the top of the pole because the metal possum band was not nailed in properly.

B. About 4 years ago on the same spur line another possum band was flapping in the wind for about 6 months before it was fixed.

C. Our low voltage single phase power supply comes from a pole mounted 3 phase transformer just in front of ■ Early Valley Rd. I think it has a 50 KVA rating. That transformer supplied and still supplies low voltage power to 8 dwellings. Early one morning in 1999 that transformer lost continuity between its output star point and the street neutral line. As a result we had a sustained overvoltage event at our place that took out 13 appliances and a number of incandescent lamps. The incandescent lamps, in the minute or so before they failed, had a very bright bluish light, not unlike the colour of "cool white" LED lamps today. When I saw the bright bluish light my first thoughts were that an 11 KV line had dropped on to the low voltage lines so I was reluctant to go near our switchboard to turn the main off for a couple of minutes but then did so. I subsequently did some tests on my work bench and found that it was necessary to apply 300 volts to incandescent lamps to achieve the same colour and very short lifespan. Our insurance paid for our damage but it should have been Orion or their insurers that paid.

We were obviously connected to a lightly loaded phase to get that level of over-voltage, and residents connected to other phases presumably suffered lower than normal voltage. With the loss of neutral reference the voltages were of course unsteady as loads changed on the 3 phases. It wasn't just a surge or spike - it was a sustained overvoltage well beyond what is allowed in the NZ specification for supply voltage. The fault was repaired at the transformer

and for a week or so afterwards I noticed that Orion had a data logger on the transformer with a view to better balancing the loads on each phase. A bit of load juggling followed. That loss of neutral could have been anticipated by periodic monitoring of neutral current to check for reasonable load balance or by thermal imaging. Nothing preventative had been done.

D. Last year a hill resident supplied from the Cass Peak MV spur line suffered a high incidence of intermittent big voltage droops that were eventually traced to a corrosion problem on a drop-link fuse feed to his transformer.

E. As a general housekeeping issue a few weeks ago I had a close look at the type of fuse links fitted on all the Early Valley Rd MV fuse systems. About 30% of the fitted fuses were the old brown double vented type that are notorious for starting vegetation fires. The Australian code of practice directive with regard to those fuses was that from 2004 onwards they were to be replaced on sight even when not blown!

F. Year not recorded but probably early 90's. Low voltage supply cable joint to our cottage at ■ Early Valley Rd dangerously overheated. Cable insulation melted and smoking. Problem caused by aluminium overhead wire from road frontage clamped to copper main at entry point to cottage. Overheating of aluminium to copper joins is a fairly common problem caused by self-anodising properties of aluminium combined with weathering of copper wire end. Clearly had potential to burn down our cottage.

G. 29<sup>th</sup> October 2015 at 9.17 AM.. A very spectacular melt-down across all 3 phases of the low voltage only pole at the eastern end of Early Valley Rd. The video imagery of it is quite impressive.

H. 13<sup>th</sup> February 2017. Photo taken at 6.46 PM . This long term neglect issue at the ground zero pole only noted in recent close examination of image. It shows copper /aluminium joins of 11KV wires that have obviously been very hot judging by blackened dense tape wrap of joins. Also note one jumper link missing completely.

None of the incidents listed above could be regarded as acts of god, or the tooth fairy for that matter. They all arise from a lack of adequate preventative maintenance. The ambulance at the bottom of the cliff approach clearly comes to mind.

**LATERAL THINKING NEEDED ON HELICOPTER AVAILABILITY:** I understand that on the day our fire started that nine or ten commercial helicopters equipped with monsoon buckets were sluicing about a million litres of seawater per day on major slips on coastal parts of SH1 that had been caused by the November 14th quake. I gather that there were only two operational commercial helicopters in the Christchurch area in the early evening of 13th February and perhaps no monsoon buckets (am still awaiting confirmation of monsoon bucket availability).

The fact that all suitable choppers with monsoon buckets were otherwise engaged at Kaikoura dealing with the quirks of mother nature was extremely unfortunate but has to be accepted as a commercial reality. When those bucket-equipped helicopters came back from Kaikoura in numbers to fight the fire they certainly did an incredible job.

However if we go back in time about 20 years the RNZAF had an airport at Wigram and amongst other things they had a few helicopters based there. Their choppers were Iroquois machines which could carry quite a heavy payload, had a good high altitude capability, and were fitted with night vision equipment. Their high altitude capability made them a natural choice for any alpine rescue work especially as most commercial choppers about at the time didn't have the necessary grunt for that. A few extra choppers would have been very handy in the February 2011 quakes and it needs to be remembered that this year is 300 years since the

alpine fault did a big move in 1717 and can be expected to move again at any time. Wigram is now covered in houses but why not reinstate an air force helicopter unit on Burnham military camp? If they were based there most of their flying would be done in support of army training manouvres, after all they always have to work together in a real combat situation. Equally importantly they would be there when the alpine fault moves again or another big fire or other disaster occurs. Surely this idea of reinstating an air force helicopter unit capabiility at Burnham would be a win-win situation for military as well as civil defence purposes. Lateral thinking has to be the name of the game!

.  
CONCLUDING REMARKS: I apologise for the time it has taken me to collate these notes but a lot of work has gone into it. These emailed notes are intended to be read in conjunction with my earlier submission of 30th May to the Selwyn District Port Hills Fire Recovery Plan. A copy of that submission was acknowledged as having been received by you on 31st May.

In addition to these two documents I have further notes of relevance, especially relating to lines company activities, and many digital images available should you wish to view them. I appreciate that your primary role is to investigate the performance or otherwise of the various fire services involved but I would suggest that establishing the source of ignition of the Early Valley Rd fire is a key component of that process.

If you wish me to give formal evidence at your inquiry I would be pleased to do so. If so, best contact currently is email as I am currently scheduled to remain in [REDACTED]  
Please leave no stone unturned in your enquiries.

[REDACTED] [REDACTED] Early Valley Rd, Lansdowne, RD2 Christchurch.  
Email: [REDACTED]

Dated 12th June 2017 (Revised a little on 24<sup>th</sup> July, partly to update but principally to change from email format to Word format.)

### Base Information

Please explain your role in the fire response including: :

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

Reply here

Worsleys Rd

### Scope of the Terms of Reference

#### Reduction (prevention)

- This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

Reply here

There were not a lot of trees right up close to our house and so I did not think it would be hard for the fire department to protect it from fires, but I was not aware that they essentially stopped work at night, and therefore only half as effective as I thought they would be.

#### Readiness (preparedness)

- This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

Reply here

I provided good flat access all around my house so that fire engines and firemen would be able to get easy access if they were to need to ever protect my house from a fire.

## Response

- This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

Reply here

I did not expect our house to be destroyed, and if this ever happened again I would do a lot more to save items before allowing myself to get evacuated.

It seems like the response process needs to be changed so that maximum effort is applied at the beginning of the fire and not built up over a few days. A special fire unit should be set up somewhere in the centre of NZ to assist with fires, and who could be deployed and on site within a few hours. While 18 or so helicopters were used, it would have been better if they were all big ones with more carrying capacity, and that could have meant an earlier end to the fire. A larger plan to provide fire retardant spraying would also help, as would a way of filling the gutters of threatened houses with foam or water to stop fires from taking hold.

## Recovery

- This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

Reply here

Our family home was completely destroyed with not even one thing recoverable. I am not aware of what the fire authorities did specifically to stop this happening, apart from some general fire fighting in the area.

### Base Information

Please explain your role in the fire response including: :

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

Reply here

We own and live at [REDACTED] Worsleys Road. This [REDACTED] property is [REDACTED] Worsleys Road and is [REDACTED]. The property faces north west. On our [REDACTED] [REDACTED] is a paddock that is slowly being developed into Westmoreland subdivision.

### Scope of the Terms of Reference

#### Reduction (prevention)

- This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

Reply here

We were aware of the fire risk as there had been a fire, lit by children, in the dry paddock next door to us - between us and Westmoreland a number of years ago. The urban fire service had attended to that fire and successfully put it out. We were always weary when neighbours lit fires and one neighbour in particular, has had the fire service called out on at least two occasions. We felt particularly vulnerable because there is only one access road in and out. In terms of mitigation we have begun cutting our small plantation of pine trees below our house and are currently planting it in native trees.

#### Readiness (preparedness)

- This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

Reply here

We always thought that our irrigation system and swimming pool would help us fight a fire. While we watched a helicopter take water from our pool we now realise that our irrigation system is not capable of being used to fight a fire or at least save our house. We would have to have copper pipes, a generator by the pool and a sprinkling system over the house. We are unlikely to do that. We have had no support from the Fire Authorities to help us prepare. After the fire in the paddock next door, a track had been bulldozed to allow the trucks to access the fire. We requested that the track remain, but it was not. We were told that they had to reinstate the paddock to what it was before. So instead of keeping a track that would allow access for future fires in the paddock it was bulldozed back to a slope. Most summers my husband would cut the long grass and gorse with a weed eater in the paddock next door to us.



## Response

- This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

### Reply here

Please see attached Word document that includes photos.

## Recovery

- This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

### Reply here

We were fortunate in that our property was not burnt. We only had to deal with fire retardant in our pool, on our roof and in our stormwater tanks. We are still at this time dealing with our insurance company.

## Worsleys Road submission to the Port Hills Fires Operational Review.

### Response

○ This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

We were alerted to the fire on Monday 13th February by seeing a glow in the sky.



This photo was taken from the deck of our house on 13 February at 9.42pm.

We heard, via the news media that it was in Early Valley Road. Because of our concern my husband set our alarm for 3am in the morning to check the progress of the fire as we could not find any information from authorities on what to do. We also checked the weather and where the wind was coming from. At this stage, we were not too worried that the fire would get close to us.

Fortunately, [REDACTED] so was able to keep an eye on the progression of the fire.

Normally [REDACTED] working in our garden and I was helping him. This gave me ongoing views of the fire from the west. I had also seen on TV, a woman who had been evacuated from a fire in Hawkes Bay and she hadn't been aware of how close that fire was to her property until the Police knocked on her door to evacuate. I thought, that won't happen to us. We also rang and talked to various neighbours in Worsleys Road regarding what everyone was doing and what they thought was likely to happen.

By Tuesday morning the fire was clearly getting worse.



This photo was taken on Tuesday 14<sup>th</sup> February 7.54am from our deck.



This photo was taken on Tuesday 14<sup>th</sup> 9.35am from our neighbours tennis court at [REDACTED] Worsleys Road.



This photo was taken on Tuesday 14<sup>th</sup> 11.26 am from our neighbours tennis court at [REDACTED] Worsleys Road. As you can see from this photo the fire has now moved down into Hoon Hay Valley.





This photo was taken on Tuesday 14<sup>th</sup> February 4.29pm from our chicken coup halfway down our section. It is looking up Hoon Hay Valley.

It was also apparent to many people in Christchurch that Worsleys Road was close to the centre of the fire. Many people were coming up to look.



This photo was taken on Tuesday 14<sup>th</sup> February 8.15pm from our house looking over the paddock next to our house towards Westmoreland.

That night, Tuesday, we were increasingly worried about the fire as it was now moving down the Valley plus we knew that there was now a fire on Marleys Hill. Worst of all was the weather report which predicted a change of wind direction to an easterly. The easterly wind is particularly strong on Worsleys Road. At our letterbox, the wind can be literally eye watering and we thought that this would fan the fire. My husband once again set our alarm for 3am to assess the progression of the fire. He felt that we were still ok and sent a text around to some neighbours. Our concerns about the fire had now increased to the extent that I said to my son to put his precious things on the bed in the event that we did have to evacuate.

On Wednesday 15<sup>th</sup> February, [REDACTED] it was evident that the fire was getting closer because the activity of the helicopters and planes around our house had increased dramatically. I went outside constantly and looked up Hoon Hay Valley.



This photo was taken on Wednesday 15th February 1.09pm from our chicken coup halfway down our section. It is looking up Hoon Hay Valley.

This was the time when I thought the fire was getting too close to us as it had now gone past the power lines which I had decided was the time to get ready to evacuate. I phoned my neighbour [REDACTED] who lives on top of the ridge at [REDACTED]. She drove up to the top of Worsleys Road, before it becomes a track, to have a look. She came back and rang me up and said she wasn't so worried about the fire in Hoon Hay Valley road area but more concerned about the fire in Cashmere Valley road. She said that I should come up soon and look at the fire into Cashmere Valley from her property.



This photo was taken on Wednesday 15th February 1.58pm from my neighbours house, [REDACTED] at [REDACTED] Worsleys Road looking up to the top of Worsleys Road.

It was at this point that we all said, "let's evacuate". It is important to note that we had not received any information at all from anyone about the fire danger on Worsleys Road. It was clear to us that we were now surrounded on both sides by this fire. There were numerous helicopters overhead and it did not occur to me to call 111 as I assumed that a helicopter or plane would have done so. I called my husband who works [REDACTED] and said I was evacuating.



This photo was taken on Wednesday 15th February 2.59pm from our drive way looking up Worsleys Road. We left our property at this time.



I was fortunate [REDACTED].  
My husband and son arrived quickly and also helped pack up our cars. At around 2.30pm my neighbour at [REDACTED] Worsleys Road said that another neighbour [REDACTED], at the top of the road, had rung to say that a policeman was at their house telling them to evacuate.



This photo was taken on Wednesday 15th February 2.59pm from our drive way looking up Worsleys Road. Helicopter in the background.





This photo was taken on Wednesday 15th February 3.04pm from our letterbox looking up Worsleys Road. The house near the fire is the [REDACTED], the last house on the road.



This photo was taken on Wednesday 15th February 3.05pm from our letterbox looking up Worsleys Road. The house near the fire is the [REDACTED] the last house on the road.

As we were standing at our letterbox the police arrived coming down the road and asking us to evacuate. This was not a simple task as the road was cluttered with onlookers who had driven up to look at the fire. The road was virtually one lane. We still had not received any information about the fire nor seen a fire engine.



This photo was taken on Wednesday 15th February 3.23pm from the bottom of Worsleys Road looking up to the top of the road.

The road had now been blocked from anyone driving up and many residents of Worsleys Road who were just arriving from work to evacuate some items from their houses were stopped.



This photo was taken on Wednesday 15th February 4.30pm from Sparks Road looking towards our house on Worsleys Road and up Hoon Hay Valley.

Our house is barely visible. [REDACTED]



This photo was taken on Wednesday 15th February 7.29pm from Sparks Road looking towards our house on Worsleys Road and up Hoon Hay Valley.

A helicopter is taking water out of our swimming pool.





This photo was taken on Thursday 16th February 7.19am from Sparks Road looking towards our house on Worsleys Road and up Hoon Hay Valley.

The next morning we went to see if our house was still there. Luckily it was.



This photo was taken on Thursday 16th February 1.14pm from Bengal Drive looking across Cashmere Valley to Worsleys Road.



This photo was taken on Thursday 16th February 4.18pm from Sparks Road looking towards our house on Worsleys Road and up Hoon Hay Valley.

### How the Fire Authorities worked with the Community

They didn't. It was also very difficult throughout this fire event to know where to get information about the progress of the fire. I looked up websites of the Christchurch City Council plus Civil Defence. It never occurred to me to look up the facebook page of Selwyn District Council. I have gone back to their facebook site and see that there was progress reports on the fire although nothing about Worsleys Road. They were obviously caught out by fire going through Worsleys Road.

At times it felt like we were in a war zone with planes and helicopters flying over our house although we were in an information vacuum.

**The Fire Service needs to value local knowledge and use it in the future.** We were acutely aware that the weather change to an easterly wind could have severe consequences for us which proved to be accurate. Communication was non-existent. In the future information needs to go both ways not just down from the Fire Service to residents telling people about the progression of the fire. The Fire Service also need channels of communication with locals to assess the hazards in a particular area and to be told about localised weather conditions, how many households are in an area, people who have difficulties, access for vehicles etc.

Worsleys Road residents are now a very coordinated group with a text group where almost all residents are members. Somehow the Fire Service needs to have contact people in fire risk areas so that they can be called upon to spread information and provide information back to the Fire Service. The City Council is no longer close enough to its communities to be able to provide this function.

### Base Information

Please explain your role in the fire response including: :

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

Reply here [REDACTED] Worsleys Rd, [REDACTED] house on lower section of Worsleys Rd.

### Scope of the Terms of Reference

#### Reduction (prevention)

- This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had ~~take~~ take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

Reply here

During dry months we graze paddocks close to the house first to minimize dry grass fire hazard. Thin mature trees to create fire breaks.

#### Readiness (preparedness)

- This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

Reply here

Fire authorities have not offered any information prior to fire



### Response

- This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

#### Reply here

my response was to call 111 at 2.07pm on Wednesday 15th Feb. 2017. When I could see the approaching fire, the wind direction, and the dry forest felled dry fuel between the residential dwellings on Worsleys Rd and the direction the fire was travelling. Response was more than an hour away. Why???

### Recovery

- This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

#### Reply here

Although our house survived we sustained severe property damage as a result of fire break dozing almost total fence replacement, and loss of out buildings and trees and landscape damage. Fire authorities have provided no assistance with recovery.

## Base Information

Worsleys Road, Christchurch

### Scope of the Terms of Reference

#### Reduction (prevention)

**o This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.**

We were aware that we lived in a rural area that could be affected by fire. In the 10 years we have lived here there have been 4 fires in our community - all in paddocks so we were aware how quickly gorse and dry grass could burn. We did not think we would be directly affected as all of those fires were visited quickly by town fire services and doused before they became an issue. We have not planted any pines on our section - all our plants are slow burning natives. However we do have a neighbour with a rather large Leyland Cypress hedge that has concerned us.

We feel that Worsleys Road has been let down by Ecan, CCC, DOC and McVicators.

Our road reserves are no longer mowed by a rural mower but by ride-on mowers from the CCC so anything on a slope beside the road contained long grass and gorse. There are several empty sections on our road that were covered in gorse and grass - the residents of Agalia PI have been complaining to Ecan for years about one of these sections. This land could easily have burnt down all 4 homes in that cul-de-sac. Worsleys Track which is at the top of the road and leads to the Summit Road was completely covered in gorse - this is supposed to be maintained by the CCC - but no work has been done up there for many years. Westmorland paddocks have been grazed on and off over the years - at the time of the fire the grass was very long and dry. Marleys Hill had native plants on it but also huge amounts of gorse - totally unmaintained by DOC.

The McVicar forest had piles of "slash" from their last tree felling littering all over their land. Trees were felled and lying dry under the Adventure Park lift line. Where they had removed trees for the bike trails they were lying on the ground next to the trail. All of this provided extra fuel for the fire to roar through the land and into our road.

Whilst McVicators did not cause this fire - the houses on our road were directly affected by the dry tinder on the forest floor provided as fuel.

#### Readiness (preparedness)

**o This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.**

On Monday night we packed the car in preparation as we were very concerned that the Early Valley Road fire could easily reach Hoon Hay Valley and therefore come up into our properties. On Tuesday after being told the fire "was under control" we unpacked the car. We had no support from Fire Authorities - and no communication - all our information came from media. We were again concerned on Tuesday night - and our immediate neighbours shared getting up in the middle of the night to check on the progress of the fire in case we needed to self-evacuate. Several of us stayed at home on Wednesday in spite of being told the fire was again "under control". We checked on the fire every hour. Finally making the decision, as neighbours, to start packing the cars with our belongings as we watched the fire sweeping towards our street. All messages from the Fire Service in relation to preparedness is to do with house fires - ie your house going on fire while you are in it - not what to do if the fire is sweeping towards you.



## Response

**o This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?**

All day Tuesday and Wednesday morning we had helicopters flying over the road dousing flare-ups at Marleys Hill and Hoon Hay Valley. By 1:45pm my neighbours and I decided we needed to start making the cars with the view to evacuate. At 3pm when I left our property the flames had reached [REDACTED] Worsleys Road.

I did not think I needed to call 111 as there were at least one spotter helicopter above us the whole morning observing the speed of the spread of the fire. I assumed that they would be sending fire crew as soon as the wind changed at midday - which wasn't the case. There did not seem as many helicopters on Wed morning which made us feel that there was still nothing to worry about. [REDACTED] we had NOT been told we might be at risk. I was highly distressed to self evacuate at 3pm and not see any fire crew on the road. Why the police were here evacuating houses further up the road and not the fire authorities was mystifying. How did the police arrive before fire crews? We did not see any fire crews on Worsleys Road until approx 3:30pm on Wednesday. The crews that arrived at that time were 2 engines from Kaiapoi and Woodend, a tanker and a bulldozer.

After evacuation we had no contact from fire authorities. This was very distressing to many of us who really had no idea what was happening with us or our neighbours.

I called in to speak to the rural fire command at PMH on Thursday afternoon with a request to have some more information with regards to our street on behalf of our community. By this stage I had gathered most of the 37 house's mobile numbers up our road. This was a perfect opportunity to enable the fire service to let us all know what was happening. The Fire Commander at PMH, at that time, agreed and told me he would make sure I would receive a phone call that night after the debriefing. But this turned out to be a strange phone call at 8:30pm from Selwyn Council to tell me that we aren't in the Selwyn District. Nothing happened with my request for info for the residents of Worsleys Road.

I finally had [REDACTED] ring me from CCC on Friday night - this was after I wrote an email to the Mayor voicing my dismay that our street was in the thick of the fire yet we had heard nothing as a community with regards our homes.

It seems to me that the communication arm of the CIMs model used by the Fire Service was not activated in any way - except maybe to feed information up the chain. I was told at PMH that "no-one" had any information on our homes. There are only 37 Worsleys Road houses that were at the front of that fire (plus a few in Hoon Hay Valley) it seems astounding to me that "no communication" was made to those residents unless your house had burnt down... even after I told the fire service on Thursday that I had everyone's mobile numbers from up the road still no effort was made by the fire service to provide a contact number or liaison person...

In the future I would not rely on any "media" information - as soon as a fire starts in the Port Hills we would pack our cars ready to evacuate - my husband would not go to work. We would move all our valuables to my parents. We now have all the residents on a group mobile list and any of us could let the others know if there was a need to evacuate or to come home to rescue animals etc.

Stay and defend is an interesting concept. As the [REDACTED] house burnt to the ground early Thursday morning - the question is would this have happened if [REDACTED] had been allowed to stay and defend his property along side the fire service and volunteers? A neighbour further up the road from us on the [REDACTED] side of the road entered his property from Hoon Hay Valley to discover fire burning up to his deck - which he extinguished saving his home. He was then forcibly removed by police. It begs the question - if he had not been there would his house also have burnt down...

As a small community this incident has rocked our faith in the fire service to manage such a big fire. We are grateful to the men and women that were up here saving our homes but they were let down by those in command who failed to put the fire out before it got so out of control and then failed to communicate to us after. It is hard to describe what it is like to leave your home with all your belongings and spend the night thinking your home had burned to the ground. The only information we got that night was from the media - and when they incorrectly reported that 40 houses had been lost all our hope was extinguished.

Communication at public meetings from Fire Authority officials has been mostly poor. Our very basic questions have been deflected or not answered. When asked why no fire trucks came to our road when a resident made a 111 call at 2:08 - no answer has made sense - one of them being "they went to the adventure park".... that still doesn't explain why it took nearly one and half hours to finally make it up our road. My understanding is that there is a 9 min response time for fire crew in Christchurch. According to the SMS Incident Report for some reason the fire crews were not alerted at the Fire Station until 3:02pm. Why was the decision made not to send any fire crews up our road until then? Why weren't they sent as soon the wind changed at midday to Easterly. Someone, somewhere made a decision to NOT protect our homes before 3pm. When the engines that did come up our road arrived that were not Christchurch City engines... where did those engines go? If they did go to the Adventure Park by mistake - how did that happen? Why did a commercial property take precedence over residential - surely peoples homes are more important? These were homes that still had contents in them - a lifetime of possessions - things that can never be replaced. A building can always be replaced your possessions can never be replaced - baby books, photo albums, all gone.

Our dealings with the 111 system in regards to the road has always been difficult. Several years ago I rang about a fire in the paddock on the top of Westmorland at approx 10:30pm - I clearly told the 111 person that the engine needed to go to the top of Penruddock Rise, Westmorland and go into the paddock from there. An engine arrived up Worsleys Road - where there was no access and another into Hoon Hay Valley Road again no access - finally after my second 111 call the engine came up Penruddock. The fire was quickly put out but displays the need for 111 to have some local knowledge....

The question I ask myself about the Port Hills fire is should I have rung 111 at midday and said "the house at [REDACTED] Worsleys road is on fire...." or maybe "our house is on fire" then at least one engine from town would have come up the road to investigate and would have been able to see what we could see. I still find it unbelievable that no information about the direction and speed of the fire in relation to Worsleys Road was given to the fire command until a resident rang 111? Somebody made a decision to send/keep crews elsewhere until it was too late. By midday stopping the fire heading our way was clearly impossible but maybe, had fire crews been up the road 3-6 hours earlier than they were, none of the Worsleys Road houses would have been lost.

According to the Fire Service they had a meeting at 10am on Wed stating concern about the wind change... why was no communication made to the residents whose homes were possibly in the line of that wind change - to be ready for evacuation...

We are in a unique position in Worsleys Road - we pay residential rates but are in a rural fire zone. When I visited the command centre at PMH the map they were using was a TOPO map with only a few houses showing up our road not the 37 homes that are up here. How does the Fire Service stay up to date with zoning boundaries and new housing developments? Our house has been here 10 years but was not on that map. Also when does rural become residential? It should be noted that the small residential sections on the top of Westmorland are also zoned rural not residential. And the subdivision on Worsleys Road at the bottom of the road.

## **Recovery**

**o This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.**

We have personally been very lucky - our home and garden is fine. We had a little smoke damage inside and worked with the insurance company to remove that. At no time have we been contacted by

the fire authorities either before, during or after the fire sweeping into Worsleys Road. As I [REDACTED]  
[REDACTED] - my enjoyment of being able to walk to the summit road several times a week from home has been removed. This has saddened me greatly - we live here because we love our community and the abundance of recreation right on our door step.

We are a close community we know all the neighbours who have lost their homes and the neighbours that have suffered land damage. We have really been set adrift. The CCC have been provided little real help apart from the skips. There has been no help from any authorities with removal of burnt gardens, fire break damage, fence damage, road damage, verge damage. Trees are still standing on the roadside charred and burnt. Some were removed by the Fire Service in conjunction with Tree Tech many are still there. Forests below residents are still standing charred - they have tried to get people to come and remove them but no-one is interested. The Recovery Plan had little in the way of actual help and support for residents.

The road to recovery will be a long one for all of us.

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

As a side note to the submission process - I fear many residents on Worsleys Road will not submit information to the Review. It's important to note that it is not because they haven't been affected - they have but alas many of them don't feel that anything they have to say will make any difference to what happens next. They have moved on with their lives because they have to... maybe they don't walk up the road anymore, or try not to look at the burnt trees. We have all asked for help over and over in the last few months and very little has happened. The CCC don't have any money, the Fire Service aren't responsible to fix the damage, Civil Defence aren't responsible, Insurance companies aren't, the digger companies aren't, McVickers aren't - the list is huge - no-one is responsible to repair the damage the fire has caused our road and community. Sure houses are insured but gardens can't be insured, fences and land damage aren't insured - not because they residents didn't insure them they aren't insurable. The smallest section up here is 3000sqm many are much much bigger. There is a LOT of damaged land here and a lot of people who just cannot afford to fix it. Spending time putting down information for a review will not change any of that.

### Base Information

Please explain your role in the fire response including: :

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

Reply here

Worsleys Road, Christchurch

Our home of 30 years and all our treasures and possessions were burnt to the ground unnecessarily 4 days after the initial fire and 16 hours after the worst of the fire had past through leaving our home undamaged.

### Scope of the Terms of Reference

#### Reduction (prevention)

- This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

Reply here

See attached

#### Readiness (preparedness)

- This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

Reply here

See attached

If required can the Review Team contact, you?

Yes ☒ No ☐

If yes, please provide the best contact details for you.

Thank you for taking the time to submit information to the Port Hills Fires 2017 Operational Review.

## Reduction (prevention)

We understand the risks of living in close proximity to forested areas as we were residents when the 1988 fire threatened our property. Our section size enabled us to maintain 3 clear paddocks and big lawns to prevent fire travelling up hill towards our home. The clear space of Worsleys Road itself along with fire hydrants at 50 metre intervals should have been able to prevent fire coming down towards our house, especially as the fire authorities had plenty of warning that fire was threatening homes in our area. However the fire service response time was in excess of an hour.

Residents should for their own benefit keep their paddocks and lawns mown or grazed short and if they don't Council should encourage this prior to the Summer months. Council should monitor fire breaks around large forested and scrub areas where they adjoin residential zones. If owners fail to keep these clear Council should enforce this or contract out the work at the owner's expense.

## Readiness (preparedness)

In preparedness we had clear paddocks, broken tree lines, native plantings, perforated metal gutter guard and fire fighting gear. A water supply of 11,000 litres with an independent pumping system.

We were well aware of the fire from the time it first started at 5.45pm on Monday 13th Feb 2017. It was a long distance away but caused enough concern for us to begin to dampen down any potentially combustible areas near our house and outbuildings from Tuesday just in case. We continued to apply large volumes of water to these areas until being ordered off the property by the police at 3.05pm despite the fire brigade still not having arrived. The fire authorities and council provided nothing to help us prepare. Late on the Wednesday afternoon 15th Feb. 2017 we understand firefighters finally got into safe and clear positions and were protecting ours and our neighbours homes and were quite comfortable in doing so. For some unknown reason these firefighters were called to retreat to a point further down the road, abandoning our homes to the fate of the fire. We watched from a distance our neighbours home burn to the ground soon after this.

## Response

We unfortunately relied on the media reports reassuring us on several occasions that the fire was contained. The use of the word contained to the general public in this situation implied that everything was fine and the fire wouldn't be spreading and there was no need to be concerned. If there had been more realistic warnings of possible danger to our homes, different decisions would have been made and we would have all been at home and able to save more of our sentimental and important possessions. We feel completely let down by the fire authorities who failed to apply enough resources in the initial stage of this fire.

We admire the individual firefighters and brave pilots who put in a lot of effort but were prevented from completing their work by a risk averse, disorganised fire hierarchy which was one step behind the eight ball from day one. This fire should have and could have been put out if the fire service had kept the pressure on it instead of relaxing at a couple of stages when they told us it was contained, particularly on Tuesday night there should have been a massive effort rather than a skeleton crew.

Not actively fighting the fire at night seems ridiculous as it counteracted the daytime efforts. This and other poor judgements have been widely criticised by veteran firefighters, the professional firefighters union and even Government Ministers. There was too much reliance on the helicopters, there should have been more manpower on the ground actually fighting the fires and protecting homes along with some preventative firebreaks done earlier. In the 1988 fire all resources were thrown at it from day one including NZ Army Soldiers, Airforce Units, High Country Fire Fighting teams, 100 Civil Defence and other volunteers which resulted in no houses being lost. These firefighters were definitely active throughout the night.

How the Selwyn District Principal Fire Officer and the Mayors from both Christchurch and Selwyn can claim there were no identified major failings in the Port Hills fire effort and they would do nothing different is beyond belief.

As far as our understanding of the fire response in our immediate area on the Wednesday this is firsthand as witnessed by ourselves and all neighbouring residents on Worsleys Road and reinforced by video footage.

We have been informed at a meeting that the response time to our area of Worsleys Road should be a matter of minutes - why did it take 1 ½ hours for the first fire engines to arrive at the bottom part of Worsleys Road and this was apparently only in response to a 111 call from a resident shortly after 2pm? If there had been a faster response the fire crews would have been able to assess the situation better and get crews in to clear and safe positions to protect our properties with little or no risk to their own safety. When this fire began to burn out of control on the Wednesday due to the well forecasted easterly wind change we would have expected the fire chiefs to have forward planned and not needed a 111 phone call to respond!

We were informed at a meeting that the first appliances assigned to Worsleys Road were re- routed to ChCh Adventure Park - is this a fact and if so why? Also was there confusion over the various parts of Worsleys Road, Worsleys Track and the upper part of Worsleys Road near the Summit Road?

For one reason or another there were no fire appliances on Worsleys Road where properties were under considerable threat. The fire had been burning since Monday and the wind change was well forecasted . Worsleys Road was one of the roads between the two major fire fronts where properties include many homes. Why was there no communication to residents on Tuesday to prepare for the possibility of evacuation when the ChCh Adventure Park were in communication with authorities and had been closed?. We support and enjoyed the CAP and think it is a great asset to Christchurch and feel for them with the destruction that has happened but did CAP take priority over homes? We do wonder if poor planning decisions associated with the bike park contributed to the speed of this fire. Especially allowing them to leave clear felled pine trees complete with dry needles and pine cones immediately under the chairlift. A video is available showing multiple spot fires immediately under the chairlift line shortly before the firestorm surged through the forest above our homes. Has this been investigated?

After being forced to leave by Police on Wednesday afternoon we continued to observe our property from afar at various vantage points. As night fell it became too difficult to see our house through the haze of smoke so decided to wait it out at relatives as no-one was allowed through the cordon.

On Thursday morning February 16th 2017 our home was intact after surviving the night undefended. A perimeter check of our house and dampening down of any hotspots at daybreak 6am or anytime during the next 1 ½ hours would have prevented our home from needlessly burning to the ground. We know there were a dozen firefighters further down the road at one house not all actively firefighting. If any one or two of these fireman had been dispatched to our home it would have still been here today. Our house was burned down by a slow moving ground based fire which could have and should have been easily extinguished by a competent fire service. The first helicopters rounded the point of Westmorland at 7.45am on Thursday morning. Couldn't at least one experienced pilot have been sent earlier? Perhaps having the important aspects of the morning briefing relayed through his headset.

This may seem overly critical of the various fire authorities but unless lessons are learnt from this more homes will be lost or perhaps even an entire suburb. We realise there are changes happening in July so we hope this will provide a well resourced fire service we can all rely on to protect not only ourselves but our properties too.

We realise that many residents have only praise for the fire service as their homes were protected, but the number of homes lost on our road could have easily been significantly higher which may have changed their views.

We are by no means the only people critical of the response to this fire event.

In any future event we will follow our instincts and not rely on the information from the authorities or media. If we had done this this time we would have saved a lot of family history and sentimental treasures and probably would have cleared out a lot of possessions. Our children have lost the only home they have ever known. We have lost everything we have been working for for the past 30 years. If we had been allowed to stay to continue to protect our home or had been communicated with during the fire or at least been able to return at daybreak on




the Thursday we are sure we would still have our home today and we wouldn't be in this difficult situation we now find ourselves in.

## Recovery

The fire authorities have fronted two group meetings. We did request to meet fire personnel who were involved with our house to find out the reason our house burnt down unnecessarily, but to date this hasn't happened. We don't think the authorities really appreciate the impact this event has had on us and all the other people affected. We are now emotionally and financially worse off with the prospect of two years of hard work and a time consuming battle ahead to try and get back our home and property.

## Summary

The terms of this submission seem to be trying to imply that the fire event was due to our own lack of preparedness. This was not necessarily the case, although we can all make improvements or do things differently next time. The main purpose of your investigation should deal with the many poor decisions made by the fire authorities during this fire event and the lack of fire prevention measures implemented by the appropriate Council authorities prior to the fire. The absence of accountability and or admissions of failure by the various authorities make us think the investigation will be a whitewash. We hope this is not the case as we intend to rebuild and if changes aren't made our new home will be put at risk by circumstances beyond our property boundaries.



The fire prevention aspects of the Christchurch Adventure Park consent need to be revisited. The tinder dry, highly combustible material immediately below the chairlift line was a huge mistake and should not be allowed to occur again. Thought should be given to water storage and pumping equipment at each lift tower. Even though smoking is banned if a cigarette butt or even a pair of dislodged spectacles dropped down from the chairlift this could lead to a fire with

the same intensity as the last one. Circulating the plastic chairs during a fire event probably wasn't a good idea either.

We have gathered various video evidence which along with media statements from fire authorities and reporters support many of the observations made in our submission. This can be made available if required.

Please explain your role in the fire response including: :

10 If you own a property affected by the fire where was your property. Please give physical addresses of property.

■ Cashmere Road, Hoon Hay Valley.

The family has [REDACTED]. There is a total of aprox 260 hectares, running from Hoon Hay Valley west to Kennedys Bush Track and Quarry Hill, and north to Cashmere Road

## Reduction (prevention)

o This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

The detailed lessons and experiences from the 1998 fire have long since been forgotten. Simple measures such as making sure all stock were moved from the farm, padlocked farm gates were opened were attended to immediately the situation became obvious.

The majority of the hill area of the farm is/was tussock grassland, and was being summer saved to provide late summer and autumn feed for ewe tupping and beef herd management. This had the cost of providing plenty of fuel, but the benefit of providing plenty of seed. The recovery of these areas after some rain and without any application of seed or fertiliser is nothing short of amazing.

Communities need to balance their wishes and desires for a balance of vegetative cover, and try to understand the implication, benefits and limitations of various different types of vegetation.

Grazed pasture/sparse tussock proved to be effective in slowing the fire advance compared to ungrazed areas, gorse, native and exotic forestry regeneration plantings where grass was still dominant, and appeared to have a much quicker and more effective response to aerial water and retardant application. These areas were also easier to damp down and appeared to have less ongoing fire control issues.

Some pine forest areas on Kennedys Bush Track saw no ground crews during the fires, which may have been a lost opportunity to limit the spread and or speed of the damage. The fire breaks in the [REDACTED] Estate forest management plan developed after the 1998 fire were not maintained nor re-established by machinery for these fires.

Given that the majority of the burnt area is in private ownership, I think it is fair that if the community wants to have a say in the management of these areas that not only it contributes advice and funds, but also there is no expectation that the private landowners have to do anything in particular.

Having said that, better communication and a clear understanding of limitations and expectations between parties would be a good thing. A good practical heads up on what are simple cost effective management ideas and methods, especially for the rural urban boundary would be very good, and if Fires services facilitated these instructional sessions I think that if

this happens that in another event there would be a better degree of civil preparedness, and a less confrontational response.

### Readiness (preparedness)

o This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

Beyond unlocking gates and making sure that ground crew access was available, no particular measures on the wider property.

Sprinklers were turned on around the house gardens for 2 days.

Farm gorse spray unit was mobilised on the back of a 4WD, and was used effectively damping down the fire margin, especially posts burning into the ground.

There was no support on our property that I am aware of from any fire authority at any time during the event. There was a Civil Defence initiated action to make fire breaks, which only served to damage a lot of fences and ground.

At one point when returning down the hill to the houses after spending time quenching burning posts and tussocks at the fire edge with the farm gorse spray unit, a policeman took strong exception to my presence on the property inside the CD area. In spite of the fact that I had been helping ground fire crews with navigation and water management.

This kind of approach and clear lack of coordination between agencies is particularly unhelpful, galling and very counterproductive. A simple name badge accepted by all authorities (perhaps distributed by police or CD) would avoid this situation and tension and allow productive interaction between property owners and authorities.

### Response

o This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

A feature of this event was the reluctance of authorities, especially CD and Police to let land owners anywhere near their properties once the Civil Emergency was declared. In the 1998 event many householders and farmers on Hoon Hay Valley took positions close to their properties and waited for the fire to arrive, and defended their properties when it did. There were no heroics and no injuries, plenty of professional and volunteer fire fighters to give advice, and every owner would have done exactly as asked by the professionals.

Particularly with reference to the larger properties, and such aspects as navigation around farm tracks, water sources, alternative access points etc there was little if any contact with the farm owner or farm lessee that I am aware of.

There was also in my opinion a very large loss of knowledge with the CCC Port Hills Ranger staff being used to actively fight fires, rather than use their intimate knowledge of the terrain,

topography and local conditions in a management role, coordinating the many and varied out of district staff who appeared over the week.

Being actively discouraged to not fight the fire, then threatened with arrest if going back onto the farm property did nothing to help the situation. As referred to above, in the 1998 fire sensible decisions were taken by land owners with regard to what was defendable or not. We don't want to get hurt or die, and aren't heroes.

Education from CCC/Rural Fire would be a very good thing. Not only to inform farmers of the basic fire fighting techniques and methods, but also to make sure farmers are aware of such things as suitable track surfaces and gradients for the range of fire appliances that could be used, what couplings to put onto water tanks, how deep to make ponds for use as monsoon bucket water sources and other practical matters.

It would also give the Fire authorities a good property and person check list, and enable quicker access with good guides if necessary.

The nearby Cashmere Stream was seen as a potential water source by some pilots, but was not very effective as there were not enough deep pools, clear of trees and overhead wires for the large helicopters to use. This is a wasted resource, and with CCC ownership of a large area of land in the immediate vicinity of the Port Hill should be addressed immediately.

There is also an opportunity to use a CCC owned property at 32 Sutherlands Road which is rural and soon to be turned into large winter flood control ponds as a fire base. It has few residential neighbours, is immediately adjacent to the Cashmere Stream water source, has few large trees, no overhead wires and should be assessed for usefulness for fire fighting purposes immediately.

In the future if summer conditions are anywhere near those experienced this year I will be taking some more proactive steps around the houses and farm buildings to reduce fuel load, create a more defendable space and have appropriate water sources for sprinkler watering of the immediate area surrounding the houses.

In the future I will be staying on my property, retreating to the defendable areas if necessary and exercising the well developed common sense and self preservation skills that a lifetime on the land have produced before self-evacuating when the situation becomes hopeless or too dangerous.

I will be resisting instructions from tense young police officers who do not know any better than myself, and politely refusing their invitations to do what they say, because unless there is a demonstrably better communication situation between authorities it is clear that they do not know any better!!

As mentioned above a simple name badge and contact details would help the situation immensely.

As far as pasture and farm management goes, I think a conversation needs to be held between land owners, CCC and Fire authorities. Limiting valid and commonly used farm management practices on private land needs thought and discussion. Developing proactive management methods for CCC owned rural land on the rural/urban boundary also needs discussion, so

CCC can make appropriate changes if required, yet maintain some sort of attractive proposition for leases of its rural land.

## Recovery

o This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

Approximately 100 hectares of tussock grassland, a farm water supply pump shed, some pine trees and approximately 2.5 km of farm fences were burnt and/or damaged. As with many farmers there was little insurance cover for the fence damage.

A capital injection from the family as well as the insurance payment was necessary to rebuild the damaged facilities to a condition and at a speed that kept the commercial terms of the farm lease. Fortunately a combination of good weather after the fires (rain at the right time), a fortuitous agreement with CCC over some nearby grazing land, a moderately flexible farm lessee, a willing fencing contractor and an ability to find the capital sums required have meant that recovery is well in hand for this property.

There has been no direct support to me as the property owner and manager from Rural Fire, CD or Fire Authorities of any kind since the fires. No visits, no contact beyond the bulk email off the CCC site, no follow up.

There was some limited contact as the aerial application of the fire retardant crossed the property. This was only after I enquired about the chemicals being used, and sought information on proper management of the area with regard to grazing, vehicle crossings etc to maintain the effectiveness of the barrier, and also about the short and medium term effects of the retardant on both pastures and animals.

I understand the urgency of a situation, but once again go back to the lack of a property register and coordination between agencies to highlight the lack of effective agency and public, and especially landowner, communication. In the computer era there is no excuse for not being able to collect and manage this basic information.

In addition to the fire damage there was considerable property damage caused to fences and the ground from Civil Defence efforts to establish fire breaks. These ultimately proved ineffectual, and as property owners we were left to clean up the damage at our own expense. This is a completely unacceptable situation, and rebuilding fences, gates, rehabilitating land and re seeding the disturbed land to promote stock pastures and limit erosion should be the responsibility and cost of the agency that caused the damage.

As for the rest of the recovery, it is still something that both me and my family think and talk about from time to time. We have had better thrill seeking adventures than this, but count the overall experience as a positive thing with regard to testing personal limits, and understanding how to react to bleak and fearful situations brought about by something totally outside our control.

I had thought I had got over most of the angst, but reading back over my submission it appears that there are still some raw emotions and maybe still some heat under the collar? That's just how it is, and I hope that the experiences gained can be used to make progress.

I would like to be involved in future discussions of these matters, as a 3rd and 4th generation property owner on the outskirts of Christchurch we hope to be here a lot longer, and would like the opportunity to contribute to both theory and practical applications of it in the future.

Please fill in this form and submit by Monday 12 June 2017. The following questions have been prepared as a guide to help ensure information is relevant to the Terms of Reference. Please submit the form:

By email: Alan Goodwin, Lead Review [porthillsreview@fire.org.nz](mailto:porthillsreview@fire.org.nz)

Or, by post:

NZFS and NRFA Headquarters  
Level 12  
80 The Terrace  
Wellington 6011

### Base Information

Please explain your role in the fire response including :

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

#### Reply here

Our family home of 20 years at [REDACTED] Worsleys Road Christchurch was destroyed at approximately 6.00 pm on 15<sup>th</sup> February 2017.

### Scope of the Terms of Reference

#### Reduction (prevention)

- This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

#### Reply here

As in any location where there are forestry blocks nearby there is always a risk of fire particularly during the summer months.

Also opposite our property is a large undeveloped land area of gorse and bracken on land that was part of a failed property development. Prior to 2008 this land had been grazed and had a regularly maintained fire break. The risk of a fire was also increased by the increased number of people using Worsleys Road and parking outside our property on a daily basis ( 20 –30 vehicles ) to access the mountain bike tracks that had had been formed in the forest areas in the 18 months prior to the opening of the



Adventure Park. There were no parking or fire protection measures in place by the Christchurch City Council that property owners had been notified of.

Measures taken to reduce risk to our property within our control included :

- Keeping the grass mown on the property and outside the road boundary fence
- Sheep grazing paddocks
- Spraying / removal of small pockets of gorse in paddocks
- Regular watering during summer months including irrigation system
- Four hoses connected to water supply around property
- Wind protection pines on south boundary were over 10 metres from garage / house
- Smaller native shrubs and trees nearer house trimmed regularly
- Regular clearing of the gutters
- Fire extinguishers / smoke alarms located in house and garage

### Readiness (preparedness)

- This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

### Reply

We have never felt we lived in isolated rural area due the close proximity to our neighbours, the close proximity to built-up residential areas and the close proximity to Christchurch city.

In the event of a fire on our property we felt reliant upon and assured the Fire Service would attend promptly if we called 111 and there is a fire hydrant on the road outside our property providing a water supply.

The call out time for the Urban Fire Service to Worsleys Road is apparently 9 minutes.

The Urban Fire Service not the Rural Fire Service have always responded to fire events in Worsleys Road in the twenty years we have lived there.

On many occasions over the last twenty years we have noted the Urban Fire Service trucks slowly coming up Worsleys Road we assumed to familiarise with the road and area access. We have never seen a Rural Fire Service truck.

If a fire started on our property we would stay if safe and use the hoses connected to the water supply around the property to try to extinguish the fire until the Fire Service arrived.

No amount of preparedness by a property owner can take into account the external events of the 13<sup>th</sup> – 15<sup>th</sup> February and the decision making processes by the Fire Authorities and other agencies which the property owner has no control over as happened in the Port Hills fire.

The Fire Authorities have never approached us to provide support to help us prepare.

### Response

- This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

Reply here

Please refer to attached documents:

1. Statement from the [REDACTED] Family sent to the CCC Recovery Team on 9<sup>th</sup> April 2017 and forwarded to the NZ Fire Service.

2. Submission from [REDACTED]

## Recovery

- This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

Reply here

The loss of our family home is having a traumatic effect on the lives of myself and my [REDACTED] sons due to the ongoing emotional , physical and financial stress we are enduring.

We lost virtually everything including the irreplaceable treasured possessions of all our life history. We also lost being surrounded by the irreplaceable treasured possessions and memories of my late husband and father of our sons which continued to comfort us following his sudden death in [REDACTED] 2011

Now we are grieving again as it is like we are experiencing his death again along with the sudden loss of our home and all our possessions.

We have been displaced to a rental property in Halswell with just the basic requirements for a home that we have purchased or that have been donated by friends and family.

As well as losing our house and possessions the infrastructure for our property has been damaged including power, water, drainage and sewer lines. Fencing and the irrigation system to the paddocks has been lost and there is fire damage to the forestry stand at the bottom of the property. The stock grazing the paddocks perished.

The future is uncertain as the losses we have incurred will not be fully covered by insurance.

Since the loss of our home the Fire Authorities have initiated no assistance or contact with us to assist in our recovery.

We have initiated all the contact with the Fire Authorities to try to get the answers we deserve and feel we are entitled to as to why our home was destroyed.

This has not been an easy process adding to our continued stress.

**Statement from the [REDACTED] Family regarding the Port Hills Fire following the destruction of our family home of 20 years at [REDACTED] Worsleys Road on 15 February 2017.**

**15 FEBRUARY 2017**

Newstalk ZB broadcast on the 8am news report that the fire on Marleys Hill had been “contained “ and the fire service and the aerial helicopters were concentrating on the fire spreading to Governors Bay.

As I felt reassured that there was no threat to my home, I carried on with my day. When I left home a constant plume of smoke could be seen rising from Marleys Hill.

At 12 midday my son [REDACTED] rang me from his work place [REDACTED] as he had seen a photo on the internet of the fire spreading at the top of the Adventure Park and indicated that the fire was heading towards Worsleys Spur. He was very concerned for me but I reassured him we had been told the fire at Marleys Hill was contained and I had heard no news reports that indicated any pending threat to our home.

Nevertheless I went home. The plume of smoke from Marleys Hill was still evident. From the road outside my property we were unable to see the fire had spread down [REDACTED] where debris had been left following the harvest of a forest block in 2015/ 2016.

At about 1:45pm we could see smoke rising behind the Marleys hill plume. A police car came up the hill and turned around and left.

A black helicopter with no monsoon bucket could be seen hovering over the rising smoke. I mistakenly thought at the time if there was any danger of the fire coming towards my property the helicopter would be alerting the fire service and fire crews would be here soon.

A member of the public who had come up Worsleys Road via Cashmere was the first person to alert me of any possible danger to my home.

I ran and gathered up some clothes , a laptop and some precious pictures. Another police car arrived and told us to prepare to evacuate. I just kept running throwing things in my car.

Then a policeman was in my house telling me to leave.

I shut the garage doors and closed the back door of our family home of twenty years containing all our precious possessions of our life history and all the treasured possessions and mementoes of my late husband not knowing that I would never walk back through the door again.

The loss of our home has had a traumatic impact on the lives of myself and my [REDACTED] We have lost virtually everything.

The physical and emotional stress and the financial loss will be ongoing for many years to come and most probably for the rest of our lives.

Our family has nothing but praise and respect for the fire fighters who tried to save our home.

Our concern is with the management by the Fire Service of the fires which started on 13 February 2017 that ultimately lead to the loss of our home on the evening of 15 February 2017 and we hope our following questions will be answered.

## **FIRE SERVICE RESPONSE TO WORSLEYS ROAD**

I have now been made aware that my neighbour [REDACTED] at [REDACTED] Worsleys Road called 111 at 2:07 pm to request Fire Service assistance. Following this call the fire crews were sent to the Adventure Park and not up Worsleys Road where houses were in the path of the fire.

The 111 call centre then rang [REDACTED] back at 2:21 pm asking for his exact location which he explained in some detail.

No Fire Service crews arrived up Worsleys Road until 3:30 pm, **1 hour 23 minutes** after the request was made for fire service assistance from [REDACTED].

## **QUESTIONS FOR INQUIRY**

**1** - Why were fire crews sent to the Adventure Park and not up Worsleys Road following [REDACTED] 111 call at 2:07 pm and whose decision was it not to redirect the fire crews up Worsleys Road to protect the houses.

**2** - Why did the Fire Service take 1 hour 23 minutes to get fire crews up Worsleys Road following [REDACTED] 111 call at 2:07 pm. and whose decision was it not to send fire crews immediately to protect the houses.

**3** - Why did the black helicopter that was hovering above Marley's Hill fire for at least 15 minutes prior to [REDACTED] 111 call at 2.07 pm not communicate with the Fire Service that the fire was spreading towards houses on Worsleys Road.

**4** - At a CCC initiated meeting on Wednesday 22<sup>nd</sup> March 2017 for residents who had lost their homes Mr Darren Woods the Christchurch Principal Rural Fire Officer stated there were "high value assets" which needed to be protected such as the Adventure Park. Was there more concern about protecting these high value assets than protecting our home.

**5** - If my son in [REDACTED] could see a photo on the internet at 12 midday of the fire spreading from the top of the Adventure Park why didn't the Fire Service know it was spreading and react sooner to protect the houses up Worsleys Road.

**6** - Why was the Selwyn District principal rural fire officer Doug Marshall given full operational command of the Port Hills fire, and was he qualified or competent to control such a devastating fire that destroyed houses and threatened many others given he was not a career fire officer and structural protection was not the rural fire services job.

**7** - Following the fire at our home the ground floor concrete block walls, the garage concrete block walls and the garage doors were still standing as seen in news media photographs taken the next day. Who gave the authority for a digger to flatten the lot before we had a chance to retrieve anything that may have been intact regardless of fire damage.

**8** - Does the Fire Service have the authority to trace the mobile number of a member of the public as occurred following the publication in The Press of a Letter to the Editor written by my son [REDACTED]. The use of the word "we" in this letter was a collective reference to residents who had called the 111 service.

██████████  
██████████ Worsleys Road  
Christchurch

**Dear Alan**

Please accept this document as my submission for the Operational Review into the Port Hills Fires.

We are hopeful the Operational Review will highlight areas the Fire Agencies failed to facilitate effective fire co-ordination and management during the Port Hills fires. For us, who lost our home of 20 years, we feel the Operational Review is our only chance to identify those failures during the fires, so the most important part of this review is the scrutiny of the fire management (Readiness, Response and Communication), specifically the objectives of Point 9 in the Terms of Reference, and not what we as homeowners can do in the future (Reduction and Recovery) as outlined in the NZFS submission document, as for us it is too late.

We believe the majority of submissions will be from people who had fences damage or had a bad experience at a cordon, however we hope the reviewers are mindful the people that lost the most during the fires need their views about the response recognised first and foremost, in order for us to find out exactly what happened. I believe everyone who lost their homes would like the review to focus primarily on the fire response, management and communication of the agencies involved.

We are also hopeful the review will take into full consideration the statutory obligations NZ Fire Agencies have to adhere to, including the prevention, detection, suppression and extinction of fires. Given our home was destroyed as a result of failures to these procedures, we hope the review team refer to the legal requirements outlined in the legislation governing these Fire Agencies for the review, including, but not limited to, the Fire Service Act 1975; the Forest and Rural Fires Act 1977; the Fire Service Code of Practice; and the National Civil Defence Emergency Management Plan 2015 as outlined in Appendix A of the Operational Review Terms of Reference. Sections of these documents are referred to below.

We are aware that the new Fire and Emergency New Zealand legislation is due to commence on July 1<sup>st</sup> 2017. While this new legislation will change the management structure of the Fire Authorities in question, we hope reference to the new legislation, changes to the Fire Authority structures, and any possible outcomes as a result of these changes in the future is left out of any findings of the Operational Review.

Worsleys road is a well-known recreational area and became especially busy following the creation of the mountain bike tracks in the forest prior to the opening of the Adventure Park, when the road became even busier. We have had fires in our area before and urban fire crews were always quick to check our road. During a fire last year, below the Sugarloaf communication tower, we had the urban fire service check on our road. In years past we held controlled fires to burn off vegetation and rubbish and the urban fire service would always arrive to inspect what we were doing. We had never encountered the rural fire service on our road before.

Additionally, we had taken adequate precautions to prevent damage to our home in the event of a fire. While we did not feel we lived in a rural area, given the proximity to the city and absence of any rural fire fighters in the past, we had followed the National Rural Fire Authorities guidelines for protecting rural properties including creating safety zones and defensible space around our home. While there were many trees and shrubs on our property, our house was situated within a large open area. It was upsetting to read a few weeks after the fires the Principal Rural Fire Officer believed the homeowners were partly to blame for losing their houses (Listener Article, 18<sup>th</sup> March), given we had followed their guidelines.

## Chronology of Events

*Monday 13<sup>th</sup> February 2017*

- We noticed the initial fire immediately and spoke with our neighbours like we have always done in the past. We could see the top of the Early Valley Road fire from our home and the smoke coming from the top of Marleys Hill where the second fire was now established. The wind was blowing toward Marleys Hill so we assumed the fire was started as a result of embers from the initial fire.
- It was reported the Selwyn Rural Fire Authority was in control and we heard from the principal rural fire officer via news media late evening that the fire was contained, it wouldn't last the night and everything was being done to extinguish the fire. Based on these communications and reassurance we were sure there was no risk to us or our property at this stage.

This information was misleading and everything was not being done to extinguish the fires as reported when the Selwyn Rural Fire Authority turned down offers of support from the urban fire service at this critical stage.



*Photograph 1: Early Valley Rd fire smoke looking south-west taken from [redacted] Worsleys Rd 6:10pm 13/02/17*

*Tuesday 14<sup>th</sup> February 2017*

- We saw the fire from Early Valley Road had grown overnight and could see the flames above the Kennedys Bush Ridge. The fire at the top of Marleys Hill was still small but accessible from Worsleys Track that continues on our road up to the Summit Road.
- An urban fire crew (Addington) stopped outside our house and we asked them why they were not helping (Photograph 2). They explained they were keen to help but were told by the Selwyn Rural Fire Authority they were not required. They checked our fire hydrant and left.

Because of the urban fire crew checking our road we felt safe and if the fire was to threaten our home, we would call 111 and they would know exactly where our home was and bring the equipment required.



Photograph 2: Taken from [REDACTED] Worsleys Rd 11:23am 14/02/17. Note the water on the ground from the fire hydrant

- A press conference was held at the operational site near Early Valley Road that afternoon reassuring us the Marleys Hill fire was still contained. Based on these communications and the reassurance of an urban fire crew not being required, we incorrectly assumed the Selwyn Rural Fire Authority was in control and any progression of the fire would be communicated to us.

At this stage the Christchurch City Council, Selwyn District Council and Civil Defence Websites all reported the Marleys Hill fire was contained with no explanation or information in the interests of public safety to take appropriate fire control measures. At this time, no communications by the principal rural fire officer or Regional Incident Management Team to the public included assessments of fire hazards or warnings of the imminence of fire hazard conditions relevant to the obligations of Part 2 of the Forest and Rural Fires Act 1977 (attached below). Had this information been communicated to us as required, we would have been better prepared for fire control on our property (fire breaks, water supply) and for evacuation.

<b>Part 2</b> <b>Fire control operations</b> Fire prediction and fire control measures	
18 - Obligations of Rural Fire Authorities and National Rural Fire Authority in respect of fire control measures	
(1) It shall be the responsibility of every Rural Fire Authority in respect of its area and in the interests of public safety to take appropriate fire control measures, including, in particular,—	
A. the observation of weather and other conditions, and the assessment of fire hazard:	
B. the giving of warnings of the imminence of fire hazard conditions:	
C. the giving of any information available in relation to fire hazard conditions.	
(2) It shall be a function of the National Rural Fire Authority to encourage and promote effective fire control measures.	



Wednesday 15<sup>th</sup> February 2017

- During the morning the Selwyn Rural Fire Authority reported via news media that the fire on Marleys Hill was still contained and the Early Valley Road fire now threatened Governors Bay so that is where their resources were focused. Given the Fire Agencies knew the forecast for easterly winds in the afternoon, we were unsure why the Marleys Hills fire was less of a priority at this stage given the proximity of the homes on Worsleys Road to the fire which was now at the top of the Adventure Park. Additionally, the lack of information regarding assessments of fire hazards or warnings of the imminence of fire hazard conditions, present in the SMS Incident Reports for Thursday night and early Wednesday morning, meant we could not prepare for the spread of the fire.

SMS incident reports from the Summit Road show communications detailing the Marleys Hill fire was 'very active' 'had grown considerably overnight' (10:00) and continued outbreaks had been occurring within the Adventure Park. No fire equipment or machinery had been deployed from Worsleys Road to fight the Marleys Hill fire from the north at this stage.

A Department of Conservation CU Log reports the 'Fire crossed the line into the Gondola block' (12:52) and the 'Fire is right at the bottom of the Adventure Park' (13:58).

- Between 12-1pm the fire grew southward from the top of the Adventure Park. A combination of the Adventure Park Chair Lift and the forecast easterly winds brought the flames down slope closer to Worsleys Road. Multiple helicopters in the air would have noticed the movement of the fire, and the populated areas now under threat.

SMS incident reports from the Summit Road show communications detailing the fire was becoming 'aggressive' (13:08) and the 'flames getting bigger' (13:30). This should have been the exact time the Fire Agencies stationed on the Summit Road recognised the fire was spreading and sent resources to the closest properties now under threat as the direction of the fire spread in the wind conditions was obvious. I find it odd that Area Commander Dave Stackhouse said he was on the Summit Road and did not see the Marleys Hill fire growing or heading down toward Worsleys Road in a meeting we attended following the fires.

We wrongly assumed the fire service would be proactive at this time and respond to the immediate danger as stated in the statutory duties of Fire Agencies in the Fire Service Act 1975, as outlined in Appendix A of the Operational Review Terms of Reference. If the Fire Agencies or helicopters had responded at this time they would have been able to access all of the upper properties and limit the fire spreading down the valley toward Cashmere Stream; across the forests of the northern facing properties on Worsleys Road; and up the paddocks toward our homes and the road on the ridgeline.

- At 2:07pm my neighbour at [REDACTED] Worsleys Road rang 111 asking for help. We have requested a record of the 111 calls from the fire service as earlier calls warning of the moving fire towards our homes may have been made. We saw the fire reach a cleared area of the forest above us and decided to pack some clothes if we were out for a night or two. At this stage we had seen how effective the helicopters were, we had been visited by the urban fire service the day prior, and we knew we had a fire hydrant at our gate. I messaged a friend at 2.26pm asking if he could come and help us pack. He arrived shortly after.
- At 2.40pm a policeman told us we had to evacuate. Looking back now I should have stayed as I feel I would have had a better chance saving our house in that extended period between leaving and the fire service arriving. My mother and I headed [REDACTED] to a police cordon. We saw the flames getting closer to the houses and I found myself screaming at two policemen asking where the fire service was.

A requested Police Southern Communications report (dated 2/5/17) details 'flames coming over the hill – over the Adventure Park' (14:32) and 'every occupant southeast of [REDACTED] Worsleys Road has been evacuated' (14:44). We evacuated on the impression the fire service were arriving soon after but we continued to wait helplessly watching the fire enter our property with no one there to save it, and not having had a chance to

prepare. If we had been told at any stage, by anyone, that day that the Marleys Hills Fire was growing, moving or no longer contained, as stated in the SMS incident reports from the Summit Road prior to us being evacuated, we would have had the chance to prepare our property and gather more than a change of clothes.

The first mention of houses under threat on Worsleys Road in the SMS incident reports is at 3:02pm, 1 hour 32 minutes after the initial ICAD report of 'flames getting bigger' from the Summit Road; 55 minutes after our neighbour rang 111; and 22 minutes after we evacuated our home. At 3:03pm the SMS incident reports show the 'fire is in the houses'. No one from any of the Fire Agencies was present on Worsleys Road at this time.

- At 3:30pm, 1 hour 23 minutes after the 111 call from [REDACTED] Worsleys Road, fire trucks arrived on our road. Around this time the first helicopters arrived also. The fire crews stopped at [REDACTED] Worsleys Road, and did not continue up around the corner to where our properties were. It appears they made their base at this location thinking they were close enough to the top. Again, if the fire crews or helicopters had arrived earlier they would have been able to get up to the houses at the end of the road immediately.
- At 3.50pm we were moved down to the bottom of the hill where I sat with binoculars watching the house. I could see more fire trucks reaching [REDACTED] Worsleys Road and a bulldozer that began putting in fire breaks around the new houses in that area, where the lowest extent of the flames were by then. I saw some firemen around our paddocks at about 5pm and thought they had reached our house and it would be saved.
- At 5:30 I saw smoke coming from the garage roof at the rear of our property. The fire had been left to cross the road behind our house which ignited a fence, then our garage roof. Shortly after a large amount of white steam came from behind the garage when our full plastic water tank was destroyed. Out of all of the helicopters, only one stopped at our house while most kept heading over to the Adventure Park. Just after 6pm I saw flames coming from our roof, then the top story, then the whole house. I left after that as I was too upset to watch what was happening and could not believe this had been allowed to happen. The two houses down the road were destroyed soon after and our neighbours house the next morning.

We found some aerial photos of the house the next day (Photograph 3), and our garage [REDACTED] [REDACTED] with the first floor still standing but once we returned the day following a digger had flattened the whole house into an unrecognisable mess.



Photograph 3: The remains of our home [REDACTED] Note the defensible space around the properties

We have been very unhappy with the lack of contact from people involved and how quick they have been to dismiss any wrong doing or what could have been done better. To have been told exactly how our house burnt down or even how many firefighters had been onsite would have helped us understand exactly what happened, yet we have been fighting to get this information that I hope you agree we deserve.

We hope a review of the calls to emergency services will show how incompetently and under managed the fire was from day one. We believe our house would still be standing if the fire service had responded when we called for help. The disconnect we read between the urban and rural fire crews that ultimately led to this is disturbing. My family now has to suffer financially at no fault of our own.

I am most upset over the lack of communication by the principal rural fire officer and Regional Incident Management Team, including the assessments of fire hazards; warnings of the imminence of fire hazard conditions; and the giving of any information to the public/media in relation to the fire hazard conditions. Had the information at hand been communicated in a reasonable time and as legally obligated, our home would have had a chance. Additionally, the inability of the Area Commander to recognise the development of the Marleys Hill fire and deploy adequate resources as required is awful. Waiting 1 hour 23 minutes for fire trucks to respond to calls for help is not a state of operational efficiency as outlined in the statutory duties of NZ Fire Agencies.

Regardless of the origins or complexity of a fire, or who was officially in charge, there is no excuse for incompetent fire management, coordination or communication. The legislation details the specific procedures which must be followed for effective fire response. Based on a review of the legislation governing the Fire Agencies, and the information we have been supplied with from the fire service so far, these procedures were not followed by the people in charge which led to my family losing our home, two garages, a farm building, livestock, kilometres of fencing and multiple trees. Based on my experience above, and the emergency management procedures that were in place but not followed, I would be hesitant to trust the efficiency or effectiveness of Fire Agencies in future wild fires in New Zealand.

### Base Information

Please explain your role in the fire response including: :

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

Reply here

We live at [REDACTED] Watlings Place, Kennedy's Bush, Christchurch 8025. Our subdivision was not damaged but we were forced to evacuate for six nights.

### Scope of the Terms of Reference

#### Reduction (prevention)

- This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

Reply here

As we are in a urban subdivision this is not particularly relevant to us. However I note that due to a wetter than normal summer, tussock grasslands further up the hill were unusually long, providing ample fuel.

#### Readiness (preparedness)

- This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

Reply here

We could see the fire spreading two days before we were evacuated. On the day we were evacuated, neighbours met in the street and agreed that we needed to be ready to move out.

## Response

- This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

### Reply here

No change in our response in the future. We left as soon as the police arrived.

## Recovery

- This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

### Reply here

The major issue for us was the unnecessarily risk-averse response of Civil Defence. We were given ZERO site-specific information about why our particular suburb was considered to be at risk, despite requesting that information at a public meeting. After that meeting, a map of hot-spots was published on their website. However on our return, I checked the one supposed hot-spot that appeared to threaten our streets, given the prevailing winds, and it was not even in the burnt zone! So we were out for no good reason. I consider that perhaps a 2-night evacuation could have been justified, but 6 nights was merely bureaucratic butt-covering. I would have been perfectly happy to sign a form taking full responsibility for our safety if we could have gone home earlier.

To: Alan Goodwin, Lead Review [REDACTED]

From: [REDACTED]

[REDACTED] Cashmere Residents' Association

Q - Please explain your role in the fire response including:

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

A - Not directly affected. But from the incident outbreak, with our committee, for our Association members and the residents of Cashmere, we maintained watch on the fire's progress for any imminent risk to lives and homes. Information was scarce so we had to research what was happening in the news etc and monitor the threat directly by line of sight. What we could find out we shared via our social media, website and group email points of local contact. Once an emergency was declared, we activated our community response plan and opened a community hub in the Cashmere Hills Presbyterian Centre - periodically over the next few days. At the point of highest risk, before 6pm declaration, we helped council to get the tinder-dry Victoria Park cordoned off from 'rubber-neckers' / unknown random visitors, because the hazard was then palpably fearful.

Q - Reduction (prevention)

This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

A – Although fire risk was included in our community response plan, developed since the Canterbury earthquakes, it was placed below threat likelihoods of snow, flood, land instability and earthquakes, based on previous experience. Now it is placed at the top, as the most hazardous risk we face and must prepare mitigation for. This will involve primarily Association effort in education around reducing fire risk in the neighbourhood. We will help distribute the NZFS information booklet content that people here need to know. We have learned that community hub activation might not always be our best response, if the suburb is affected by smoke or evacuation orders e.g.

Q - Readiness (preparedness)

This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

A – As above, but nothing really done beyond planning as yet. We have heard from [REDACTED] at SCION who has been very helpful to us better understanding this local risk and the fire event we experienced. Our community response plan is being improved in light of what we learned.

Q - Response

This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future?

A – There were two fire events begun on Monday 13 February, but only one response – too little too late. The response to the first event was by Rural Fire in Selwyn, and it seemed the rural response strategy of ‘let a fire burn itself out’ was mistakenly applied within Christchurch City boundaries. The local authorities never took appropriate control and a city cycle park / forest asset was badly damaged as a result, unnecessarily costing some homes on Worsley’s Road and putting many others at similar risk by Wednesday afternoon. By sheer good fortune, the fire then did burn itself out (where near us) in pine trees beside more dangerous eucalypt plantation, in Victoria Park. Or so it appears. No information was supplied, except through Police enforcement of local evacuations. Rural Fire staff did not talk and referred us to the Halswell Quarry fire response hub, which was impractically far away. Police/Army cordons bisected our community and its active response, after the threat had largely passed.

#### Q - Recovery

This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

A - [REDACTED] from SCION has been very available, highly informative and much appreciated. But mainly we are waiting for a full and frank discussion of what is perceived as an unfortunately fatal debacle. People here were very afraid and had good reason to be. Authorities made it their story alone, told their way, without transparency. We do appreciate all the effort that was made, the direct fire-fighting on many fronts, regardless of the response flaws: some will always be inevitable.

Q - If required can the Review Team contact, you?

A - Yes

Q - If yes, please provide the best contact details for you.

[REDACTED]

Date: 12/06/17

### Base Information

Please explain your role in the fire response including: :

- If you own a property affected by the fire where was your property. Please give physical addresses of property.

Reply here

We were evacuated from our property on Worsleys Road, Cracroft, Christchurch. Our property was affected by smoke and ash.

### Scope of the Terms of Reference

#### Reduction (prevention)

- This section seeks to gain information of your understanding of the fire risk in your location prior to the fire, what measures you had been take to help mitigate or reduce that risk and how you think communities should be involved in fire risk management.

Reply here

We were unaware of the risk of wildfires and had taken no measures to help mitigate or reduce that risk. Given that the knowledge of the risk will often get lost as people move on from an area, we think it is important for communities to be involved so that the knowledge doesn't get lost. Resident associations could be a useful means of keeping that knowledge and keeping an eye on potential risks.

#### Readiness (preparedness)

- This section seeks to understand what preparedness measures you had taken in case of a fire plus what motivated you to take these actions and what support the Fire Authorities provided to help you prepare.

Reply here

Prior to the fires starting we had taken no preparedness measures. Once the fire started we made a list of what needed to be done around the house, and what we should take with us if we needed to be evacuated. We thought it was important to have the list as it is often hard to think through what needs to be done when you only have a limited amount of time available. We did nothing around the property largely due to a lack of resources to be able to move material that needed to be shifted but also due to thinking the fire was unlikely to reach us.



## Response

- This section seeks to gain information about the fire response e.g. what you experienced or observed during the response, how the fire authorities worked with the community, what was your response (stay and defend or leave straight away) and has this changed as a result of this event. Would you do the same in the future)?

Reply here

Over Monday, Tuesday and Wednesday, we observed the helicopters fighting the fires. At that stage the fire wasn't near our house so didn't really have first hand experience of how the fire authorities worked with the community. On the Wednesday when the Marleys Hill fire flared up after lunch, we made a decision to get ready to evacuate and started to pack up. We intended to stay until the police came. On viewing how close the fire was getting I made the choice to leave and placed a note on the outside of the house to inform the police that the house was empty. We had seen helicopters during Wednesday morning and as we left around 3pm saw a fire engine driving up the hill. We found on leaving the house the biggest issue was getting past people who were just there to check out the fire. It would have been useful given that Worsleys Road is a no exit street if access for the general public had been closed off earlier. We understood from talking with neighbours that people had tried to contact the fire service from mid morning but the first truck didn't arrive till the afternoon.

## Recovery

- This section seeks to understand the impact of the fires on you and what support the fire authorities have provided to assist with this recovery.

Reply here

Other than being evacuated from our house for a week and sustaining a small amount of smoke and ash damage, we have had little environmental impact. The impact has been more in experiencing the emotional effect of the distress of our neighbours, due to suffering they experienced through the loss of their houses and significant damage to their properties. There has been a significant amount of anger that perhaps the response by the fire authorities on the Wednesday wasn't timely. Although the fire authorities have provided support by attending a number of neighbourhood meetings afterwards and they have tried to answer questions as best they could.