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TRANSCRIPT OF PROCEEDINGS

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2009 VICTORIAN BUSHFIRES ROYAL COMMISSION

MELBOURNE

FRIDAY 26 FEBRUARY 2010

(113th day of hearing)

BEFORE:

THE HONOURABLE B. TEAGUE AO - Chairman

MR R. MCLEOD AM - Commissioner

MS S. PASCOE AM - Commissioner

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1 MS DOYLE: Commissioners, I now call Mr Miezis.

2 <LEE ALEXANDER MIEZIS, affirmed and examined:

3 MR RUSH: Your full name is Lee Alexander Miezis and you are  
4 currently director forests, forests and parks division in  
5 the DSE?---That's correct.

6 You have prepared a statement for the assistance of the  
7 Commission dated 5 November 2009 dealing principally with  
8 questions related to firewood and tree debris in relation  
9 to roadsides?---That's correct.

10 Are the contents of that statement true and correct?---Yes.

11 I tender that statement.

12 #EXHIBIT 753 - Witness statement of Lee Alexander Miezis dated  
13 5 November 2009 plus six attachments (WIT.3024.004.0315).

14 MS DOYLE: Can we start with some simple concepts, Mr Miezis.

15 First of all, in order to understand the use that the  
16 community might have been able to make of firewood prior  
17 to the February fires, so if you could put yourself back  
18 in that timeframe. This is by necessity a simplification  
19 of the issues, but prior to February 7th the basic  
20 position in Victoria was that fallen trees, logs, firewood  
21 belong to the State and in order to take them from at  
22 least public land one needs a permit?---That's correct.

23 So where our fallen trees, logs and our tree litter are found  
24 in public or state forests, there was always a need for a  
25 member of the public, whether they be an individual or a  
26 commercial enterprise, to get a permit from DSE to take  
27 that wood?---To take that wood for the purposes of  
28 firewood.

29 Let's just then confine this question now still to the period  
30 prior to the February fires and just talk about an  
31 ordinary individual who wants to use wood that they find

1 on the sides of roads for firewood. What was the  
2 situation prior to the fires for an individual who wanted  
3 to take stuff from the side of the road to use as  
4 firewood?---An individual would first have to get the  
5 permission, if you like, of the road management authority.  
6 So that could be VicRoads or their council?---That's correct.  
7 That permission was often in written form and they would  
8 bring that written form to a department office and would  
9 be issued with a domestic firewood permit.  
10 So is it true to say then, Mr Miezis, that prior to the  
11 February fires an individual essentially needed two forms  
12 of authorisation or consent to take wood that they wanted  
13 to use as firewood or fuel from the side of the road.  
14 They needed some sort of authorisation from the road  
15 manager and some sort of authorisation from DSE?---That's  
16 correct.  
17 Are you able to give us an insight into how much of that was  
18 done prior to February 7th and the fires? How much were  
19 Victorians in rural areas drawing on that capacity to get  
20 a permit to take firewood?---Based on our records and  
21 information, Victorians consume about 550,000 cubic metres  
22 of firewood a year. The sources of that are quite  
23 diverse. Some of it comes from interstate, some of it  
24 comes from roadsides, some of it comes from state forest  
25 and a large proportion comes from private property and in  
26 fact a large proportion the source is unknown.  
27 Is there any clarity on what portion of it came from  
28 roadsides?---From studies undertaken it is quite variable.  
29 The record keeping through time hasn't been great and  
30 studies have said between zero per cent up to 11 per cent.  
31 In a study that we commissioned in 2007 the amount was put

1 at about 2.4 per cent of total consumption or around  
2 13,000 cubic metres a year.

3 We won't dwell on the commercial use but essentially, as your  
4 statement outlines, in terms of commercial enterprises  
5 dealing with firewood, that's a matter that's governed by  
6 the Forests Act and there is a whole regime there that  
7 applies to commercial users of firewood?---The Forests Act  
8 and the Sustainable Forests (Timber) Act.

9 Would it be fair to say that prior to the fires the public  
10 debate and the department's research about firewood was  
11 principally focused on its use as a fuel and its  
12 importance to the environment?---The policy around  
13 firewood, if you like, pre-February last year was about  
14 ensuring that it is available to meet community demand in  
15 a sustainable way.

16 We will go to this in a moment, but your statement recounts the  
17 fact that there has been a history of a debate about this  
18 topic and prior to these fires occurring DSE was part way  
19 through a large amount of work in terms of research,  
20 consultants, advice and preparation of a discussion paper  
21 to ventilate some of these issues in the public  
22 domain?---That's correct.

23 We will go to the discussion paper in a moment. Can you talk  
24 us through the role of firewood, principally fallen logs,  
25 on roadsides. Do you have any expertise or are you able  
26 to offer any view about what role logs on roadsides play  
27 in terms of fire behaviour?---I'm certainly not an expert  
28 in fire behaviour. My comments would be based on research  
29 that we commission through the preparation of the  
30 discussion paper and the findings of that research were  
31 that firewood tends to be collected at a size around 10

1 centimetres. Fire behaviour is primarily derived from  
2 the fine fuels, less than six millimetres in size, so the  
3 collection of firewood or the removal of coarse woody  
4 debris, if you like, doesn't have a significant impact on,  
5 for example, the rate of spread or the flame height.  
6 Where it does have an influence can be on the heat output  
7 of the fire.

8 So that's the question of fire behaviour. Can we look at the  
9 other side of the coin and look at the environmental  
10 importance or role of the coarse woody debris you have  
11 spoken of and, if there is a difference, the coarse woody  
12 debris and fallen logs of a greater size. What importance  
13 do they have to any environmental values that the  
14 department has been collecting research on?---Coarse woody  
15 debris as a concept includes pretty much dead standing  
16 trees, it includes large pieces of timber, it includes  
17 large root masses, if you like. The research has  
18 basically found that it does have an important role in  
19 providing habitat for a number of threatened species, both  
20 flora and fauna. A number of those species can be  
21 impacted on by the removal of coarse woody debris. The  
22 specifics around what impact does the collection of  
23 firewood have on those threatened species or indeed the  
24 collection of firewood from a fuel reduction perspective,  
25 there is not much research in that space. It has been  
26 very much focused on the broader concept of coarse woody  
27 debris.

28 Can we look at the discussion paper which has been issued by  
29 DSE. It is attachment 6 to your statement. It starts at  
30 (DSE.HDD.0052.1169). As I understand it, the work that  
31 has gone into this was well progressed before the February

1 fires?---That's correct.

2 I think it was released in mid-2009, according to the date on

3 the second page?---Yes, that's correct.

4 Can we go to page 1181, where there is a handy diagram setting

5 out some of the matters you have just talked us through.

6 At least until recently, this is a schematic diagram of

7 the way in which firewood was handled in

8 Victoria?---That's correct.

9 Then if we can look at page 1183, there is a discussion of some  
10 of the matters you have already directed attention to.

11 Can we just look at the second column, second paragraph

12 down, the sentence that starts "Coarse woody debris", and

13 this is the matter you were just referring to. "Coarse

14 woody debris is generally found on the forest floor and is

15 an important source of firewood. However, it also

16 provides shelter for animals, protects small plants from

17 grazing and stormy weather and contributes to the building

18 of soil". This portion of the paper seems to be directing

19 attention to the environmental impacts of firewood when it

20 is found in its natural environment?---That's correct.

21 There is a great deal of discussion in the paper which I won't

22 go through in detail. What's the status of the paper now?

23 Where to from this for DSE?---Public submissions have been

24 received, have been analysed and the strategy, if you

25 like, the end point of this project has been - there is an

26 initial draft been prepared by the project team. However,

27 that draft hasn't been through the internal approvals

28 process yet or hasn't been considered by government at

29 this stage.

30 What's the overall timeframe expected? When will the call for

31 submissions be concluded so you can move to the next

1 phase?---The call for submissions has been concluded.  
2 What will then be released?---A firewood strategy for public  
3 land in Victoria.  
4 So the new strategy you refer to in your statement is just an  
5 interim step on that path?---No, that is the strategy.  
6 Perhaps if we look at it and you can tell me whether it is  
7 permanent or whether it has an end date to it. That's  
8 what I'm driving at. The new strategy you have attached  
9 at (DSE.HDD.0052.1576). It is attachment 5. I think in  
10 the body of your statement you explain this was issued in  
11 September last year?---That's correct.  
12 It explains in the second paragraph in the first column that,  
13 "The Victorian government has announced temporary  
14 exemptions from the need for a planning permit to remove  
15 native vegetation to help reduce fuel load around your  
16 home." So that is a reference to the broader changes that  
17 have been made to the planning regime, and that's all set  
18 out in detail. The next page, 1577, goes to the detail of  
19 firewood. "You can remove fallen wood from certain  
20 roadsides without a permit during 'firewood collection  
21 periods'." So my first question is from when did the new  
22 policy take effect? When could members of the public start  
23 to rely on this new policy?---When it was announced in  
24 I think September.  
25 So about September last year?---Yes.  
26 And is this a policy that will endure forever? Does it have an  
27 end date? Is it to be reviewed?---This is a policy that's  
28 predominantly around managing fuel on roadsides, if you  
29 like, or reducing fuel hazards on roadsides and in other  
30 areas such as the 10/30 rule. Firewood collection in this  
31 context is really subservient to that primary objective.

1           So whether or not that persists I guess depends on the  
2           policy decisions that are made around those primary  
3           objectives.

4   So your understanding is this remains in force, this firewood  
5           collection component, but its long-term life might be  
6           dependent on the fate of the whole new regime?---That's  
7           correct.

8   What it then says is, "Designated firewood collection periods  
9           will be advertised in your local paper and will occur two  
10          weeks prior to planned fuel reduction burns." Then it  
11          goes to some of the details. "There will be signs along  
12          roadsides showing you where fallen wood may be collected.  
13          If in doubt, check with your council. Outside the  
14          advertised collection periods you may need permission."  
15          Where there is a decision, whether it be by DSE or CFA in  
16          conjunction with others, to do some planned burning and  
17          where that planned burning is going to overlap with  
18          roadsides or perhaps be alongside roadside reserves, the  
19          new regime is that in the two weeks leading to the burn  
20          the public can come and take any firewood that lies  
21          alongside the affected roadsides?---This new policy and  
22          this particular element applies to roadsides. Basically  
23          what we are saying is where the council or the road  
24          management authority in consultation with DSE and CFA  
25          determines that it will conduct a planned burn in an area,  
26          then the decision whether or not it allows firewood  
27          collection in that area still rests, as it always has,  
28          with the road management authority. But if that decision  
29          is made, then there is no requirement, if you like, for an  
30          individual to obtain further permits from the department.

31   The planned burn that is referred to, though, does it have to

1 be one literally that is going to be conducted alongside a  
2 road or could it be a large planned burn that has some  
3 roads in it?---Those sort of questions are probably not  
4 best directed to me. My role in this has been around the  
5 firewood component rather than the actual conduct of  
6 planned burns.

7 I understand that, but there is a lifting of a previous permit  
8 regime or a relaxing of it in a certain way and I'm just  
9 wondering whether you have been advised as to its scope  
10 because, as you can imagine, some planned burns might  
11 straddle a number of roads, in which case one reading of  
12 this is they are all caught and there will be a relaxation  
13 alongside all of those roads. Another reading of this  
14 might be only literally if it is a planned burn running  
15 alongside a road, which would be quite a different outcome  
16 in terms of the number of roads affected. You haven't  
17 been advised which applies?---No.

18 The rationale for the change to this lifting of the permit  
19 requirement for two weeks leading in, what is the  
20 rationale?---Again, it was about the primary objective of  
21 fuel reduction on roadsides. In this case, if you like,  
22 or normal firewood policy previously has been around a  
23 sustainable supply to meet community demand for firewood.  
24 In this case I guess the policy imperative changed. The  
25 wood or the material on the roadsides would have been  
26 burnt in the fuel reduction activities and the decision  
27 was made that we would enable the community to use that  
28 material as opposed to it being burnt, if you like.

29 I take it from your earlier answer about the advice you have  
30 been given about fire behaviour, and you quite  
31 appropriately said it is not science you have studied but

1 advice you have been given, the advice you have been given  
2 at the moment tends to suggest that removing the types of  
3 material that people use as firewood will have minimal  
4 outcome in terms of fuel reduction in and of itself?---The  
5 advice has been that firewood or coarse woody debris tends  
6 to influence on heat output of fire. There are some  
7 operational issues that were identified such as removing  
8 obstructions for vehicles and people.

9 What I'm getting at is this: if it has minimal utility in and  
10 of itself, is the new policy really directed at avoiding  
11 waste. That is, given that the area is going to be burnt,  
12 why not let people take it and use it usefully as  
13 firewood. Is that really the utility of it; it is  
14 practical?---Yes.

15 In relation to moving forward from here, how many submissions  
16 or what sort of degree of interest has DSE received from  
17 the public about the current debate about the new policy  
18 and where to from here?---We received 226 submissions on  
19 the discussion paper. Nine of those were not really  
20 submissions per se. They had a couple of lines filled in  
21 but didn't really provide any information. So 215  
22 submissions were received that made comments on various  
23 aspects of the current firewood management regime, if you  
24 like.

25 Just to conclude, I think from what you have said, whether we  
26 are talking pre the February fires or now with the new  
27 relaxation, either way in the end the managing road  
28 authority needs to give its consent in the form of an old  
29 permit or in the form of a new two-week lead-in  
30 period?---That's correct.

31 So it still rests with the road manager, VicRoads or the

1 councils?---That's correct.

2 You may not have intimate knowledge of this, but is it your  
3 understanding that councils around Victoria all take  
4 different approaches to the question of firewood? Some  
5 have local laws which prohibit its collection; some have  
6 local laws which permit its collection; some have  
7 particular approaches to permits. There is variation  
8 around the state?---I don't know the explicit details.  
9 I do understand there is some variation.

10 Do you know what VicRoads' current approach is generally in  
11 relation to permits but in particular in light of the new  
12 suggested relaxation? Has it communicated a policy to  
13 you?---Not directly, no.

14 I understand, I think from material that was attached to  
15 Mr Brown's statement, that VicRoads in fact disputes, on  
16 the basis of legal advice it has received, that it can  
17 waive the requirement to give consent and doesn't think  
18 adopting the device of putting up road signs will work,  
19 but that what it intends to do is give a blanket permit to  
20 the CFA. Is that something they have raised with  
21 you?---No.

22 So, as far as you are concerned, the new approach is expected  
23 to give the public some greater access to firewood at some  
24 times?---Yes.

25 But ultimately its implementation is going to depend on the way  
26 the different road managers treat different stretches of  
27 roads at different times around the state?---Yes.

28 I have no further questions for Mr Miezis. Commissioners, do  
29 you have any questions?

30 CHAIRMAN: No.

31 MS DOYLE: There is no-one who seeks to cross-examine, so may

1 Mr Miezis be excused.

2 CHAIRMAN: Yes. Thank you, Mr Miezis, you are excused.

3 <(THE WITNESS WITHDREW)

4 MS DOYLE: The next witness is Mr Spence from the Municipal  
5 Association of Victoria. I have discussed with Dr Lyon  
6 the most efficient way to progress all of the material  
7 pertaining to council. As a result, we have come to the  
8 arrangement that he will address you briefly now almost by  
9 way of opening in terms of issues that affect councils and  
10 that will help clarify matters. I will then call  
11 Mr Spence.

12 DR LYON: Thank you, Commissioners. There is a proposition  
13 paper that will be handed up. Can I make the preliminary  
14 observation that many of these propositions, there are  
15 seven propositions and many of them overlap with the key  
16 propositions that have already been made in relation to  
17 land use planning. They have also come up within section  
18 5.7 of the general submissions made in May last year.  
19 Also, if I can make the observation that because of the  
20 time pressures today I do not intend to dwell on these at  
21 length but - - -

22 CHAIRMAN: The fact that you have put them in a page makes it  
23 easier for us to dwell on them.

24 DR LYON: Thank you, Mr Chairman. The first proposition is  
25 that the statutory obligation of councils under section 43  
26 must be understood in context. There are five matters  
27 that need to be taken into account here. The first is  
28 that the obligation under section 43 is for councils and  
29 public authorities to take all practicable steps. This  
30 acts as some form of qualification in that it must take  
31 account of available council resources, the physical and

1 topographical characteristics of the roadsides and the  
2 available treatment options.

3 The obligation of safety is one to prevent the  
4 occurrence of fires on and to minimise the danger of the  
5 spread of fires from, in this case, roads under its care  
6 and management. So it is not a general obligation at  
7 large for that reason either; it is constrained by those  
8 words. It must be read with the power vested in the CFA  
9 under section 42 in relation to roadsides. It must be  
10 read, of course, in conjunction with the other legislative  
11 provisions of the State and Commonwealth. We heard from  
12 DSE yesterday and there was a big folder of material  
13 tendered by the Commonwealth and you might have seen  
14 Ms Treleaven had a very fat Act of Parliament sitting on  
15 the Bar table as well. And of course it must be  
16 understood alongside the role of the municipal fire  
17 prevention committee of which we have heard quite a deal  
18 over the months.

19 The second proposition was made during the  
20 planning session and that is that councils are given no  
21 real guidance as to how to balance the protection from  
22 bushfire risk against the native vegetation net gain.  
23 Although we had evidence yesterday from Ms Dripps, one  
24 might easily conclude that, despite the assurances, the  
25 exemptions operate in a complex manner and there is no  
26 easy balance to be struck. That is the third point, that  
27 the exemptions are complex and difficult to apply.

28 In any event, turning to the fourth one, there  
29 are still considerations under the Flora and Fauna  
30 Guarantee Act and the Commonwealth's Environment  
31 Protection and Biodiversity Conservation Act. These add

1 further layers of complexity. The EPBC Act is  
2 particularly complex and difficult to apply and, as you  
3 will shortly hear from Jack Green from Colac Otway, it can  
4 be an Act that has serious and costly consequences for  
5 councils.

6 The fifth point has already been made at length.  
7 Councils are dependent on the technical fire expertise of  
8 the CFA. You will forgive me if I say no more than that.

9 The sixth point is self-evident, but must be  
10 emphasised; that is, that roadside vegetation clearance  
11 activities are labour intensive and costly. Although you  
12 will get the exact figures from Mr Spence in just a few  
13 moments, we are talking about in excess of 128,000  
14 kilometres of roads under the control of municipal  
15 councils. Two roadsides for each kilometre of road means  
16 that you are looking at over a quarter of a million  
17 kilometres of roads under council control.

18 Of course, the point that has already been made  
19 through Matt Parsons but can be made by the three you will  
20 hear today is that councils differ in size and ironically  
21 many of the councils that have the greatest kilometrage of  
22 roads in them are the most poorly revenueed of councils.  
23 Murrindindi with a budget of \$23 million for the thousands  
24 of kilometres of roads; Colac Otway on a budget of \$32  
25 million has a large kilometrage of roads also. These are  
26 the propositions that we have already tried to put on the  
27 table and will come out through the evidence of the  
28 witnesses to be called today.

29 CHAIRMAN: Yes. Thank you, Dr Lyon.

30 MS JUDD: If the Commissioners please, in relation to the  
31 submission by Dr Lyon there are some fundamental mistakes

1 in this submission. Just as an example, the third bullet  
2 point in paragraph 1 as to a requirement, that's just  
3 simply not correct. Paragraph 2 to a large extent shows a  
4 misunderstanding by MAV of the regime and it ought not be  
5 forgotten in this context that DSE regional staff are  
6 regularly used to assist in this whole process.

7 Now, I don't have complete instructions at this  
8 point in time. We were not given any notice of this  
9 submission and we say that the proper time to be making  
10 submissions like this is at the end of the evidence and  
11 that's when we will do this.

12 CHAIRMAN: Yes.

13 MS DOYLE: If the Commission pleases, I invited Dr Lyon, after  
14 he raised the proposal with me late yesterday, to make  
15 some points, essentially by way of opening, but  
16 particularly in light of the fact this is a complex area,  
17 many witnesses, a lot of documents we were not able to go  
18 through line-by-line. It is my submission it is a helpful  
19 process, but of course there ought be no unfairness.  
20 Anything the State wishes to raise by the end of the day  
21 it is certainly at liberty to do so, but also at any stage  
22 that it needs to, whether that be during the evidence. It  
23 will have the usual opportunity to cross-examine, as  
24 anybody does, but also will have a full opportunity to  
25 respond in writing in the ordinary course. I hope that  
26 addresses any perceived difficulty. We will now move to  
27 the evidence of Mr Spence.

28 <ROBERT NORMAN SPENCE, recalled:

29 MS DOYLE: Your full name is Robert Norman Spence?---Correct.

30 You are the chief executive officer of the Municipal

31 Association of Victoria?---That's right.

1 You have held that position since 1997?---Yes.

2 It is your third time giving evidence in these proceedings and

3 we are all old friends now?---We are, and it is a pleasure

4 to be back, and Happy New Year.

5 Thank you, Mr Spence. In relation to the question of roadside

6 clearing you have prepared a statement dated 30 November

7 2009 which can be identified at (WIT.4014.001.0001). That

8 has a number of attachments. In addition, Mallesons

9 solicitors have provided some additional material after a

10 further request by counsel assisting which is contained

11 essentially in a letter dated 1 February 2010. The letter

12 has an attachment which we are going to make part of your

13 materials. The letter is at (CORR.1002.0001). Attached

14 to that letter is a chart which sets out responses

15 obtained from a number of councils in relation to

16 additional questions. First of all, Mr Spence, there is

17 probably a caveat or an explanation we need to make about

18 all of the material you are presenting by way of evidence

19 today. Some of it is based on your personal experience

20 and knowledge. Large parts of it are answers given to you

21 by your constituent councils, them having been polled by

22 MAV or by its solicitors in relation to a number of

23 detailed questions?---That's correct.

24 So while you have assisted in compiling the material, you have

25 some familiarity with it, a lot of it has had to have been

26 obtained at the coalface and you can't attest to every

27 line of it?---That's correct.

28 With those caveats or that notation, are the contents of your

29 statement and the additional February attachment true and

30 correct?---They are.

31 I tender the bundle of materials from Mr Spence.

1 #EXHIBIT 754 - Witness Statement of Robert Norman Spence,  
2 dated 5 November 2009 plus 24 attachments  
3 (WIT.4014.001.0001). Mallesons Stephen Jaques - Response  
4 to VBRC Request For Supplementary Information - Roadside  
5 Clearing, dated 1 February 2010 (CORR.1002.0001). Table  
6 Summarising Council Responses to Matters Raised in Witness  
7 Statement of Ms Dripps, dated 1 February 2010  
8 (CORR.1002.0004).

9 MS DOYLE: Just while we are on the question of explaining the  
10 way the documents work, Mr Spence, in large part  
11 attachments 2 and 3 of your statement are a chart which  
12 set out the answers given by councils to very specific  
13 questions about dealing with roadsides and permits in  
14 relation to roadside work?---That's correct.  
15 And the same is true of the table that's now on the screen  
16 which was attached to the February letter?---That's right.  
17 We are not going to be able today, nor would it be helpful, to  
18 go through every line in those charts, but where necessary  
19 I will ask you to comment on the balance of the answers  
20 from councils or the themes that emerge in the answers  
21 from councils. First of all, it has become clear in the  
22 evidence we have heard already that councils obviously  
23 manage certain roads in Victoria but not all of them. Can  
24 you give us a feel for the scale. Across Victoria, how  
25 many kilometres of roads, if we can put it that way, do  
26 councils manage?---Councils manage 129,235 kilometres of  
27 road. The interesting one is the CFA district, which is  
28 really the one that's relevant, I think, to the  
29 discussions today. There is 119,444 kilometres of road,  
30 approximately, in the CFA district, which is the  
31 equivalent of about three times around the earth at the

1 circumference.

2 That 119,000 is the kilometres of roads falling in the CFA  
3 district of Victoria which are managed by  
4 councils?---That's right.

5 There has been a lot of evidence and indeed I opened in  
6 relation to this matter about what has been described in  
7 MAV's general submission to this Royal Commission as an  
8 "inherent tension". What does MAV mean by that and how is  
9 it that you say councils are faced with an inherent  
10 tension in legislative regimes?---I think in the regime we  
11 are talking about here there is a clash between that  
12 component that deals with road safety and that component  
13 that deals with fire safety as against that that deals  
14 with environmental management and securing the  
15 environment. Those three things push against each other  
16 I think all the time. So, if you take road safety, we  
17 know that the statistics on deaths on local roads are not  
18 coming down relative to the sort of numbers we are seeing  
19 on state highways and state controlled roads. The issue  
20 in fixing that problem is going to turn to what sort of  
21 gap you have between the edge of the road and the tree  
22 line. The wider that gap is, the greater safety there is  
23 for the driver and yet that absolutely pushes against the  
24 notion of removal of trees and the issues around the  
25 environmental side. So councils are constantly trying to  
26 work their way through their requirements, which are about  
27 road safety, about fire safety and protection of the  
28 environment. The problem is, I think, that the  
29 legislation in no way guides councils in where the  
30 priorities should sit. I would argue at the moment the  
31 weight sort of leans a bit to the environment side because

1       it is so impenetrable almost to actually work through the  
2       legislative regime.

3    You spoke about priorities, which gives rise to a question  
4       about funding and resources. Are councils given any  
5       component or line in their budget by way of funding from  
6       the state government that is devoted to maintenance of  
7       roads and maintaining the safety of roads?---No, there is  
8       money that comes from the Commonwealth through their  
9       grants programs that flows into local government for road  
10      management, but part of the complexity of this is that the  
11      endangered species in the council environment, that is  
12      councils that are at financial risk, the majority of those  
13      actually sit in the CFA areas and they are the councils  
14      who have the longest road networks, the most dispersed  
15      population, the greatest amount of state park, lowest  
16      revenue base and they are the threatened species in our  
17      environment.

18    In relation to resourcing, this was a question that you were  
19      asked to poll your constituent members about and the  
20      answers are collected in attachment 2. The answers start  
21      at (WIT.4014.001.0014). We will have that chart or part  
22      of the chart brought up. The way in which the chart works  
23      in each occasion is your councils are collected in  
24      alphabetical order and it was question 17, as it happens,  
25      where your councils were asked, "What proportion of  
26      council resources are devoted to roadside vegetation  
27      management and clearing?" So if we can look at that page  
28      there, question 17 is the third question along the top.  
29      We may have to have that brought up a little so you can  
30      read it more easily. We want to be able to look at the  
31      answers down that column. The first is just an example,

1 they happen to be first up. It's the Alpine Shire  
2 council. They say they spent \$45,000 on local road  
3 vegetation works in '08/09, excluding slashing, and a  
4 further \$69,000 on road reserve grass slashing. Other  
5 roadside clearing is undertaken as part of other road  
6 maintenance works. The total budget, including capital  
7 works was \$26.28 million. Obviously every council is  
8 going to give a different answer depending on its  
9 requirements that year and its budget. Having looked at  
10 the answers that all your councils gave to that question,  
11 can you give us any examples of particularly resource rich  
12 or resource poor councils; what is the spread of the  
13 spending; what is the spread of the problem?---Alpine  
14 Shire would be a classic resource poor council. The  
15 challenge for councils has been that they have had  
16 obligations under the Road Management Act to get the  
17 standard of their roads, the pavements and edges, up to a  
18 reasonable standard in terms of their road management  
19 plan, so that's where a lot of the effort has gone over  
20 the last five years, really, since 2005. So you will see  
21 with an Alpine shire, stressed financially, enormous  
22 commitments in terms of road construction and maintenance,  
23 aged care and so on, the normal array of services, and the  
24 more wealthy councils, and you will be hearing from one of  
25 the stronger councils in regional Victoria, Latrobe, they  
26 have greater capacity, stronger staffing numbers, bigger  
27 revenue base.

28 Can we look at page 0024, where the entries for Murrindindi and  
29 Nillumbik happen to appear sequentially. We are looking  
30 at first of all Murrindindi?---Yes.

31 We need to be a bit further over the page so we can see the

1 answer to 17. Murrindindi Shire spent approximately  
2 \$410,000 on vegetation clearance along roads, a further  
3 \$55,000 on slashing and other fire prevention works. Fire  
4 prevention works include the provision of infrastructure,  
5 they advise. Under that is Nillumbik, \$50,000 for  
6 slashing firebreaks identified in their fire plan and  
7 \$70,000 for the balance of roadside maintenance?---Yes.

8 So necessarily all of the answers will be local and they will  
9 have been driven by local concerns and local  
10 funding?---That's right, and what the road network looks  
11 like. Because Nillumbik has got a large amount of pure  
12 urban in it with kerbs and gutters and so on, you get a  
13 different look to Murrindindi, which is primarily open  
14 verge roadways.

15 Just one further example by way of contrast. The next page,  
16 0025, you have an answer from the Surf Coast shire  
17 council. There it is indicated roadside vegetation  
18 management attracted \$382,000 worth of spending. The  
19 primary aim of this budget is to ensure road users are not  
20 impacted upon with encroaching vegetation, so they make  
21 special mention of that, not specifically focused on fire  
22 prevention. Then there are further amounts of \$87,000 and  
23 \$210,000 given to each of the resealing and resheeting  
24 program and the fire prevention seasonal works program.  
25 Down the bottom they indicate this represents  
26 1.347 per cent of the annual operating budget. What sort  
27 of factors in relation to the topography and vegetation of  
28 that council have promoted this level of spending in terms  
29 of roads?---It is a complex environment in Surf Coast and  
30 it has a significant population now with becoming a real  
31 sea change location. It has the sort of rural/urban

1 interface, so you will see, I think, in that sort of  
2 council quite complex programs in trying to deal with  
3 population and the amount of traffic that you've got on  
4 roads.

5 We won't go through any more because they are all individual,  
6 as I have noted. So I want to step back from that and ask  
7 you about the ways in which councils manage this issue in  
8 terms of regulatory regimes. There are a number of types  
9 of instruments through which councils regulate roads,  
10 whether as to safety or whether as to fire prevention.  
11 One of those we have heard a lot about, the municipal fire  
12 prevention plans. Is it your understanding that typically  
13 municipal fire prevention plans may deal with roads in a  
14 number of ways. One might be to identify some existing  
15 roads as possible firebreaks?---That's correct.

16 Another might be to set standards or recommendations as to  
17 treating roadsides in a fire prevention way?---Correct.

18 The focus of that document, the municipal fire prevention  
19 plans, its focus on roads is necessarily driven to fire  
20 prevention and risk reduction aims?---That's correct.

21 In contrast, councils also typically have road management plans  
22 and is it your understanding that those plans are usually  
23 more directed towards the maintenance of safe roads,  
24 traffic flows and maintaining the capacity to use our  
25 roads in a safe way?---That's correct.

26 A number of councils, if not all, will also have a roadside  
27 vegetation management plan. There is sometimes different  
28 terminology about those plans, but what are those  
29 documents usually directed at?---They are really the  
30 operational plan that the council has to deal with  
31 the roadside itself and its management, so it is really an

1 operational document. It will be called a different title  
2 in different locations, but it is the way they actually  
3 approach on a plan basis the management of the roadsides.

4 In light of the usual title of this document, roadside  
5 vegetation management plan, sometimes that word  
6 "vegetation" is replaced with "conservation", I think.  
7 What is its real focus at the operational level? Does it  
8 focus on fire prevention, safety, or what?---I would say  
9 that it is more focused on the road safety side, but it  
10 does take into account fire prevention. But it is about  
11 managing the resource of the council and the job that has  
12 to be done and how you actually apply the resource to the  
13 task.

14 There is another category of document that might regulate the  
15 question of roads and roadsides. Some councils, as  
16 I understand it, have local laws which might deal with the  
17 question of vegetation removal at large and/or the  
18 question of vegetation removal on roadsides?---That's  
19 correct.

20 And that's just one of the quirks, is it? Some councils have  
21 them and some don't?---That's right. We have 79  
22 governments out there. They will all do things in  
23 slightly different ways, depending on what the direction  
24 of the council is and what the community's expectations  
25 are.

26 Each of your councils were polled and as it turns out it was  
27 questions 10 and 11. They were polled as to whether they  
28 implement the CFA's 2001 guidelines that Mr Leslie gave  
29 evidence about yesterday or whether they have got in its  
30 place agreed standards with the CFA about how to implement  
31 the requirements upon councils. Did you get a feel,

1 looking at the answers from councils, as to whether there  
2 is a typical approach to working in with the CFA and any  
3 standards it has?---I think the CFA standard sort of is  
4 the lead document, but there is some variability in the  
5 way it is handled across the councils.

6 Just scanning the answers to that question which is in the  
7 column, you can see for example Surf Coast shire on the  
8 screen does not have any specific agreement with the CFA;  
9 however, the guidelines are taken into account when  
10 identifying strategic firebreaks and the principles are  
11 taken into account when reviewing the fire plan. I can  
12 suggest to you that that's a fairly typical style of  
13 response throughout all of the answers. Does that fit  
14 with your understanding?---Yes, it is.

15 I want to ask you a little bit about native vegetation in the  
16 context of clause 52.17 of our planning provisions?---Yes.  
17 A great deal of evidence has been given about this and we don't  
18 need to go over all the same ground. Is it your  
19 understanding that there are a number of exemptions which  
20 might be relevant to councils when they are managing  
21 roadsides?---That's correct.

22 In some respects your councils have been polled about their  
23 approach to the exemptions, but I want to step back from  
24 the detail and ask you a couple of broader questions. It  
25 might be useful for you to have part of clause 52 in front  
26 of you. If we can go back to (TEN.225.005.0005). This is  
27 part of clause 52 and I just want to direct your attention  
28 to one paragraph. Under the heading "Fire protection",  
29 the second dot point, "The native vegetation is to be  
30 removed", et cetera, "for the making of a fuelbreak by or  
31 on behalf of a public authority in accordance with a

1 strategic fuelbreak plan approved by the secretary ...  
2 maximum width 40 metres." We heard evidence from  
3 Ms Dripps about the potential breadth of this exception  
4 and it was noted by her that in this subparagraph "public  
5 authority" could be broad enough to mean or include  
6 VicRoads or a council. She confirmed that to her  
7 knowledge no council has ever submitted or had approved a  
8 strategic fuelbreak plan of this kind. Do you know  
9 whether any councils have prepared such plans or have  
10 considered submitting them?---I'm not aware of any  
11 examples.

12 Ms Dripps also filed a supplementary statement quite recently  
13 and I don't know if you've had time to consider it. Have  
14 you received a copy of her statement of a day or so  
15 ago?---I have, yes.

16 In that she identified a new regime that has been recently  
17 proposed to councils in which it was suggested that  
18 councils might like to consider submitting a plan now  
19 going to be known as a local strategic fuelbreak plan and  
20 that if councils drew up such a plan and submitted it, the  
21 DSE would consider approving them. There were attached  
22 documents which indicated that the approval may turn on  
23 matters including the overall soundness of the plan,  
24 I suppose, but also it was noted that where the plan seeks  
25 to have fuelbreaks greater than 20 metres, it's unlikely  
26 to be approved unless there are exceptional circumstances  
27 demonstrated, and insofar as the fuelbreak is on public  
28 land, offset would be needed. Is that the first time you  
29 had seen that new proposal?---Yes, it was.

30 Do you recall that her statement also indicated a fairly low  
31 take-up rate. At this stage two councils had indicated

1 they had seen it but wouldn't draw on it?---That's right,  
2 I think there is a nervousness, if I recall the statement  
3 correctly, with the councils, because net gain applies in  
4 relation to public authorities. So, it is an interesting  
5 proposition that in this case, if I remember the document  
6 correctly, the private land there was no net gain but  
7 public land there was, so basically on council land they  
8 would have to deal with net gain and just in the current  
9 environment they are struggling to deal with net gain  
10 based on the arrangements that are in place.

11 When you say net gain, to turn that round the other way, are  
12 you saying councils may struggle because every kilometre  
13 of their firebreak that traverses public land needs to be  
14 offset with provision of native vegetation somewhere  
15 else?---That's correct.

16 Ms Dripps said in that context, "Look, the offset doesn't have  
17 to be in the same shire, just in the same bioregion." Do  
18 you have any views you can share with us about how one  
19 council might convince a neighbouring council to take its  
20 offset and plant trees for it?---A pretty complex task,  
21 but I would suggest the councils will say, "This is just  
22 grinding us into the ground. The rules of the game are so  
23 complex and intense that we'll just tap the mat and find  
24 another way to get around it."

25 Can I suggest to you another way to get around it. Let's look  
26 at dot point 2. If it be correct to say that public  
27 authority can include councils when they are wearing their  
28 road management hat, would not your constituent councils  
29 be better off not trying to use the new agreement that's  
30 proposed, but rather submitting a plan for strategic  
31 fuelbreaks in their area and seeing if the secretary will

1 approve it because on the face of this exception you can  
2 then get wider fuelbreaks with, on the face of it, no  
3 offset requirement?---Yes, that's right. I think the  
4 catch-22 in this, though, is that you are back to the  
5 secretary of the department where potentially you will be  
6 back at net gain, so I think it is a catch-22.

7 Would you be prepared to recommend to your constituent councils  
8 that, where they are willing, they work in with the CFA  
9 and even the land and fire division of the DSE to devise a  
10 sound plan and submit it and have a go, seek  
11 approval?---I think it's a smart thing to do. It's worth  
12 a try. We have been successful in relation to an outcome  
13 in relation to the 15 high risk roads and that's an  
14 example of how the organisations have worked together. So  
15 what happened in that case was that the Moorabool shire  
16 came to the MAV and said, "We're really worried about the  
17 town of Blackwood and we're worried that the road in and  
18 out of Blackwood, a single road, has the possibility of  
19 dead trees and so on dropping over it in a fire or strong  
20 wind condition." We went to VicRoads and had a discussion  
21 with them about it, had a discussion with senior people  
22 inside the bureaucracy, got a team of DSE, VicRoads, CFA  
23 and MAV together and within two hours we had a new policy  
24 in place which was agreed by the agencies and the 15 roads  
25 were dealt with or are being dealt with. The local  
26 government, there were three councils involved in local  
27 government, I think, four roads, they were dealt with very  
28 quickly. We got a model where trees could be removed  
29 efficiently, quickly, no great onerous reporting  
30 requirements. It is possible.

31 The new approach that you are talking about is in fact

1 encapsulated in attachment 4 to your statement. We might  
2 deal with that now, (WIT.4014.001.0038), attachment 4 to  
3 your main statement. If we can look at the first page of  
4 that. First, just to confirm, this project grew out of  
5 the approach by one council?---That's correct.

6 And now has evolved to the stage where its point is to start  
7 with the top 52 towns, if I can call them that, the 52  
8 towns that have been adjudged under the township  
9 protection plan regime as needing the most urgent  
10 attention?---That's correct.

11 And the point of this approach is in towns within that 52 where  
12 there are particular issues that can be summed up in this  
13 way: towns that are essentially one road in, one road  
14 out?---Correct.

15 The view has been taken, because of the particular challenges  
16 that poses during a fire, that one needs to be sure that  
17 road is in good working order in terms of access and  
18 egress?---That's correct.

19 And so through the cooperative model you have described with  
20 CFA, DSE, VicRoads and councils coming together, you have  
21 been able to identify the most important places where  
22 critical works will need to be done to ensure the  
23 integrity of the one road in, one road out?---That's  
24 correct. It links back to the town protection plan, no  
25 neighbourhood safer place, how risky is this town, the  
26 road has to be open no matter what. Then we end up with  
27 this policy.

28 As I understand it, if a particular town does not yet have a  
29 neighbourhood safer place, you have given that town even  
30 greater priority on the access/egress project?---That's  
31 correct.

1 Because, of course, if there is no neighbourhood safer place,  
2 they have to get out if they are not otherwise prepared to  
3 defend their home?---And the fire services and the  
4 emergency services have to get in.

5 So the way this project works is there are some agreed criteria  
6 set out there in terms of what you are going to do. You  
7 are going to remove dead trees that are leaning towards or  
8 overhanging the road, you are going to remove trees that  
9 are leaning significantly towards the road, remove  
10 diseased trees, remove debris, remove trees at the top,  
11 remove trees that are unstable. Mr Spence, the theme of  
12 those criteria seems to principally directed at making it  
13 safe to get in and out, but point 4 also seems to have a  
14 fuel reduction load component?---Yes, it does.

15 That might be a good thing in any event, but in terms of using  
16 the road it will assist safety, keeping radiant heat down  
17 and particularly safety of firefighters?---That's correct.  
18 I think the fact that you brought the four agencies  
19 together to work up the policy quickly really gets the CFA  
20 issues in there about fire and the road issues from the  
21 road authorities and DSE's issues in relation to the  
22 environment neatly dealt with.

23 The way that it is done is identified in the next dot point,  
24 down under paragraph 6; you do joint site inspections. As  
25 I understand it, that has offered a particular benefit,  
26 getting the people there physically together. Is that  
27 what happens?---That's correct, so the parties go to the  
28 site, have a look at it, agree on the strategy and then  
29 the work commences.

30 Mr Spence, that sounds to me like something that would happen a  
31 lot more quickly than individual inspections interspersed

1 with email chains and decisions and discussion papers.  
2 This is something you do on the spot?---That's right, and  
3 you need all the parties there. You can't just have a few  
4 of the parties.

5 Can we just look at the next page, 0039, to get a flavour of  
6 the way that it is going to work. Let's take Blackwood,  
7 as I think that was the town that inspired the whole  
8 program, is that right?---Yes, that's correct.

9 Blackwood, the road in question is Greendale-Trentham Road from  
10 Barrys Reef to Greendale. You give its location, VicRoads  
11 to determine, it is within a VicRoads region and within  
12 the municipality of Moorabool. CFA has proposed, and  
13 there is a whole lot of text there about what the CFA says  
14 is necessary here: completing proposed burn, treating  
15 access and egress routes; the neighbourhood safer place it  
16 notes is in Blackwood and it's the fire station, "but this  
17 will require further treatment by removal of some native  
18 vegetation. The issue of private forest, bush blocks and  
19 gorse in Blackwood could be improved by using mechanical  
20 mulching." Is this where, as you say, the CFA get to put  
21 their issues in with the other partners?---That's correct.

22 There is then a joint inspection agency and on this occasion it  
23 was all four entities, CFA, DSE, the council and VicRoads.  
24 VicRoads it says is responsible for the work, so in that  
25 instance it will be a matter for VicRoads with its  
26 contractors, or however it organises itself, to get the  
27 work done on the roadside?---That's right, and we get  
28 reporting weekly on the process, so it is regular  
29 reporting that is collated by VicRoads and provided to all  
30 the parties.

31 DSE's issues, how are they being managed and how are the

1 requirements of clause 52 being managed under this  
2 program? Is it regarded as all falling under a particular  
3 exception or how is it being done?---There has been a  
4 separate exemption provided to deal with flora and fauna  
5 guarantee and other native vegetation questions.

6 So those are the other extra documents attached to Ms Dripps'  
7 second statement?---That's correct.

8 So, as far as you understand it, DSE has said to councils -  
9 let's just focus on your people - that when you are doing  
10 work covered by this program you are exempted from clause  
11 52?---They have actually said it in a sort of roundabout  
12 way to the CFA, I think, and it has come to us through a  
13 third party or provision of documents.

14 Ms Dripps suggested yesterday that she understands it works in  
15 two ways. They have issued an agreement to councils that  
16 if councils sign they can take the advantage of and can be  
17 assured they are not caught by clause 52, and a permit to  
18 CFA when they are undertaking the work. In fact, she  
19 indicated that I think only six councils have taken up the  
20 agreement in question and an oddity that was pointed out  
21 to her by Dr Lyon was that none of those are the six  
22 councils with these roads. Has that been brought to your  
23 attention?---It has been brought to my attention. I think  
24 it is really a failure in the communication chain. The  
25 normal practice that's been agreed with the State, really,  
26 on communication with councils in relation to bushfire  
27 matters is that it is channelled through the MAV, we  
28 negotiate the strategy and then we get the councils to  
29 deal with it. That's worked very effectively. This one  
30 has gone outside that loop.

31 So can I be the honest broker here and help you fix this. If

1           there were an approach made to MAV in relation to a form  
2           of words that would help this program be implemented  
3           without any risk of your councils breaching clause 52, you  
4           would work with DSE and your councils to get the right  
5           form of words?---Absolutely. We want to get the job done  
6           and we want to avoid councils getting penalties under  
7           section 52. The idea is to get the outcome in the most  
8           efficient way.

9   Turning to other legislative controls, there has also been some  
10          evidence about the fact that the state Flora and Fauna  
11          Guarantee Act and the Commonwealth EPBC Act both sit on  
12          top, if you like, of the native vegetation regime. They  
13          have different requirements for different reasons?---Yes.

14   How do your councils and their staff inform themselves about  
15          those two regimes to ensure they don't fall foul of  
16          them?---It is a difficult one to answer because they are  
17          both complex regimes. I couldn't really answer the  
18          question as to how the councils actually work their way  
19          through this. I mean, I've spent some time having a look  
20          at the Commonwealth legislation in particular and it is  
21          incredibly difficult. The way it operates is a bit like  
22          the taxation department self-assessment model. If you get  
23          it right, you're okay; if you get it wrong, you get  
24          whacked. What happens is, the way it works is if a  
25          council, say it has 4,000 kilometres of road it wants to  
26          maintain, it effectively has to go in through a web portal  
27          in the Commonwealth department and have a look at the  
28          location it wants to work in and have a look at the  
29          species that are relevant to the Commonwealth legislation,  
30          that is endangered species under international law or  
31          international treaties and migrating species under

1 international treaties, and it has to have a look at the  
2 site and see what it gets from the site to determine how  
3 it goes forward. Now, I'm a bit - I have strange ways of  
4 doing things sometimes, so I did my home in Fitzroy. You  
5 know how environmentally sensitive Fitzroy is and how many  
6 interesting species there are around Fitzroy, probably not  
7 endangered, or some of them are endangered, clearly. So  
8 I did my house. What I found in my house is that I would  
9 have to be very sensitive about what I did with my house  
10 because it's got - I can run through the list: the regent  
11 honeyeater, the swift parrot, the Australian painted  
12 snipe, the growling grass frog, the southern bell frog,  
13 the golden sun moth, the spot tailed quoll - I have never  
14 seen a quoll in Fitzroy but I assume they're there - the  
15 tiger quoll and so on. I also did the same thing - I'm  
16 quite happy to give you these documents - I did the same  
17 thing for the corner of Swanston and Flinders Streets.  
18 There is quite a lot of activity in that space, again on  
19 the steps of probably the station, but there is a list, a  
20 massive list of endangered species and migrating species  
21 that are featured on the corner of Swanston and Flinders  
22 Streets.

23 COMMISSIONER PASCOE: I think they are mostly two-legged,  
24 Mr Spence?---Mostly two-legged, that's correct. But the  
25 one that took my interest most was the listed marine  
26 species and there is the great egret, the cattle egret,  
27 the Latham's snipe, the white-bellied eagle - we haven't  
28 seen one of those in Flinders Street for a while,  
29 I suspect. What I'm saying to you with this is that, if  
30 you look at it from a council's viewpoint, the requirement  
31 is they go to this website, identify what's there, and

1 then they have to think about, "Do we take the risk and do  
2 this work or do we get a consultant in to actually look at  
3 the scene and determine whether in fact what this document  
4 says is accurate." So they do that. If the consultant  
5 comes in, you spend a lot of money, you get the answer, it  
6 says you've got a problem, then you go to the Commonwealth  
7 to get an approval. That's an incredibly cumbersome  
8 process when you are dealing with 119,000 kilometres of  
9 road.

10 MS DOYLE: Have you had any discussions with the Commonwealth?  
11 We've had evidence of a particular exemption that's been  
12 issued by Minister Garrett in relation to dealing with the  
13 emergency while it was on foot of our bushfires and  
14 evidence of the fact that South Australia, for example, is  
15 at the beginning of a process in terms of getting an  
16 assessment done of its approach to land management. Have  
17 councils or MAV had any discussion with Commonwealth about  
18 whether there is any place where councils can get an  
19 exemption, an agreement or a strategic assessment,  
20 whatever title you might give it, a means of doing fire  
21 risk prevention or reduction works that will in some way  
22 have the protection against the Act?---We haven't at this  
23 stage and the reason is, I think, that - well, the reason  
24 is that we are learning about these issues as we go  
25 forward and this has really come to the fore in recent  
26 times, so we are ready to have the engagement with the  
27 Commonwealth. I've learnt more on this in the last two  
28 weeks, really, when you actually drill down into the  
29 complexity of it for a council, because I'm a generalist  
30 and I travel across a lot of different issues, but this  
31 one is an incredibly complex issue in a policy sense to

1           unravel, I think.

2   Leaving aside the Commonwealth and turning to the questions of  
3           the Flora and Fauna Guarantee Act and the State clause 52,  
4           after some discussion with Ms Dripps about the way the  
5           different exemptions work and what covers what, I put a  
6           suggestion to her that I want to repeat to you. Has any  
7           thought been given to advocating for a new exemption under  
8           clause 52 with the following form or effect: that there be  
9           an exemption covering works done for the purpose of  
10          reducing the risk of fire, whether that be restricted to  
11          roadsides or more generally, where such works are approved  
12          or recommended by the CFA?---I think that's an entirely  
13          logical thing to do because it's the current gap in the  
14          system.

15   Can I suggest to you that at the moment your constituent  
16          councils have to devote some effort and care to making  
17          sure they fall properly within either grasses, weeds, fire  
18          protection or public roads or the fuelbreak components of  
19          all of those in order to be sure they are not contravening  
20          the spirit of clause 52?---That's correct, and I think  
21          when you look at the collected information from the  
22          councils you will see a lot haven't taken up the agreement  
23          with DSE on roads because I think they're using the other  
24          exemptions and have probably been very cautious about  
25          getting outside the grass cutting and canopy removal, the  
26          third, basically.

27   Just to finish that question about the public roads exemption,  
28          I went through that in detail with Ms Dripps so I won't  
29          rehearse that material and the complexity of it. But she  
30          confirmed that a number of councils have signed what's  
31          called the public roads agreement and some haven't. Have

1           you had feedback from your councils about why some of them  
2           have gone that route and others have not agreed to sign  
3           it?---They look at it - I think it is partly a resourcing  
4           issue. I know a number of the councils have been really  
5           cautious about getting involved in it, not because of its  
6           intent but of the record keeping and reporting required  
7           and they are nervous about when they have contractors  
8           doing this work, whether they cross the line or not. So  
9           particularly the ones that are short on a dollar are  
10          really worried about the administrative burden that sits  
11          beside trying to sort out what is basically a roadside  
12          clearance issue.

13         So can I suggest to you, Mr Spence, the alternative that I have  
14          floated with both you and Ms Dripps has a focus on the  
15          purpose of the works, namely for reducing or minimising  
16          the risk of fire, but also is directed at trying to be  
17          sure it's a sound plan and in that regard one relies on  
18          the expertise, the proven expertise of CFA. Are those two  
19          elements that might attract MAV or its councils in terms  
20          of supporting such an exemption?---I think we would  
21          welcome it.

22         The final matter I want to ask you about is the use of fire  
23          prevention notices. Mr Leslie from the CFA confirmed  
24          yesterday he has heard of a couple of situations in which  
25          a municipal fire prevention officer has served a fire  
26          prevention notice under the CFA Act on its own council and  
27          he had heard of that anecdotally. Is that something you  
28          have heard of and is that something that you have  
29          considered in terms of why that might happen?---I have  
30          heard of it. I know it actually happens. I don't think  
31          it happens a lot, but it does happen. It is a means of

1 the councils getting through the exemption, so they use  
2 the fire prevention notice to trigger the fire prevention  
3 exemption.

4 Because acting in accordance with a fire prevention notice is,  
5 as you say, one of the triggers to enliven the fire  
6 protection exemption?---That's correct.

7 That sort of creativity, if I can describe it in that way, is a  
8 matter for the individuals who are involved in it. But  
9 would you prefer there to be a clearer way home in terms  
10 of drawing on exemptions under this regime?---I think the  
11 thing that's missing out of it is we've got road safety  
12 and we've got environment as strong influences for the  
13 direction of the policy, but fire prevention isn't strong  
14 enough. In my mind there needs to be an exemption in  
15 there that actually deals with it that is not articulated  
16 in the form of fire protection, as it is at the moment,  
17 which is really directed I think more to firefighting  
18 responses for CFA than council activities.

19 I have no further questions for Mr Spence. Commissioners,  
20 anything arising?

21 COMMISSIONER PASCOE: I just want to give you a fairly broad  
22 question, Mr Spence, and I'm going to have a brief  
23 preamble relating to the complexity of regulation. I'm  
24 reminded of a comment by the chair of the Productivity  
25 Commission, Gary Banks, that in the last 90 years of the  
26 20th century there was more legislation passed than in the  
27 first decade. No, reverse that. There was more  
28 legislation passed in the - I'm losing the plot  
29 here?---I know what you mean.

30 You have the intent, that we have had a massive amount of  
31 regulation at all levels of government and the Business

1 Council of Australia was prompted to undertake a study a  
2 couple of years ago which costed the impost on business at  
3 \$9 billion per annum. There haven't been comparable  
4 studies done of the cost on all levels of government, but  
5 we know that many levels of government, and in particular  
6 I think the Victorian government and indeed the  
7 Commonwealth, have been working to reduce the regulatory  
8 burden but with limited success. I suppose the broad  
9 question is for you is there a better way? Ms Doyle has  
10 given you a suggestion of a broad exemption under clause  
11 52 of the Victoria Planning Provisions as one suggestion.  
12 In light of the example we had yesterday, which I think  
13 was really a bit of a contrast between Mr Leslie from the  
14 CFA, who was working at the officer level and trying to  
15 find means of stitching up small arrangements that would  
16 enable him to work through the tangle of regulatory  
17 requirements, and perhaps at the other end of the spectrum  
18 we had Ms Dripps who was giving quite a singular focus on  
19 the environmental protection values for the DSE. When you  
20 look at the impact on council officers, and you have aptly  
21 described that today so I'm not going to go into it again,  
22 but what we can see is a morass of regulatory requirements  
23 aptly described, I think, by the species that need  
24 protection at the corner of Flinders and Swanston Streets.  
25 So I'm really asking you from your own perspective is  
26 there a better way?---I think clearly there is. I think  
27 the problem is that we just get regulation laid on with a  
28 trowel and it is generally through a single focus.  
29 I think the disappointing thing is that over time we layer  
30 and layer up regulation and legislation without thinking  
31 of the unintended consequences of it and it biases things.

1           There is no doubt that native vegetation is important, the  
2           habitat is critical, but also the safety of humans is  
3           critical. Getting that balance right requires I think a  
4           stripping back of the legislation and a rethink of the  
5           whole model. We are heading in the right direction,  
6           I think, with the Commission and the reviews that are  
7           occurring. We are getting there, but this is just being  
8           layered up and layered up. For councils who are generally  
9           just doers, they take the task and they try and get on and  
10          do it with the resources they have got available. Having  
11          layer and layer of regulation just grinds them to a halt  
12          almost.

13        I think often the proof is in the pudding when at any layer of  
14          government where people look for ways around legislation  
15          and we have had ample evidence of that with some of these  
16          provisions. Mr Leslie didn't feel sufficiently brave or  
17          senior to chance his arm on a proposition that perhaps one  
18          way forward might be for there to be stronger statutory  
19          provisions for the CFA, including the obligation for  
20          planned burning to rest with them and one would assume  
21          therefore the funding. Is that something that might be  
22          welcomed by local councils?---In relation to private land?  
23          I think it would be. I think clear lines of  
24          responsibility are really key to it and at the moment it's  
25          blurred.

26        Can I just correct my preamble. In the final decade of the  
27          20th century there was more legislation passed than in the  
28          preceding nine.

29        MS DOYLE: And that doesn't surprise me. I understand the  
30          order of events now is the Commonwealth will ask Mr Spence  
31          some questions and then his own counsel.

1 MS TRELEAVEN: Commissioners, before I ask Mr Spence any  
2 questions, I would just like to repeat what Ms Judd said  
3 about Dr Lyon's opening, and in particular the  
4 Commonwealth has been taken by surprise this morning by  
5 some of the evidence of Mr Spence.

6 Ms Doyle yesterday inferred somehow by the  
7 delivery of our tender bundle to her the night before that  
8 we had added a layer of complexity to these matters. It  
9 is clear that since at least August 2009, when counsel  
10 assisting served a request upon Mallesons for Mr Spence's  
11 statement, that the involvement of the Commonwealth has  
12 been known. Mr Spence's statement doesn't raise these  
13 issues but was filed in November 2009. The Commonwealth  
14 has not been requested to provide any evidence on these  
15 matters, and in particular has not been asked to provide  
16 any evidence about any information or training sessions  
17 that it provides to councils to assist them in their role.

18 Obviously attempts will be made to remedy this  
19 position through cross-examination of witnesses today, but  
20 I would just like to reserve the Commonwealth's position  
21 more generally.

22 CHAIRMAN: Yes.

23 MS DOYLE: I don't think the involvement of the Commonwealth is  
24 a surprise. For example, it was raised in paragraph 28,  
25 I think it is, of Ms Dripps' statement that was served in  
26 December last year, but of course there ought not be any  
27 unfairness. If the Commonwealth wants to advance any  
28 material, it is free to do so with this caveat: The  
29 written submissions on this topic will be filed by counsel  
30 assisting on 22 March. Any material that is received too  
31 close to that date to be given proper consideration we

1 will have great difficulty agreeing ought to be tendered  
2 or considered in any way. It is the Commonwealth's  
3 regime. It must know it well. If it can assist us,  
4 that's welcomed, but with that caveat. It must be well in  
5 advance of 22 March.

6 MS TRELEAVEN: Perhaps I should clarify that. It wasn't the  
7 Commonwealth's role that was unknown, it was the criticism  
8 that was to be raised in respect of the Commonwealth's  
9 role.

10 <CROSS-EXAMINED BY MS TRELEAVEN:

11 Mr Spence, you just gave evidence that the problems encountered  
12 by councils in respect of the application of the EPBC Act  
13 have generally come to your attention over the last two  
14 weeks and you have been endeavouring to get on top of it;  
15 is that correct?---That's correct.

16 Mr Spence, are you aware that the EPBC Act has been in place  
17 since 16 July 1999?---Yes.

18 Is it not fair to say that, as the peak body of the municipal  
19 councils, that had any serious problems been identified  
20 they would have been raised before two weeks ago with  
21 you?---The issues have been, I think, floating around for  
22 some time. When we turn our mind to it really depends on  
23 how forceful the issues are and what the debate is about.

24 So it has only been in the last two weeks that those issues  
25 have become forceful?---Well, yes, because when you, as  
26 I am, are involved in consideration of bushfire matters  
27 and bushfire protection, my life pre-February last year  
28 was never or rarely in the bushfire space. Since February  
29 last year I've spent almost all my life in the bushfire  
30 space and every week I learn something new that needs to  
31 be dealt with. This is not about criticism of the

1 Commonwealth. I'm just trying to point out how hard  
2 things are for councils and any client looking at the  
3 system. I come to this because, as we build up our  
4 knowledge of the system and the complexities, we have been  
5 dealing with native vegetation and all of a sudden we come  
6 across this piece of legislation and its complexity. We  
7 have one council who copped a significant fine, not to do  
8 with clearance for bushfire purposes or so on, but they  
9 copped a whack. That raised the issue in local  
10 governments' minds and, as I have been working up the sort  
11 of tree of issues to deal with, this has now come onto my  
12 agenda.

13 I just want to revisit that particular council you have  
14 referred to. It is correct, isn't it, that that is the  
15 prime example of the difficulties with the application of  
16 the EPBC Act, but doesn't relate to roadside clearance so  
17 far as is necessary for bushfire mitigation?---No, that's  
18 correct. It doesn't relate to that, it is a completely  
19 separate issue. But what it led us to do was to actually  
20 look at this from a customer or a citizen viewpoint, not  
21 to look at it from a policy down viewpoint. When we  
22 understand the structure of the way the thing works, we  
23 entered through the front door to see how you actually did  
24 it, and that's when I just used a couple of target sites  
25 that I know just to see what I got. The advice I get from  
26 my legal team, who work in this space a lot, is they say  
27 to me you never identify a location that hasn't got some  
28 of these species in it, which says it is a complex model  
29 to work in.

30 Mr Spence, if you've been spending time familiarising yourself  
31 with the Act and its application, you would be aware that

1           it only prohibits actions which are likely to have a  
2           significant impact on matters of national environmental  
3           significance; is that correct?---That's correct.

4    So if we take your example of your home in Fitzroy, it is  
5           unlikely that anything that you would do in your house  
6           would have a significant impact on those species that you  
7           have found may or may not exist in the locale?---I don't  
8           know. The lizard that was on the gate a few weeks ago, is  
9           it a significant issue? I don't know. The problem I've  
10          got with this as an individual, not speaking for the MAV,  
11          is do I have to have a QC beside me every time I have to  
12          assess something? It is so complex. You can't simply get  
13          through the decision path if you look at it from a client,  
14          a citizen in viewpoint.

15    Mr Spence, this all assumes, of course, that before councils go  
16          to the federal government's website, the Department of  
17          Environment, Water, Heritage and the Arts, that they don't  
18          in fact know what threatened or endangered species exist  
19          in their municipal districts, doesn't it?---That's true.  
20          But also what this is dealing with is migrating species,  
21          which is incredibly complex, I think. The migrating  
22          species might only be there for, what, three weeks or four  
23          weeks as it passes by. As I understand it, if you damage  
24          a habitat for a migrating species you are in the same boat  
25          as if you damage it of a species that's there all the time  
26          and is endangered. My concern with it is, if you look at  
27          it from a council's viewpoint and particularly the poorer,  
28          smaller councils where they haven't got the massive skill  
29          set of the big ones, to deal with something like this is  
30          I think incredibly onerous. That's my view.

31    Mr Spence, have you spoken with anybody from the department in

1 relation to these matters?--No. Happy to do it, though.

2 Are you aware that in June last year the department conducted  
3 an information session for fire prevention officers of  
4 both councils and fire agencies at which the department's  
5 approach to these matters in respect of bushfire  
6 mitigation was presented?---I heard about that a matter of  
7 just before I came on to give evidence.

8 Are you aware that the department also has a general  
9 information line that's available for people to call to  
10 identify whether or not they may be faced with the  
11 possibility of having to comply with the Act?---Yes, I am.  
12 Could I just pass an observation, too, that in just making  
13 an examination of this - hunting out this material, the  
14 website is very difficult to penetrate to find the spot.

15 Mr Spence, if I can use that particular council that you  
16 referred to. It is the Colac Otway Shire Council, is it  
17 not?---Yes.

18 I would like to hand you some schedules that are to be found in  
19 the council's planning scheme. Planning schemes are  
20 documents that are prepared by the councils themselves,  
21 aren't they, and then are subject to review by the  
22 department?---That's right.

23 If you can have a look at schedule 2 to the vegetation  
24 protection overlay?---Yes.

25 We look at the second page of that schedule?---Yes.

26 At the bottom of that page there is listed a number of  
27 threatened or endangered species being present in  
28 particular areas of that council, aren't there?---There  
29 are.

30 If we look at the first one in that list, we have the  
31 Cressy-Shelford Road area, which is the subject of the

1 complaint that's been made?---Yes.

2 We can see there that that says there are remnant native

3 grasslands?---Yes.

4 And that there are rare and threatened species and communities

5 present?---Yes.

6 Then if we go to the other document and look at page 3, and

7 Dr Lyon can correct me if my geography is a bit out, but

8 we see there the first item is the east side of Cressy

9 township and it refers to native grassland?---Yes.

10 And the second item is the Cressy trotting track?---Yes.

11 And there is specific reference there to the striped legless

12 lizard, isn't there?---Yes.

13 And that was one of the species that was impacted by those

14 particular works?---Can I just pass a comment. I'm not

15 arguing about the issue of the fine that went to Colac

16 Otway. All I was suggesting in my evidence was that the

17 fact that they copped a \$700,000 with legals, I think,

18 bill raised in our sector's minds the scope and issues

19 around this legislation that they needed to become

20 conscious of. I don't want to get into a debate about

21 whether it was right or wrong at Colac Otway. All I'm

22 saying is our sector is sitting out there going about

23 their jobs. This legislation I suspect wasn't high on

24 their radar screen. When someone gets fined with legals,

25 say, \$600,000 or \$700,000, everyone sits up and takes

26 notice, so it changes the profile.

27 If I can just clarify something. The payment of legal costs

28 for legal advice and representation can't properly be

29 construed as a fine, can it?---No. No, it's not.

30 DR LYON: That wasn't what the witness said?---All I'm saying

31 is the council's fined, legal costs all in, it's going to

1 cost \$600,000 or \$700,000. In a shire like Colac Otway  
2 that's a massive hit to them, that's all I'm saying, and  
3 it reverberates through the sector because it's a pretty  
4 small pond, local government, and people then become  
5 sensitive to the issues. As I said to you before, when  
6 you look at it from the customer viewpoint, the citizen  
7 viewpoint, the council viewpoint, this is very difficult  
8 to work your way through.

9 A representative of Colac Otway is here today and is going to  
10 be participating in a panel?---Yes.

11 So it is probably more appropriate for them to speak to these  
12 issues than perhaps you because you've heard them third or  
13 fourth hand; is that correct?---That's correct.

14 Thank you. Nothing further, Commissioners.

15 MS DOYLE: I understand there are no further questions for  
16 Mr Spence, so I ask that he be excused. I just want to  
17 attend to two matters.

18 CHAIRMAN: Thank you, Mr Spence. You are excused.

19 <(THE WITNESS WITHDREW)

20 MS DOYLE: The first is there was mention just a moment ago of  
21 a document that I was supplied from the Commonwealth this  
22 morning. I think it is accepted that this constitutes a  
23 training package that was given by relevant  
24 representatives of the Commonwealth department to  
25 attendees including state municipal fire prevention  
26 officers and the CFA. I think it would be useful to  
27 tender it as a separate exhibit. It is  
28 (TEN.239.001.0001), if I can tender that.

29 #EXHIBIT 755 - Environment Protection and Biodiversity  
30 Conservation Act 1999 State Municipal Fire Prevention  
31 Officers Forum 23 June 2009 (TEN.239.001.0001). Schedule 2

1 to the Vegetation Protection Overlay (EXH.755.0001).  
2 Schedule 4 to the Environmental Significance Overlay  
3 (EXH.755.0005).

4 MS DOYLE: I have just been looking at it myself and it  
5 obviously seems to be a comprehensive package that was  
6 delivered to the attendees. My attention was drawn,  
7 though, to page 0029 and I just ask that that be shown.  
8 The document seems to have taken the attendees through  
9 easy ways in which the Act might be accessed, sources of  
10 advice and assistance and looking at a number of  
11 scenarios. At this page it is noted that aspects of fire  
12 management that may be significant in terms of the meaning  
13 that has under the Act include those activities with  
14 irreversible or permanent loss of protected ecological  
15 communities or key habitat for listed species, and the  
16 attendees would have already, it seems from the slides,  
17 been taken through some of the material that helps you  
18 understand what will be a significant impact.

19 One of the examples given is substantive new  
20 firebreaks, asset protection zones or access roads or  
21 one-off fuel reduction burns in remnant high value forests  
22 and other suggestions made there, including trial or  
23 experimental ecological burns. On the other hand, on the  
24 preceding page the point is made that activities with  
25 temporary or minor impacts, this is page 0028, are not  
26 likely to be subject to the Act. The types of activities  
27 there include maintaining firebreaks, so presumably  
28 existing firebreaks, routine burn-offs, removal of  
29 individual trees, for example. My attention was drawn to  
30 those two examples, although the document has to be read  
31 as a whole.

1                   What we now propose to do and it might be  
2                   suitable to take a short break now, is call three council  
3                   witnesses who will effectively sit as a panel. We have  
4                   from Yarra shire Mr Grant Jack, from Latrobe Mr Paul  
5                   Buckley and just to clarify the situation with Colac, the  
6                   original witness or deponent was to be a Mr Small, who is  
7                   overseas and unavailable. A Mr Jack Green has  
8                   familiarised himself with the contents of the statement  
9                   and is in a position to speak to the matters in any event,  
10                  so he will adopt essentially Mr Small's statement.

11                  So the panel members will be Colac shire, Jack  
12                  Green; Yarra shire, Grant Jack; Latrobe shire, Paul  
13                  Buckley. We will reorganise the room a little and have  
14                  them in place when we resume.

15 CHAIRMAN: Yes, we will take the break now.

16                  (Short adjournment.)

17 MS DOYLE: Commissioners, I now call three witnesses together,  
18                  Mr Jack Green, Mr Paul Buckley and Mr Grant Jack.

19 <JACK DAVID GREEN, sworn and examined:

20 <PAUL LAWRENCE BUCKLEY, sworn and examined:

21 <GRANT WILLIAM JACK, affirmed and examined:

22 MS DOYLE: Thank you, gentlemen. I will deal with the  
23                  preliminaries for each of you in turn. First of all,  
24                  Mr Green, your full name is Jack David Green?

25 MR GREEN: That's right.

26 MS DOYLE: And you are presently the general manager of  
27                  sustainable planning and development with Colac Otway  
28                  shire?

29 MR GREEN: That's correct.

30 MS DOYLE: You have agreed to give evidence in place of  
31                  Mr Small, who had prepared a witness statement. You have

1 had the chance to look at the materials contained in his  
2 statement and those attached, and you are in a position to  
3 speak to them?

4 MR GREEN: That's correct.

5 MS DOYLE: Are the contents of that statement true and correct?

6 MR GREEN: Absolutely. Yes.

7 MS DOYLE: I tender that statement now to be identified as the  
8 statement of Mr Jack David Green.

9 #EXHIBIT 756 - Witness Statement of Robert Small, plus 15  
10 attachments (WIT.4020.001.0001). Biographical Details for  
11 Jack Green - Colac Otway Shire Council (TEN.237.001.0001).

12 MS DOYLE: Because you were a late starter in relation to this  
13 process, your details and your experience are obviously  
14 not contained in the statement of Mr Small. You have  
15 provided us with a one-page document which is now on the  
16 screen and I will make that part of exhibit 756, if  
17 I might. It is page (TEN.237.001.0001). As this document  
18 notes, you have 26 years experience in the sector in broad  
19 terms, but you commenced with Colac Otway shire in  
20 October 2006 in the position you hold to this date, and  
21 you have served as acting chief executive officer from  
22 November 2008 to May 2009, prior to the appointment of  
23 Mr Small. You have all the responsibilities listed on  
24 that page and towards the bottom this biography notes you  
25 were previously the director for shire development in the  
26 shire of Moorabool where you managed a similar portfolio.  
27 You have also previously held a position with  
28 the Department of Industry. Having noted those  
29 preliminaries, I will come back to you in a moment.

30 Mr Buckley, your full name is Paul Lawrence  
31 Buckley?

1 MR BUCKLEY: Correct.

2 MS DOYLE: And you are presently chief executive officer of  
3 Latrobe City Council?

4 MR BUCKLEY: That's right.

5 MS DOYLE: For the assistance of the Royal Commission you have  
6 prepared a statement dealing with a number of matters  
7 which is at (WIT.4015.001.0001). Are the contents of that  
8 statement true and correct?

9 MR BUCKLEY: Yes.

10 MS DOYLE: I tender that statement.

11 #EXHIBIT 757 - Witness Statement of Paul Buckley, dated 1  
12 December 2009 plus 12 attachments (WIT.4015.001.0001).

13 MS DOYLE: Mr Buckley, you are chief executive officer and that  
14 is a position you have held for five years?

15 MR BUCKLEY: That's right.

16 MS DOYLE: Your statement records your professional  
17 qualifications, which include a Graduate Diploma of  
18 Business Management from Monash and you have also had  
19 experience in a number of other areas relevant to your  
20 current role. For example, you were the general manager  
21 of city strategy at Latrobe from 2002 to 2004 and the  
22 group manager for corporate services from 1994 to 2002.

23 MR BUCKLEY: That's right.

24 MS DOYLE: Turning to you now, Mr Jack, you are the manager of  
25 asset maintenance and services for the shire of Yarra  
26 Ranges council.

27 MR JACK: Correct.

28 MS DOYLE: You have also prepared a statement for the  
29 assistance of the Commission at (WIT.4019.001.0001). Are  
30 the contents of your statement true and correct?

31 MR JACK: Yes, they are.

1 MS DOYLE: I tender the statement of Mr Jack.

2 #EXHIBIT 758 - Witness Statement of Grant William Jack, dated 3  
3 December 2009 plus nine attachments (WIT.4019.001.0001).

4 MS DOYLE: Mr Jack, your role as I said is manager of asset  
5 maintenance and services. You are also the municipal  
6 emergency response officer. The Commission has some  
7 familiarity with the work of a MERO, as we have come to  
8 know it. What are the main responsibilities of manager  
9 asset maintenance and services?

10 MR JACK: I also manage the parks and bushland team, recreation  
11 and buildings.

12 MS DOYLE: You have been in those positions since 2006. How  
13 long have you been with the shire all up?

14 MR JACK: Just over six and a half years.

15 MS DOYLE: Thank you, Mr Jack. For this morning's purposes I'm  
16 going to invite members of the panel to comment on a  
17 number of questions and themes. There may be some topics  
18 where I ensure that each of you answers the question.  
19 There may be others where one council may be more directly  
20 impacted by a theme and therefore the others might not  
21 feel the need to comment. I want to start first by  
22 inviting each of you to tell us about your municipal area,  
23 your shire, and in particular its management of roads at  
24 the high level.

25 Could I just start with you, Mr Green. In  
26 relation to Colac Otway shire, first of all give us a  
27 thumbnail sketch of its size, the type of topography and  
28 landscape you will find there and, if you are able, the  
29 size of the ratepayer base.

30 MR GREEN: Colac Otway shire is a municipality located within  
31 the Surf Coast to the east and Corangamite shire to the

1 west and Golden Plains shire to the north. The southern  
2 boundary is the Victorian coastline. We have a very  
3 diverse land form; volcanic lakes, craters and plains in  
4 the north, hinterland and forests of the Otway Ranges, and  
5 the Great Ocean Road coastline to the south. The shire is  
6 an area of 3,530 square kilometres, a population of  
7 approximately 21,800, which swells to almost 45,000 during  
8 the summer months. The municipality also has a large  
9 number of national, state and regional parks, and an  
10 extensive inland lakes system.

11 Colac is our key industrial, commercial and  
12 service centre, a population of approximately 12,000.  
13 Apollo Bay is the other major urban centre, a permanent  
14 population of 1,000 that swells to over 15,000 during the  
15 summer season. Industries located within the Colac Otway  
16 shire include substantial dairy, sheep, cattle and pig  
17 farming, milk and meat processing, forestry, timber  
18 processing, tourism, fishing and craft enterprises. Colac  
19 Otway shire contains approximately 2,100 kilometres of  
20 roads, of which council manages 1,660 kilometres, and  
21 various agencies, including DSE, Parks Victoria and  
22 VicRoads manage the remainder.

23 MS DOYLE: You have told us a little about the population and  
24 the way it swells in the summer months. What about the  
25 ratepayer base? Would it generally be regarded in  
26 Victoria as one with a high ratepayer base and therefore  
27 high revenue in that regard, or is it on the lower end of  
28 the scale?

29 MR GREEN: It is on the lower end of the scale. I suppose  
30 there are councils that are smaller, but it is a low rate  
31 base for the area of land and the responsibilities that

1 council has, and I think also the diverse topography and  
2 the diverse issues that we face make it even more complex  
3 in that sense.

4 MS DOYLE: Turning to Latrobe, Mr Buckley, can you similarly  
5 give us a thumbnail sketch. What does the region look  
6 like and are there the same sorts of issues in terms of  
7 the permanency of the population base and the ratepayer  
8 base?

9 MR BUCKLEY: No, very different. About 1,400 square  
10 kilometres, a population of 73,000, a rate base of about  
11 40,000 assessments, a total budget of about \$90 million  
12 per annum. A very diverse landscape from the Strzeleckis  
13 through to coal mining operations. We produce 90 per cent  
14 of the state's power from the Latrobe Valley and a huge  
15 pulp and paper industry as well, so in that context about  
16 16 per cent of the landscape is plantation associated with  
17 that industry.

18 MS DOYLE: Your statement indicates at paragraph 11 that  
19 Latrobe contains approximately 1,486 kilometres of roads.

20 MR BUCKLEY: That's correct.

21 MS DOYLE: Do you have a feel for what portion of those are  
22 roads that the council needs to manage? You may not know  
23 the split.

24 MR BUCKLEY: The council manages about 1500 kilometres of roads  
25 itself.

26 MS DOYLE: I will come back to you in relation to the specifics  
27 of that, but let's ask Mr Jack the same question. In  
28 relation to the shire of Yarra Ranges council, can you  
29 tell us a little about the area that it is responsible for  
30 and turn your mind also to the question of population base  
31 and ratepayer base.

1 MR JACK: Yes. The shire of Yarra Ranges is an interface  
2 council on the metro border or outer rim of Melbourne. It  
3 has a low area of urban element to it with most of the  
4 population living in the urban element, probably around  
5 three to five per cent, and the balance with rural or  
6 forestry areas. There is a total of 2,500 kilometres of  
7 roadside that the shire is responsible for. All up there  
8 are 145,000 residents with about 50,000 assessments and an  
9 annual budget of around \$140 million. Primary industries  
10 are horticulture, agriculture, and viticulture.

11 MS DOYLE: Especially in circumstances where we have three  
12 witnesses, if I can ask you all to slow down a little in  
13 your answers. We have transcript being recorded. We have  
14 an introduction now in terms of the way your councils  
15 might look and the resources that might be available to  
16 them. I want to turn to asking you some questions about  
17 management of roadsides and in particular management of  
18 roadsides where there is a risk of fire or a desire to  
19 reduce the risk of fire.

20 A number of witnesses who have been called in  
21 relation to roadsides have referred to what they call an  
22 inherent tension between the environmental concerns that  
23 might promote retaining our roadside vegetation and the  
24 fire prevention concerns which might in some situations  
25 suggest that it should be removed or minimised. I want to  
26 start at the high level first. Gentlemen, does any one of  
27 you care to comment on the way in which your council  
28 generally manages those competing objectives? We will go  
29 to the particular documents later, but is there a  
30 philosophy or an approach which governs the way any of  
31 your shires deal with this tension?

1 MR GREEN: I suppose one thing I don't think I did say before  
2 was that our budget is only \$32 million, so we have that  
3 3,500 - or the 1600 kilometres of road we have to manage  
4 with 3,500. I think that's important in my response to  
5 this question, in that council has to manage its roadside  
6 responsibilities in the context of the practicality of  
7 doing that in terms of the funding that can be available,  
8 but also in terms of its road safety responsibilities  
9 under the Road Management Act and they are very key  
10 elements. Obviously, in the type of topography we have,  
11 and we have the Otways or a large proportion of the Otways  
12 in our area, obviously fire prevention is also an  
13 important consideration in that and a large part of that  
14 part of the area is state responsibility so we don't get  
15 any rate base from that, which makes it very difficult as  
16 well.

17 We certainly work as closely as we can with DSE  
18 and where appropriate DEWHA in relation to prioritising  
19 these things and we have a fairly comprehensive fire  
20 prevention plan and we have also our road management plan  
21 and our roadside vegetation management plan which are all  
22 important elements in considering how we address that.

23 MS DOYLE: Can you shed any light, Mr Green, on the way in  
24 which the documents you have just mentioned work in  
25 together? I think, as you have said, Colac Otway has a  
26 municipal fire prevention plan, a road management plan and  
27 a roadside vegetation management plan. From the citizen's  
28 perspective, working out which of those documents apply to  
29 what may be a complex question. How do those three  
30 documents work in together.

31 MR GREEN: We have got a fire management plan where we have

1 developed and we have worked with the CFA in terms of our  
2 roadside management fire guidelines, and so we identify  
3 strategic firebreaks in relation to those.

4 MS DOYLE: Would it be your municipal fire prevention committee  
5 that does the bulk of that work?

6 MR GREEN: Yes, it does. We did a total review of our fire  
7 prevention plan in 2007. We worked through that document  
8 in the context of the integrated fire management process  
9 which is being introduced and which we are working closely  
10 with the CFA and other agencies. So our fire management  
11 plan is in a very up to date format. We have had it  
12 looked at and it is a very comprehensive and up to date  
13 document.

14 In the Colac Otway strategic firebreak plan the  
15 council roads are slashed from fenceline to fenceline,  
16 unless it is too dangerous to do so. These firebreaks are  
17 contiguous with firebreaks in neighbouring municipalities  
18 and with those of land managed by state and federal  
19 government agencies. We do some additional roadside fire  
20 prevention activities.

21 MS DOYLE: And would those fall under your roadside vegetation  
22 management plan?

23 MR GREEN: The vegetation management plan is the next one. But  
24 in the meantime we have the Barwon-Corangamite area  
25 roadside and rail fire prevention works plan. That  
26 identifies works which are to be undertaken by a whole lot  
27 of other agencies as well.

28 Our roadside vegetation management plan is a  
29 supporting document of our roadside management plan. This  
30 document was developed in 2005. It provides guidance to  
31 council on how to design and execute it works involving

1 roadside vegetation to minimise damage. It involves  
2 machine, hygiene, reinstatement works and monitoring  
3 inspections.

4 MS DOYLE: Before I move to the other representatives, I just  
5 want to ask you in light of that it sounds as though there  
6 are different objectives to some extent being pursued in  
7 fire prevention plans, road management plans and roadside  
8 vegetation management plans. The outsider might say,  
9 "They are all about roads to greater or lesser degrees,  
10 aren't they?" Would there be some utility in bringing the  
11 three documents and the three models under the one  
12 umbrella as a one-stop shop in terms of dealing with our  
13 roads?

14 MR GREEN: I'm sure there would be utility in doing that. I'm  
15 not sure how you would actually go about it. But  
16 certainly the roadside management plan is more along the  
17 lines of what we need to do to provide an effective and an  
18 efficient road system, and it is very much driven by  
19 safety and not really driven by fire.

20 MS DOYLE: I might invite you, Mr Buckley, to comment first of  
21 all on whether there is a particular approach adopted in  
22 your shire in terms of managing the tension, but you might  
23 also care to address the last question I put to Mr Green  
24 about whether at least in the council side of the ledger  
25 all the documents that deal with roads might better manage  
26 the tension if they were brought under one umbrella.

27 MR BUCKLEY: I would certainly agree with that. I think the  
28 tension starts with a road management plan principally  
29 being about road safety and making sure that the road  
30 network functions as a safe road network. Things like  
31 environmental management guidelines I guess complement

1 that in terms of making sure we can where practicable  
2 protect native vegetation on roadsides et cetera. But  
3 there is that underlying tension. I would agree that if  
4 there was one document that encapsulated all of those  
5 requirements then that would have to be a good thing.

6 MS DOYLE: Mr Jack, in the Shire of Yarra Ranges how are the  
7 tensions dealt with and do you equally have the three  
8 types of regimes to deal with roads?

9 MR JACK: We have a number of documents in place that help us  
10 or guide us that we have developed, and one of them is the  
11 municipal fire prevention plan, which is a document that  
12 we have developed with CFA and other agencies.  
13 Additionally, we have also got an annual program for fire  
14 management. It may be changed from time to time based on  
15 discovery of vegetation or fauna and flora issues. We  
16 have developed a tree management plan which specifically  
17 provides guidance around roadside clearance and the  
18 envelope around the road area for trafficable and safety  
19 for vehicles.

20 There are a number of others, including the  
21 electric line clearance program which is a program that we  
22 need to submit to the - I'm trying to think of the name of  
23 the agency now. It is the Office of the Electric Safety  
24 Commission, I think it was. Additionally, we also have  
25 some site specific fire management plans. So  
26 traditionally they are more in reserves.

27 Our fire slash contract specification also  
28 provides some guidance about our specific contractors on  
29 certain sites. The statement before was that they slash  
30 from fenceline to fenceline. Unfortunately, due to the  
31 competing tensions and the issues that we have with very

1 significant vegetation on roadsides, we have had to modify  
2 that specification. So in some areas we are only cutting  
3 maybe two to three metres back from the road edge.  
4 Generally we refer to that as the embankment and on top of  
5 the batter cut. So if it is a low quality vegetation area  
6 it will be fenceline to fenceline or as far as the  
7 topography will allow. However, if it is high  
8 conservation there is a compromised specification that's  
9 been discussed with municipal fire prevention officers,  
10 CFA and environmental experts at the shire.

11 MS DOYLE: Can I just pick up something you mentioned about the  
12 submission of plans to the electricity authorities. As  
13 I understand it, there are obligations under the  
14 Electricity Safety Act on people, including road managers,  
15 in terms of the safety risks that trees might pose to  
16 electric lines. Is that something that you are familiar  
17 with in your work at Shire of Yarra Ranges?

18 MR JACK: Yes, I manage the department that makes that plan and  
19 submits that on an annual basis.

20 MS DOYLE: Is that a plan that's focused more on the hazard  
21 that trees pose if they fall or hit electricity lines or  
22 how does it come into play?

23 MR JACK: The plan is around maintaining compliance to the  
24 electrical line standards and clearances. So where a  
25 particular tree or any trees are within the vicinity of  
26 powerlines, there are minimum standards around those  
27 powerlines that need to be maintained and need to be  
28 maintained on an annual basis. The plan basically details  
29 how we go about those works on an annual cycle.

30 MS DOYLE: Going back to you, Mr Buckley, in terms of the  
31 standards that now Colac and the Shire of Yarra Ranges

1           have now referred to about the basic matter of slashing,  
2           is there a particular approach that's taken in Latrobe?

3 MR BUCKLEY: Generally we try to maintain about 1.5 metres from  
4           the road verge to provide about a 10-metre firebreak, if  
5           you like, on strategic firebreaks along roads.

6 MS DOYLE: How many metres was that, sorry?

7 MR BUCKLEY: Ten metres.

8 MS DOYLE: On roads that are designated as strategic  
9           firebreaks?

10 MR BUCKLEY: Yes.

11 MS DOYLE: What about an ordinary road that has no such  
12           designation?

13 MR BUCKLEY: One and a half metres from the road verge or one  
14           metre behind the guidepost if guideposts are in place.

15 MS DOYLE: Panel members, there has been a great deal of  
16           evidence over the last couple of days about the way the  
17           exceptions under clause 52 of the Victorian Planning  
18           Provisions work and when they might be available.  
19           Assuming you all have some familiarity with that regime,  
20           can I ask you first of all about how you approach this  
21           question in your council. What I mean by that is who are  
22           the people charged with the responsibility of working out  
23           when clause 52 applies and when the exemptions are  
24           available, and what resources or team are they given in  
25           order to ensure they can address the question? Mr Green,  
26           what section of your shire at Colac would be handling  
27           inquiries, whether they're internal or external, about how  
28           does this clause 52 work?

29 MR GREEN: It is a planning exemption. We have an  
30           environmental planner who works in our environment and  
31           community safety area, which is also the area where our

1 emergency management and fire prevention is handled, among  
2 other things. We have consciously set that area up so  
3 that we have the environmental issues and the local laws  
4 and those environmental planning issues working so that we  
5 are across those things.

6 MS DOYLE: Is there literally, did you say, a planning officer  
7 or a department?

8 MR GREEN: We have a lot of planning officers, but we have an  
9 environmental planner who works in the environmental area  
10 who looks after these sorts of issues, also obviously with  
11 the support of other planners if that's required. Also,  
12 as a result of the Cressy Shelford Road issue, we have an  
13 environmental planner working in our infrastructure  
14 department or an environmental officer with responsibility  
15 for those things working in our infrastructure department.  
16 One of the outcomes of the Cressy Shelford Road issue is  
17 that this officer is part of the agreement and to make  
18 sure that all of those things are properly covered off  
19 with infrastructure as well. So they all work very  
20 closely together.

21 MS DOYLE: Mr Buckley, at Latrobe what section of the council  
22 would handle these matters and what resources are devoted  
23 to it?

24 MR BUCKLEY: We have got both a design and capital works team  
25 plus obviously a planning team. They work together. The  
26 design team will consult with the planning group,  
27 including the environmental planners, in the design of,  
28 say, a road widening or road construction project or  
29 whatever it might be and do some of that analysis  
30 internally first before then, if it is determined that a  
31 planning permit is required, referring that to DSE for

1 consideration.

2 MS DOYLE: Mr Jack, the position at Shire of Yarra Ranges?

3 MR JACK: For general inquiries around those issues they would  
4 be referred to the planning services department. There  
5 may be a referral through to the environment department to  
6 help make assessment on those areas.

7 MS DOYLE: I want to ask you about a couple of the exemptions  
8 themselves. One that we have heard a bit about is called  
9 the public roads exemption. The Commission has had  
10 explained to it the fact that the way generally that's  
11 been administered by DSE is that councils have been  
12 invited to sign a pro forma agreement effectively  
13 designating consent from DSE. Some councils have signed  
14 up to that; some haven't.

15 Starting with you, Mr Jack, the Shire of Yarra  
16 Ranges has determined not to sign it but, as I understand  
17 it, in part because Yarra Ranges has its own planning  
18 scheme, usually referred to as clause 53. What's your  
19 planning scheme and how did that affect the council's  
20 decision not to sign the DSE pro forma agreement?

21 MR JACK: Basically clause 52.17 doesn't actually apply to the  
22 shire. Clause 53 overrides it.

23 MS DOYLE: So your own internal planning regime overrides the  
24 statewide planning provisions?

25 MR JACK: That's correct. So in terms of the DSE pro forma it  
26 was deemed or suggested that that was onerous in terms of  
27 reporting requirements and didn't necessarily apply to us  
28 because of clause 53.

29 MS DOYLE: Under your clause 53, though, what sort of provision  
30 is made there for your council to do fire prevention works  
31 on roadsides?

1 MR JACK: There is a section in clause 53 that allows for the  
2 removal of vegetation for fire emergency based works.

3 MS DOYLE: Up on the screen now is part of your statement.

4 Paragraph 68 deals with the way in which you say clause 53  
5 works. In paragraph 69 you say that under clause 53 of  
6 the Yarra scheme a permit is required to remove, destroy  
7 or lop vegetation, but this doesn't apply if the activity  
8 falls into an exemption. You then go on to say the  
9 schedule to clause 53 provides a permit is not required on  
10 the condition there is no removal beyond that provided for  
11 in any code of practice for tree clearing. So does Shire  
12 of Yarra Ranges draw up a code of practice for tree  
13 clearing?

14 MR JACK: There are actually two documents that we would refer  
15 to. There is the environmental code of practice, which is  
16 probably getting fairly old now, I think it was done in  
17 1999, and the tree management plan, which was newly  
18 adopted in I think September 2009.

19 MS DOYLE: Those documents, insofar as they relate to tree  
20 clearing, does their object include fire prevention  
21 purposes or just hazard?

22 MR JACK: Generally the approach with balancing the fuel and  
23 fire issues and trees and vegetation is that we wouldn't  
24 normally be taking out trees to manage a fire hazard. We  
25 may carry out underpruning or disconnection from ground to  
26 the upper canopy. However, for trees, generally the tree  
27 management plan provides guidance around clearance for the  
28 road envelope for safe and trafficable movement of  
29 vehicles and pedestrians. Other elements that we may take  
30 out may be weed tree species, and they are exempt under  
31 our various plans.

1 MS DOYLE: When you were explaining earlier, Mr Jack, the  
2 differences that you might see through the Shire of Yarra  
3 Ranges, namely some roads slashed to a certain width and  
4 some others with a lower conservation value to a wider  
5 width, why is that so? Is that something that is also  
6 governed by clause 53 or does that come from elsewhere?

7 MR JACK: No, I think that's been our attempt to try and  
8 balance or deal with the tension between fire management  
9 and environmental significance and trying to align the  
10 principles of the state and federal policy around the  
11 protection of native flora and fauna. So it is a delicate  
12 balance, I would suggest, in trying to make sure there is  
13 adequate fire prevention and fire management techniques in  
14 place, and making sure that we are not unnecessarily  
15 destroying or impacting on the environment.

16 MS DOYLE: The way you describe that, Mr Jack, makes it almost  
17 sound voluntary. Has Yarra Ranges effectively exempted  
18 itself or exited the clause 52 regime by having its own  
19 local regime under its clause 53?

20 MR JACK: I'm not an expert on the history of the planning  
21 scheme, but my understanding is the Shire of Yarra Ranges  
22 is in a green wedge area and there was a regional plan  
23 before the amalgamation of the four councils and that  
24 regional plan was incorporated and named and included in  
25 the planning scheme as clause 53. There is some long-term  
26 history there. But, again, I'm not an expert on the  
27 background of the planning scheme.

28 MS DOYLE: Can you comment on this; you may not be able to,  
29 Mr Jack: regardless of what your clause 53 does, you are  
30 still bound by anything in the state Flora and Fauna  
31 Guarantee Act or the Commonwealth EPBC Act?

1 MR JACK: Absolutely. They are overriding pieces of  
2 legislation to the planning scheme.

3 MS DOYLE: Now, the Colac Otway Shire initially expressed  
4 concerns about signing the public roads pro forma, but  
5 ultimately did sign it. What were the considerations that  
6 led to the early reluctance and the ultimate signing up,  
7 Mr Green?

8 MR GREEN: You have just heard Mr Jack say that Yarra Ranges,  
9 which is a municipality with significantly more funding  
10 than Colac Otway, and even if you compare that to the  
11 amount of area that they are managing they still have  
12 significantly more funds, that that was a resource concern  
13 for them. It was a significant resource concern for our  
14 council. We believed that our roadside maintenance was a  
15 regime that had been in place for a long time and we were  
16 still intending to clear our roadsides using a clearance  
17 envelope which addressed the height of any overhanging  
18 branches and things that could be cleared, and they were  
19 based on road safety. We believed that the requirement by  
20 DSE in the agreement for the reporting of vegetation  
21 removed which over a year period is a significant amount  
22 if you have to measure all of that over a period of time,  
23 record it and then report it back.

24 What we suggested was that if we could just adopt  
25 the roadside envelope that we had previously adopted, any  
26 trees over a - I can't remember the circumference, but any  
27 trees that would be of any significance that we would  
28 record, any trees that were of more significance that we  
29 would discuss those with DSE and we would apply for a  
30 permit to remove those. Basically what we put together we  
31 thought was very reasonable in the context of the resource

1 constraints that the council has and the benefit that  
2 would be achieved by it. I mean, in our sense, we had  
3 been clearing those roadsides anyway. So you couldn't  
4 very well call it significant, any of it, because it would  
5 have already been cleared.

6 We wrote to DSE in relation to that. I have  
7 already tabled that letter in Rob Small's submission.  
8 I think you will see from that there was a fairly flat  
9 refusal in the context of they were unwilling to negotiate  
10 with any individual council in relation to specific  
11 issues.

12 The reason that we eventually agreed to sign  
13 it - another couple of things, I suppose. We have a  
14 feeling that other councils who have signed it aren't  
15 anywhere near as conscious of the implications that it  
16 might have, and a lot of this goes back to Cressy Shelford  
17 Road again.

18 MS DOYLE: Which I will take you to later this morning.

19 MR GREEN: So basically we have adopted the principle that if  
20 we need to report on something we need to do it properly  
21 because we cannot afford as a council to have another  
22 issue where we are seen to be in breach, because it has a  
23 significant impact on council.

24 At the end of the day I had discussions with Rob  
25 Spence and Alison Lyon at the MAV. We discussed what we  
26 believed would be an appropriate way to measure that and  
27 record that and we agreed to sign it. The reason we  
28 agreed to sign it was because we were holding off on doing  
29 roadside clearance work. We were actually applying the  
30 letter of the law in that we were putting in planning  
31 permits for any of that clearance work that we intended to

1 do. At one stage we had 60 planning permits in our  
2 planning system which, as you can imagine, for a council  
3 our size was crippling. It was bogging down all the other  
4 work that needed to be done. But it was also delaying the  
5 commencement and the undertaking of our clearance works  
6 which needed to be done as we were entering into the fire  
7 season. So the only reason we signed it at the end of the  
8 day was that we believed that it would be inappropriate  
9 for us not to get those works done in the current fire  
10 environment and in the context of the physical  
11 infrastructure, the physical make-up of our municipality.

12 MS DOYLE: Mr Buckley, the situation at Latrobe, I understand  
13 Latrobe has not signed the pro forma otherwise. Why is  
14 that?

15 MR BUCKLEY: That's right. We have had an arrangement in place  
16 with DSE since 2002 based on a document called the  
17 environmental management guidelines, which is designed to  
18 balance that conservation of significant vegetation along  
19 roadsides with the need to manage vegetation for road  
20 network safety purposes.

21 MS DOYLE: You are the sole signatory to this thing called the  
22 environmental guidelines?

23 MR BUCKLEY: Yes, it was developed internally by us for our  
24 operation, for both staff and contractors. So we think  
25 that has worked well for us. The pro forma document seems  
26 to be complex, seems to impose a whole range of additional  
27 reporting requirements et cetera on us that we don't think  
28 are necessary.

29 MS DOYLE: That document called the environmental guidelines,  
30 is it your understanding that for Latrobe what it  
31 effectively does is set out what is the right way to

1 navigate your way through the exemptions in clause 52?

2 MR BUCKLEY: Yes.

3 MS DOYLE: It doesn't override those exemptions, but it is a  
4 working document as to how they are to be resolved in  
5 Latrobe?

6 MR BUCKLEY: That's correct.

7 MS DOYLE: One of the other exemptions that there's been quite  
8 a bit of evidence about is the one called fire protection  
9 and it is an exemption under clause 52 that has a lot of  
10 different components. I want to ask each of you to  
11 comment on the use that your shire has made of the fire  
12 protection exemption, first of all to deal with its  
13 roadsides. We will leave fuelbreaks out of it for now,  
14 but dealing with roadsides. Mr Jack, the Shire of Yarra  
15 Ranges, does it use much the exemption called fire  
16 protection and in what circumstances?

17 MR JACK: I assume you are referring to the 10/30; is that the  
18 element you are talking about there?

19 MS DOYLE: Yes, or in fact, as you have said this morning, if  
20 you were going to be using the exemption you would look to  
21 53?

22 MR JACK: Yes, that's correct. So we haven't utilised those  
23 changes. We use our existing tree management plan,  
24 environmental code of practice, fire management plans and  
25 all within the existing clause 53 of the planning scheme.

26 MS DOYLE: Working back to Latrobe, Mr Buckley, I'm going to  
27 have this part of clause 52 put up on the screen for you  
28 at (TEN.225.005.0005), just so you have in front of you  
29 the text of the fire protection exemption. As it is  
30 coming up, you might be able to start your answer because  
31 it seems that the environmental guidelines you have

1 referred to might rule the day, but perhaps you can talk  
2 us through that. Do you ever at Latrobe seek to rely on  
3 the freestanding fire protection exemption or is all your  
4 work of that kind done under your environmental  
5 guidelines?

6 MR BUCKLEY: Pretty much all under the environmental  
7 guidelines, and my understanding is that a reference to  
8 that clause is incorporated in that assessment under the  
9 guidelines.

10 MS DOYLE: There is another part of the fire protection clause,  
11 if we can see the definition of "fire protection", which  
12 is at the bottom of the page. Dot point 1 refers to  
13 fuelbreaks up to 6 metres wide and dot point 2 refers to  
14 fuelbreaks, if they are part of a strategic plan, up to  
15 40 metres wide. Has Latrobe ever sought to use either of  
16 those dot points in its fire prevention works?

17 MR BUCKLEY: Not that I'm aware of.

18 MS DOYLE: Just hopping back to you, Mr Jack, on that. Has the  
19 Shire of Yarra Ranges ever sought to use either of these  
20 dot points to build a track up to 6 metres wide or a  
21 strategic break up to 40 metres wide?

22 MR JACK: I don't believe so.

23 MS DOYLE: Then turning to Mr Green, Colac Otway shire, what  
24 use does it make of the first two dot points there, if  
25 any?

26 MR GREEN: The exemption from our perspective would allow  
27 for council to make mineral earth breaks or spray some  
28 firebreaks. But generally the vast majority of those are  
29 exempt because they have been in place for many years.  
30 But, where new breaks are needed to be constructed,  
31 council would use the exemption.

1 MS DOYLE: Have you ever submitted an overall plan or is it  
2 more likely to be the 6-metre wide one in the first dot  
3 point?

4 MR GREEN: My understanding is the 40-metre wide one has been  
5 used in relation to the Surf Coast Shire and was I think  
6 more particularly put up and suitable for the environment  
7 in that area. It is probably not appropriate to us. As  
8 I said, the areas that we are already using are ones that  
9 have been in place. We haven't put up a plan to do  
10 anything more recently.

11 But we would use the exemption obviously if we  
12 had to remove native vegetation for firefighting measures,  
13 periodic fuel reduction burning or the making of a  
14 fuelbreak or firefighting access track up to 6 metres  
15 wide.

16 MS DOYLE: But are there any instances in which Colac Otway  
17 Shire has sought to construct a fuelbreak up to 6 metres  
18 wide, say alongside a road or across council managed land?

19 MR GREEN: I am not aware of any new ones of those. I think  
20 our breaks like that have already been in place for some  
21 time, as I said before.

22 The other issue that might be relevant here and  
23 was discussed I think with Mr Spence earlier is that we do  
24 issue permits to burn for fire, CFA brigades, and we also  
25 consult with the relevant authorities in those regards.  
26 This was done recently again for the Cressy Shelford Road  
27 and also Poorneet Station Road.

28 MS DOYLE: The next two exemptions I just want to effectively  
29 poll the panel about are those relating to grass and  
30 weeds. If we can go back to page 3, which is the previous  
31 two pages back in the same document. There is a

1 reflection of the grasses exemption. In relation to grass  
2 it says, "No permits required if the native vegetation is  
3 grass, and it is to be mown or slashed for maintenance.  
4 Under this exemption the grass must be", and then the  
5 second dot point says "maintained at a height of at least  
6 100 millimetres".

7           Gentlemen, you have explained there are different  
8 reasons and different documents pursuant to which each of  
9 your shires' mows and slashes the grass on the sides of  
10 its roadways. Have you experienced any difficulty in  
11 terms of the height of grasses? I will start with you,  
12 Latrobe. I know that it may be governed by what it says  
13 in your environmental guidelines, but what does Latrobe do  
14 in terms of looking at what is the required height of the  
15 grass that it mows?

16 MR BUCKLEY: I'm not sure I can answer that question.

17 MS DOYLE: Would it be your belief that, whatever the position  
18 is, it is going to be finding expression in your  
19 environmental guidelines?

20 MR BUCKLEY: Yes.

21 MS DOYLE: Mr Jack, under the Yarra Ranges approach, which is  
22 governed by clause 53, you have told us about how far you  
23 mow. What governs the height of your grass?

24 MR JACK: The governing factor in that is actually the roadside  
25 slashing specification contract which our contractors sign  
26 up to. That is actually in alignment with that, but it is  
27 actually more from the guidelines, from the CFA roadside  
28 management guidelines, that we use and we do actually cut  
29 to 100 millimetres.

30 MS DOYLE: Mr Green, at Colac Otway Shire what are the rules or  
31 situations which govern the way you manage the height of

1 your grass on roadsides?

2 MR GREEN: The exemption allows grass to be slashed to a height  
3 of 100 millimetres, which we believe is appropriate to  
4 maintain its survival. So this exemption has probably  
5 helped us to carry out fire prevention works by  
6 implementing routine maintenance activities whether on  
7 roadsides or other council land without needing a permit.  
8 Now on roadsides the practice is covered by the exemptions  
9 associated with the agreement with DSE that we have now  
10 signed.

11 MS DOYLE: One other question which arises in the context of  
12 grass and weeds is the prior question of whether they are  
13 native or not, because if they are not native you don't  
14 have to worry about this scheme. Is there particular  
15 expertise that resides in your councils that enables you  
16 to answer the threshold question: is this stuff on the  
17 side of the road, whether it be grass or weed, native or  
18 introduced? Mr Jack, how does the Shire of Yarra Ranges  
19 answer that question? Do you have some local expertise?

20 MR JACK: There is probably a number of ways it is identified;  
21 firstly, through our contract review that we carry out at  
22 the end of each contract period, which is three years we  
23 reset the specification and make alterations to the sites  
24 that are listed. So there is some ground-truthing through  
25 that process about sites, where the grass cutting should  
26 start or stop. We have also put in systems of signage and  
27 bollards to protect areas of significant vegetation. So  
28 indigenous vegetation like themeda, which is a native  
29 grass which has particular times for seeding, those areas  
30 may be delineated or defined.

31 MS DOYLE: When you say "delineated", you mean literally by

1 signs at the site rather than someone having to consult a  
2 map back at the office?

3 MR JACK: Through a couple of different methods. One would be  
4 within the specification, and it may say "at this point".  
5 Another way would be with signage saying "no mow zone".  
6 So we may be able to mow up to that sign, but the intent  
7 is that from that sign back to the fenceline wouldn't be  
8 cut. Or there may be fencing installed, protective  
9 fencing, a farm style fence. More recently we have  
10 started using a recycled plastic bollard with colour  
11 coding on that to delineate alignment. They may be  
12 positioned two metres apart or 50 metres apart. Generally  
13 operators would then align those and cut up to that sort  
14 of imaginary line that may be between those bollards.

15 MS DOYLE: Mr Buckley, at Latrobe how is the threshold question  
16 asked and answered? Before you need to trouble yourself  
17 with all these exemptions you have to figure out whether  
18 the material is grass or weed, native or introduced.  
19 Where does the expertise lie for that?

20 MR BUCKLEY: Both internally and within DSE . So there is a  
21 reference mechanism under the guidelines that I spoke  
22 about before. Plus our own environmental planners are  
23 involved in some of that activity.

24 MS DOYLE: Any different approach at Colac Otway Shire?

25 MR GREEN: All our roadsides have been assessed by a qualified  
26 botanist to identify the conservation significance.  
27 Botanists identify species and rates the roadside as  
28 having either a low, medium, high or very high  
29 conservation significance. A number of our roadsides with  
30 very high and high conservation significance have signs  
31 highlighting the need for people to contact council before

1 carrying out any works. It also helps us of course. The  
2 information on conservation significance is incorporated  
3 into council's GIS system. So it is easily identifiable  
4 by the council officers. Threatened species maps provided  
5 by DSE are also on council's GIS.

6 Where it is likely that affected species under  
7 the Flora and Fauna Guarantee Act or the EPBC Act may  
8 occur or be affected, an on-site inspection is carried out  
9 by council officers and DSE and they are consulted for  
10 advice prior to carrying out any works.

11 MS DOYLE: Mr Green has mentioned GIS mapping, and that leads  
12 to something else I wanted to ask you about. Mr Jack,  
13 first of all, did you have something to add in relation to  
14 this issue?

15 MR JACK: Yes, I just wanted to finish off the statement I was  
16 making. The third option or the last option that may  
17 change the areas that may be cut or not cut is that  
18 through observation of the operator's carrying out the  
19 works that there is a requirement that if there are native  
20 grasses that are in the area that would be normally  
21 traditionally cut, that they avoid them and report back to  
22 the council. I should just point out that, in terms of  
23 the area that we are talking about and the threshold, we  
24 are looking at 1,700 kilometres of roadside that's being  
25 slashed by the Shire of Yarra Ranges. That is one  
26 kilometre up one side and one kilometre up the other, so  
27 850 kilometres of road that are being slashed. To  
28 identify and assess those in a meaningful way for  
29 thresholds is not an easy way, but we try to do that  
30 through specifications and observations where we can.

31 MS DOYLE: There was a lay witness who gave evidence in these

1 proceedings a couple of weeks ago who happened to work for  
2 the City of Hume, and he spoke about having quite  
3 comprehensive mapping systems at the council offices  
4 pertaining to trees as well as vegetation and the like.  
5 Mr Green has mentioned GIS mapping. Starting with Yarra  
6 Ranges first, what sort of technological tools do you have  
7 available to enable all the detailed information you have  
8 just referred to to be able to be captured and accessed by  
9 people down the line?

10 MR JACK: There is probably a number of things that we have in  
11 place. One is we have the ecological vegetation class  
12 that were predating white settlement all mapped, so the  
13 type of vegetation that would traditionally have been  
14 there before settlement. So that's identified in the GIS  
15 system. We have also identified sites of high and very  
16 high conservation value and mapped them on our GIS system.  
17 We have overlaid our roadside slashing program onto the  
18 GIS system as well. So we can see where there may be a  
19 departure from the fenceline to fenceline and there may be  
20 a compromised specification or cutting program for that  
21 site.

22 MS DOYLE: Mr Buckley, in relation to Latrobe, have you at the  
23 moment got access to that kind of technology in terms of  
24 mapping?

25 MR BUCKLEY: Yes, certainly the GIS system is in place.  
26 I couldn't tell you what the detail of all the different  
27 layers within that system might be, but certainly - - -

28 MS DOYLE: It is broadly comparable to the description Mr Jack  
29 has given?

30 MR BUCKLEY: Yes.

31 MS DOYLE: And obviously Colac Otway has something similar. We

1 will go to the detail of compliance in a moment, but  
2 I want to stop and ask about permits. Assume that some  
3 work your council wants to get done relating to a road  
4 doesn't fit under either the guidelines, clause 53 or any  
5 available exemption or agreement and you are in the world  
6 of needing a permit. I just want you to walk us through  
7 the process for obtaining such a permit and the timeframes  
8 that might be attached to getting a permit from DSE if you  
9 need to get a permit to do something in relation to native  
10 vegetation. Mr Jack, is that something that Shire of  
11 Yarra Ranges has some experience with?

12 MR JACK: We have probably got one example where we have had to  
13 go through an application through the EPBC Act. There is  
14 only one example. Generally clause 53 would provide us  
15 with enough coverage in dealing with trees that interfere  
16 with the road area or provide a safety and fire management  
17 issue. However, the Macclesfield Road was a process where  
18 we made application in the planning permit and was  
19 referred to the EPBC Act for response.

20 MS DOYLE: This is something that starts at paragraph 76 in  
21 your statement, just for future reference,  
22 (WIT.4019.001.0015). You explain there that back in 2007  
23 your council wanted a planning permit to clear vegetation  
24 from the Macclesfield Road in Yellingbo and you wanted to  
25 clear vegetation while doing box clearance activities and  
26 it was referred off to DSE. Picking up the story there,  
27 what went on in terms of getting the work and the permit?

28 MR JACK: Basically the process was quite lengthy up front  
29 before we made the application. It was quite a bit of  
30 consultation with the local community trying to deal with  
31 their expectations. It was in the area of the helmeted

1       honeyeater, which is a protected species, and also the  
2       Leadbeater possum, again protected species. So there are  
3       friends groups there. It is next to a national park. It  
4       is a very high conservation value road. We had trees  
5       interfering with the road envelope, and also dead and  
6       dangerous trees threatening to fall into that area as  
7       well. So that went through quite a lengthy process of  
8       consultation with the local community.

9               Those applications were made, both sort of  
10       planning permit and the EPBC Act, and basically they  
11       decided it wasn't a matter they needed to deal with and  
12       they were happy with council's voluntary suggestion of  
13       implementing a management plan for that area and carrying  
14       out additional offsets and planting through that area.  
15       Because we nominated those items, we believed we had dealt  
16       with it responsibly and it was left at that.

17   MS DOYLE: The permit and the conditions attached to it that  
18       was issued appears at attachment 10, page  
19       (WIT.4019.001.0498). I will just have that brought up so  
20       that we can get a picture in terms of what these sorts of  
21       permits look like and what they do. You have been handed  
22       a hard copy. This is the planning permit dated  
23       30 November 2007. It is dealing with Macclesfield Road  
24       between Swales Road and Beenak Road in Yellingbo.

25               We will just wait for it to come up and we will  
26       show you what the permit allows. Removal of 10 indigenous  
27       trees, heavy pruning of seven trees and medium pruning of  
28       29 trees within the road reserve to allow for vehicle  
29       clearance. Then there are some conditions that apply.  
30       Number 3 says that within 12 months the Shire of Yarra  
31       Ranges will develop a biodiversity vegetation management

1 plan in consultation with DSE and other stakeholder  
2 groups. Then there is some identification of what the  
3 plan should show. It should detail the number of plant  
4 species to be offset. In point (b) it notes the location  
5 of the 103 indigenous plants to be offset, of which at  
6 least 15 per cent must be overstorey species and must be  
7 recruited in high priority ecological sites along the  
8 road. I take it from what you have said, Mr Jack, the  
9 council effectively helped to propose its own conditions  
10 and that facilitated the processing of this permit to do  
11 the works.

12 MR JACK: Correct, and that's in line with the native  
13 vegetation framework and other state and federal policies  
14 and guidelines.

15 MS DOYLE: On the way through there you referred to the fact  
16 that someone raised the question of whether the  
17 Commonwealth Act might be attracted. It appears from the  
18 next couple of pages on in your statement - we might not  
19 need to go to the detail - at 0501 that when the  
20 Commonwealth was contacted about this it made it clear  
21 that the proposed action was not a controlled action and  
22 so it didn't require assessment by the minister under the  
23 Act.

24 MR JACK: Correct.

25 MS DOYLE: Latrobe or Colac Otway Shire, can you shed any light  
26 on the permit application process? Any particular  
27 examples that have engaged your council?

28 MR BUCKLEY: Probably with us Budgeree Road was one where we  
29 had to go through the permit process. It was referred to  
30 VCAT and at the end of the day had to provide some offset  
31 sites on private land. The final agreements for that are

1 still being negotiated and finalised.

2 MS DOYLE: Budgeree Road is a project you deal with at  
3 paragraph 66 onwards in your statement,  
4 (WIT.4015.001.0016). While that's coming up I will just  
5 get you to explain, though, this was a proposal to upgrade  
6 the road in Boolarra called Budgeree Road and you wanted  
7 to widen the road so it would enable a car to pass a large  
8 truck. Obviously that's principally an access issue and  
9 in that instance it was about logging vehicles.

10 MR BUCKLEY: That's right.

11 MS DOYLE: So it is not a typical fire prevention focus.

12 MR BUCKLEY: No.

13 MS DOYLE: In any event, in applying for a permit to undertake  
14 those works a notice of decision to grant a permit was  
15 issued but then challenged in VCAT by Environment  
16 Victoria.

17 MR BUCKLEY: That's right.

18 MS DOYLE: The basis for the challenge was that the City of  
19 Latrobe had not sought to minimise the extent of  
20 vegetation clearance. So this is an instance where a  
21 group that might be called a stakeholder or an interested  
22 party was the agitator or the contravener, contradictor,  
23 and you ended up in VCAT. Was there a contested hearing  
24 at VCAT about the content of the permit?

25 MR BUCKLEY: Yes, and the alignment of the road was eventually  
26 changed.

27 MS DOYLE: Ultimately you received both a decision and a permit  
28 that allowed you to go ahead. But were there any  
29 restrictions or conditions placed on how you might deal  
30 with Budgeree Road?

31 MR BUCKLEY: Yes, the major condition attached to the permit

1 was to provide for offsets on private land.

2 MS DOYLE: Paragraphs 70 and 71 of your statement deal with  
3 that. A particular family and the property they own was  
4 used to provide the offsets.

5 MR BUCKLEY: That's right.

6 MS DOYLE: It is an intriguing outcome. How was it that the  
7 Hall family was prevailed upon to provide their land to  
8 carry the offsets?

9 MR BUCKLEY: I guess the Hall family has a long history of  
10 civic responsibility and contribution and were happy to be  
11 part of that process.

12 MS DOYLE: In paragraph 71 there is an agreement that's been  
13 reached with them in relation to the offset site. That is  
14 set out there. The key component or obligation falling on  
15 the family in 71(b) is they are prohibited from using that  
16 site for any use which is inconsistent with its function  
17 as an offset site.

18 MR BUCKLEY: That's right.

19 COMMISSIONER PASCOE: This is an issue that I thought was  
20 interesting going through the statements, that there may  
21 well be a level of reciprocity where you have local  
22 landowners who are looking for a windbreak, given there is  
23 enough evidence I think that in certain circumstances it  
24 can slow the spread of fire, and the need for a council to  
25 find a location for offsets.

26 MR BUCKLEY: That's right.

27 COMMISSIONER PASCOE: Have any of you engaged in that in a  
28 broader sense than just, say, in relation to this  
29 particular family?

30 MR BUCKLEY: No.

31 COMMISSIONER PASCOE: Is it something that you think could be

1 attractive to councils in the future?

2 MR BUCKLEY: I think so. I think it would be handy to have an  
3 offset bank available so that when these sorts of works  
4 are planned that there is already a potential offset site  
5 in place.

6 MS DOYLE: We have talked about permits. I want to touch on  
7 compliance. There is a particular example identified in  
8 the statement provided by Colac Otway Shire, and I would  
9 invite you to speak to that, Mr Green. It has already  
10 been mentioned in despatches a number of times. This  
11 relates back to events principally in October 2009. The  
12 circumstances are set out in the statement of Mr Small  
13 which has been adopted by Mr Green at (WIT.4020.001.0007).

14 The shire was threatened with proceedings under  
15 the Commonwealth Act and ultimately that was resolved by  
16 means of Colac Otway Shire entering into an undertaking.  
17 Can you explain to us, Mr Green, what did Colac Otway  
18 Shire want to do at Cressy Shelford Road that started this  
19 story off?

20 MR GREEN: Cressy Shelford Road required reconstruction. We  
21 engaged a contractor to do those works. As part of that  
22 process the contractor had to provide us with an  
23 environmental management plan. The environmental  
24 management plan wasn't appropriate. The contractor then  
25 moved off to the side of the road which was an  
26 environmentally - it had some significant vegetation  
27 species there.

28 MS DOYLE: Perhaps if we go to paragraph 29 of the statement.  
29 It just lists those for completeness. It turns out there  
30 were specific species present, including populations of  
31 the spiny rice-flower, small milkwort and the striped

1 legless lizard, the legless lizard being something I have  
2 puzzled over. I asked Dr Lyon whether it was a snake. He  
3 assured me it was not. In any event, those were the  
4 species that were potentially impacted. Then what  
5 happened?

6 MR GREEN: Yes, they were some of the species. There were  
7 others there as well. The contractor scalped the area or  
8 some of the area along that road for dump sites for the  
9 product that was to be used on the road. We became aware  
10 of that and we reported that immediately to DSE and DEWHA.  
11 We were threatened with prosecution because obviously we  
12 had contravened the Flora and Fauna Guarantee Act and the  
13 Environmental Protection and Biodiversity Conservation  
14 Act.

15 We had several discussions with both parties in  
16 relation to the matter. The issue from council's  
17 perspective was that right from the start we had been very  
18 active in identifying these sites in the municipality. We  
19 had processes in place to ensure that this sort of thing  
20 didn't happen, and there were two key breakdowns in the  
21 process which were basically human error which related to  
22 resource constraints. So the difficulty for a council  
23 like us is that we are covering a hugely diverse amount of  
24 responsibilities with a very limited rate base and we  
25 struggle to provide the appropriately trained resources to  
26 administer them in some cases.

27 There were clearly processes in place. There  
28 were a couple of errors made, one where someone identified  
29 a planning permit wasn't required when it clearly was and  
30 one where the environmental management plan when it was  
31 submitted wasn't appropriately investigated and

1 determined. The other was not us, but we are responsible  
2 for it, and that was the contractor, who obviously didn't  
3 take due care in the works he was doing.

4 MS DOYLE: Paragraph 32 of the statement indicates that, given  
5 the circumstances, you received an indication from  
6 the Commonwealth department it was considering a  
7 prosecution because of a potential breach of section 18A  
8 of the Act. Over the page it is then indicated there were  
9 negotiations. The way it was resolved was Colac Otway  
10 Shire entered into an enforceable undertaking with  
11 the Commonwealth department and a memorandum of  
12 understanding with our state DSE.

13 The content of the enforceable undertaking, you  
14 have actually attached it to the statement, but in essence  
15 what the council needed to do is set out in paragraph 36:  
16 pay DSE \$250,000 for the purpose of offsetting the native  
17 vegetation and the threatened species as a consequence of  
18 the work; undertake and complete restitution and  
19 rehabilitation as summarised in the supporting documents;  
20 develop and implement further internal processes and  
21 initiatives, this is effectively the improvement in the  
22 system to ensure you do better clause. Then over the page  
23 there are various other items in relation to that: raising  
24 awareness, increasing the accuracy of your mapping,  
25 ensuring all of the documents are up to date, and then in  
26 point (d) undertaking an external raising of awareness  
27 program.

28 The ultimate cost of all of this you set out in  
29 paragraph 40, and you note there the total cost of the  
30 issue was \$690,000. The amount that sometimes might be  
31 referred to or thought of as the fine, but effectively an

1 amount of money required to be paid to DSE, was the  
2 \$250,000 mentioned on the previous page. You note in 41,  
3 \$242,000 in legals. So has the remainder been devoted to  
4 the other restitution and awareness-raising programs and  
5 improvement programs identified?

6 MR GREEN: We had to engage people to do a remediation of the  
7 site which was fairly significant. So we actually had  
8 machinery out there working on planks to remove the  
9 storage sites that the contractor had provided. That was  
10 eventually done, when it got down to the bottom, by hand.  
11 We have engaged a botanist firm to do reports on the thing  
12 as we go along. I talked to you before about the  
13 environmental officer that we have in the infrastructure  
14 department now to work through that process. We have an  
15 education program which is obviously designed to put our  
16 council up as an example to other councils - which is  
17 obviously effective because it sounds like from today the  
18 other councils are well aware of this - of what not to do.

19 In all of the discussions we had with the  
20 departments they freely admitted that our council was very  
21 committed environmentally and that we had done a number of  
22 things, including identifying sites to the department, and  
23 we had done the mapping and we were very committed, we had  
24 processes in place. They virtually indicated that the  
25 reason they weren't proceeding with the prosecution was as  
26 an example of that.

27 We had discussions about the resource  
28 implications that this would have on council and the fact  
29 that the primary reason for this occurring was resource  
30 limitations and if they proceeded down this path that  
31 would further strain our resources and make it even more

1 likely that we would be in that situation at another time.  
2 This has resulted in our reluctance to deal with DSE in  
3 relation to the agreement because we felt that the amount  
4 of reporting that would be required for that would be  
5 something we, with our resources, would struggle to do.

6 We have done a review of our infrastructure  
7 department and we have added two or three positions which  
8 are outside the bounds of this agreement. When you think  
9 about the cost to council you need to put that in the  
10 context that 180,000 is a one per cent rate rise for our  
11 council. So it is a significant burden on our  
12 municipality.

13 To put it in another context, there was another  
14 incident directly across the road from this where a farmer  
15 removed rocks from a legless lizard habitat as part of  
16 cleaning up his property and got find \$20,000. We thought  
17 the amount that was put on council was so much in excess  
18 of that that we obviously felt we were being used as an  
19 example, which we thought was inappropriate.

20 MS DOYLE: In paragraph 44 you mention one of the impacts has  
21 been anxiety amongst council officers, staff and  
22 contractors over whether or not the works are being  
23 undertaken in accordance with the guidelines.  
24 Springboarding from that comment, Mr Buckley, Mr Jack, is  
25 there any flow-on effect? Mr Green has suggested that  
26 Colac has become an example, perhaps a notorious example.  
27 What has your council done, if anything, in light of  
28 hearing of their experience, Mr Buckley?

29 MR BUCKLEY: I think it has reinforced the importance of making  
30 sure that all of that environmental assessment is  
31 undertaken before you go into what might have been

1 traditionally standard works.

2 MS DOYLE: Mr Jack, any particular flow-on effect at Shire of  
3 Yarra Ranges?

4 MR JACK: Yes, there has been a more stringent documentation  
5 and process of environmental management planning prior to  
6 carrying out these types of works. I think we are  
7 bringing on a new staff member to assist with that  
8 process. There has also been additional resources and  
9 funding put in to help record, map and document these  
10 sorts of things. So, in terms of costs, we are investing  
11 in it to try to protect ourselves from a similar sort of  
12 situation.

13 MS DOYLE: I want to stay with you, Mr Jack, and ask you about  
14 the next issue. We have had a number of instances where  
15 we have talked about the different concerns that might  
16 arise when you are dealing with the Commonwealth regime,  
17 the DSE regime. But your ratepayers don't always see eye  
18 to eye and there may be instances in which the council  
19 needs to manage a different tension, and that is between  
20 different groups in the community who have different views  
21 about how a road should be handled.

22 Mr Jack, your statement deals with the particular  
23 example of Old Kinglake Road at paragraph 90,  
24 (WIT.4019.001.0018). There you talk about issues which  
25 arose in relation to Old Kinglake Road, starting at  
26 paragraph 90. You talk about a tension between vegetation  
27 retention and fire prevention. Old Kinglake Road, you  
28 describe in paragraph 91, as an unsealed dirt road near  
29 Kinglake National Park, substantial populations of burgen  
30 bush, which is highly flammable, and there were 10  
31 properties which accessed the road.

1           You recount that in August 2008 the council wrote  
2           to residents stating that as vegetation was starting to  
3           encroach on the road you were looking at doing work in  
4           addition to the regular slashing program. There were  
5           three purposes of the work that are set out under  
6           paragraph 93. The first one had a clear fire prevention  
7           aim, reducing fuel loads for fire prevention purposes.  
8           Then there were two issues of access, including for  
9           emergency services.

10           In paragraph 94 some of the work is described.  
11           What happened after the council proposed these works on  
12           Old Kinglake Road?

13 MR JACK: We arranged an on-site meeting on I think it was  
14           17 December 2008 to meet with the residents of that road  
15           and the neighbouring road, and also had representatives  
16           out from the local CFA, brigade captain, and also from  
17           region 13 CFA. I was present at that meeting. We  
18           basically outlined what we were proposing to do to  
19           maintain compliance with the Road Management Act and also  
20           with our fire prevention plan and our roadside slashing  
21           contract.

22           It was a fairly heated debate by residents and a  
23           lot of opposition initially. There were some people who  
24           were quite angry that we were even proposing to do any  
25           work on that environment because they saw it as a very  
26           high conservation value area and were very keen on  
27           protecting it at all costs. There was a concern that any  
28           work we did in terms of roadside slashing would introduce  
29           weeds and be to the detriment of the area.

30           Through that meeting we ended up walking through  
31           the whole site and literally identifying by hand each and

1 every plant that we were talking about and sections of  
2 road that we wanted to prune back the cunzia. The cunzia  
3 was actually on the top of an embankment and then sort of  
4 leaning over the road. So it actually had very much a  
5 tunnelling effect and was of some concern to us in terms  
6 of road management plan and fire protection.

7 Through that meeting we did have objectives to  
8 push back that burgen at least two metres back from the  
9 top of the batter. Unfortunately that wasn't considered  
10 suitable by the residents and there was quite a bit of  
11 opposition to that. CFA were keen for us to do whatever  
12 we could but were trying to remain neutral. As a  
13 voluntary group living in that community, I can absolutely  
14 understand that too.

15 At the end of that meeting we had some agreement  
16 to carry out dead wooding, some removal of dead trees or  
17 plants, and some very selected hand based work rather than  
18 a more agricultural mechanism that we would normally use  
19 in terms of a box slasher or a slashing implement mounted  
20 on a tractor.

21 MS DOYLE: Do I understand what you are saying in paragraph 99  
22 to essentially be to this effect: because of the way the  
23 agreed works were ultimately pursued, they were more  
24 finicky, if I can put it that way, which means they needed  
25 to be done manually rather than mechanically in order to  
26 pick off the agreed trees and vegetation?

27 MR JACK: Yes. There were no trees. It was more shrubby and  
28 groundstorey material that would generally fuel the fire.  
29 But finicky is definitely the right word. In comparison,  
30 we would normally be going through in an area where we  
31 needed to clear small shrubby vegetation, we may do that

1 with a chainsaw or agricultural machinery like a box  
2 slasher. In this we were actually going through with  
3 secateurs and hand weeding, pruning.

4 A comparative issue is that this should have been  
5 a job in any other road that cost a couple of hundred  
6 dollars, maybe \$1,000. We ended up spending \$7,500 on  
7 that site. Per kilometre, with a very restricted budget,  
8 this is not an issue we would normally get into because it  
9 was quite detailed.

10 MS DOYLE: Can I ask you all then about the situation after the  
11 February fires. Press reports are full of allegations,  
12 suggestions and stories about how roadside vegetation  
13 contributed to the intensity or spread of the fires that  
14 we endured. How has that sentiment, if at all, been  
15 conveyed to your council? Colac Otway Shire, have you  
16 noticed any difference in the types of issues residents  
17 raise? Are residents raising roadside vegetation as a  
18 fire risk in your shire?

19 MR GREEN: There was probably a marked increase in that shortly  
20 after the fire. I think that the processes that we have  
21 undertaken in relation to working with the community and  
22 the CFA and DSE in relation to personal responsibility and  
23 stuff like that seems to have calmed that down. I think  
24 it was just an initial response for us, but of course we  
25 were fortunate we were not involved.

26 MS DOYLE: Latrobe, particularly given the Churchill fires in  
27 your area, has there been any particular change or  
28 anything that you would care to comment on in terms of  
29 what the community say about your roads?

30 MR BUCKLEY: Yes, I think there has been a significant shift in  
31 people's attitudes to more clearing required than perhaps

1 previously protect the native vegetation. I think the  
2 attitude at both Boolarra in terms of the Delburn complex  
3 and at Traralgon South-Callignee has been, "Get as much  
4 stuff off the roadside as you possibly can."

5 MS DOYLE: Mr Jack, you gave us a moment ago an example of the  
6 world before the February fires and a group of residents  
7 who wanted less done rather than more. There are a number  
8 of residents groups active in the Shire of Yarra Ranges.  
9 Have you received any indications or submissions from  
10 residents groups or individuals that are different now  
11 after the fires?

12 MR JACK: Absolutely. Probably before I answer that, maybe a  
13 footnote to the Old Kinglake Road story post the fires.  
14 We have gone back there and it was an area that was  
15 significantly hit by fires and there were deaths in that  
16 region. We went back there to say, "Look, we still need  
17 to do more work here and we want to do clean-up just  
18 following the fires and the fire damage." We have met  
19 with some residents in that area and discussed the issues,  
20 and they are still committed to not touching it. Despite  
21 the amount of debris and damage done in that area, there  
22 is still a commitment to the environment to not touch it  
23 and leave it in pristine condition.

24 In terms of responding to your question, we have  
25 seen a significant increase in requests and awareness and  
26 activism, I suppose, with probably a couple of key areas,  
27 with our arborists receiving over 160 per cent increase in  
28 workload this year, in the last 12 months following the  
29 fires, and bushland management officers who deal with  
30 vegetation requests for fire slashing on roadsides over  
31 200 per cent increase for their workload. That has been a

1 significant issue for our staff in terms of resourcing,  
2 stress, dealing with very emotional people. With that,  
3 there are still people who are saying, "Don't touch  
4 anything."

5 Just as recently as last night I was dealing with  
6 a particular reserve where we were trying to consult with  
7 residents and community groups to actively participate in  
8 storm damage removal, firebreaks, maintenance works that  
9 would be routinely considered normal sort of fire  
10 management tasks.

11 But it is definitely a balancing act. There are  
12 a lot more people becoming very active about requesting  
13 work, but equally so the environmentally based people have  
14 just as much resistance to that work occurring. So it is  
15 a volatile situation at the moment with the community  
16 groups and trying to balance those competing needs.

17 MS DOYLE: Mr Green, did you want to comment on that?

18 MR GREEN: Yes. While we weren't involved and the pressure  
19 obviously was nowhere near as intense for us, I think the  
20 main thing from a local government perspective overall was  
21 that the media coverage of all of that certainly went down  
22 to local government refusing to provide permits. I think  
23 what you are hearing here is the difficulty councils have  
24 to do that because of the legislation that we are only  
25 responsible for. I think the message didn't go out - and  
26 never does - that local government is really just  
27 administering legislation from higher levels of  
28 government. I think that was probably the biggest damage  
29 that was done to local government in a broader context as  
30 far as community perceptions and understandings are  
31 concerned.

1 MS DOYLE: I have asked you just now about interaction with the  
2 community. I want to finish by asking you about  
3 interaction with the CFA. Mr Jack has made a very  
4 important point: they often are the locals, particularly  
5 the volunteers. But how does your council, each of you,  
6 work in with the CFA who, as we have heard from Mr Leslie  
7 yesterday, do the lion's share of the work on the ground  
8 in some areas, including through devotion of time by  
9 volunteers? They are often referred to and are the  
10 experts in the area. How does each of your councils make  
11 use of their skills and their labour? Mr Jack, starting  
12 with you?

13 MR JACK: I think we have a very good relationship with CFA.  
14 At region 13 we have definitely engaged in a number of  
15 reviews of works. It should be noted that we have 38 CFA  
16 brigades in our shire. That in itself can be challenging,  
17 dealing with that many brigades.

18 In terms of region 13 for the CFA, we have  
19 actually been conducting a review of our roadside slashing  
20 program. They have gone back to their brigade captains to  
21 nominate additional sites to be included or considered.  
22 CFA have assisted in doing those assessments and they are  
23 referring them back to us for inclusion into future  
24 contracts.

25 They have recently, following the fires, have  
26 also included a fuel management facilitator, who is  
27 helping with development of burn plans for us to consider.  
28 That's a challenge that we will need to take back to  
29 council probably in the near future.

30 So I think generally we have been very active in  
31 maintaining that relationship with CFA and they have been,

1 where possible, supportive and provided the technical  
2 expertise. A good example of where we have municipal fire  
3 prevention officers carrying out assessments on private  
4 land, the CFA have assisted in playing an independent or a  
5 referee sort of role in those elements as well. So it has  
6 been valuable.

7 MS DOYLE: Mr Buckley, CFA has a strong presence in the Latrobe  
8 Valley as well and many volunteers, as we heard during the  
9 Churchill hearings, are locals working in the important  
10 industry there or in agriculture. What is the  
11 relationship like between City of Latrobe and the various  
12 brigades?

13 MR BUCKLEY: Very strong, particularly through the municipal  
14 fire prevention committee. There are 24 brigades and  
15 three groups, I think, within the municipality and all  
16 very active in making plans through that municipal fire  
17 prevention plan.

18 MS DOYLE: Mr Brown yesterday in the context of VicRoads, but  
19 I wonder whether it applies more generally - do they also  
20 act as a sort of surveillance army, is the way it was  
21 suggested yesterday by Mr Brown, namely they're locals,  
22 they have some fire skills; do they assist the council by  
23 notifying you about problems that they have noticed on the  
24 roadsides?

25 MR BUCKLEY: There is no question about that.

26 MS DOYLE: Mr Green, Colac Otway Shire?

27 MR GREEN: We have 33 brigades. We do work closely with them.  
28 Particularly I think that's demonstrated through the work  
29 that's been done in the township protection plans and  
30 neighbourhood safer places where they have had a primary  
31 responsibility for those, and we have worked very closely

1 with them.

2 I think the interesting concept about the CFA is  
3 obviously the difficulty they must have with a  
4 professional arm and a volunteer arm. That's always a  
5 challenging thing to manage when you have 33 brigades in a  
6 region because it is very difficult to, I suppose, be all  
7 singing from exactly the same songsheet.

8 But we work very closely with them. We have a  
9 very good relationship with them at a regional level and  
10 at an individual local level. We have had a couple of  
11 issues in relation to neighbourhood safer places where a  
12 brigade captain may feel that a neighbourhood safer place  
13 should be there. We have had feedback from some of our  
14 councillors when brigade captains have brought issues up  
15 that are not our responsibility, but they sometimes suffer  
16 from that communication up and down. It is a very complex  
17 process for them. But we certainly have no difficulty  
18 with them and we work with them very positively.

19 MS DOYLE: What I would do is invite Commissioners, first, if  
20 you have any questions of the panel.

21 COMMISSIONER PASCOE: I have a broad question that relates to  
22 some of the evidence that we have been hearing over the  
23 last few days. We had a panel of experts on Monday and  
24 Tuesday whose expertise ranged broadly across the land and  
25 fire management areas. In the same period we have had  
26 someone from the Victorian Association of Forest  
27 Industries, a group called BEAM Mitchell that I think you  
28 could classify as environmental advocates, and the  
29 Victorian National Parks Association. I think it would be  
30 fair to say that there was no dispute amongst all of them  
31 about the need for roadside burning, vegetation slashing

1 and removal and so on to protect human life. So obviously  
2 all of the argument revolved around the extent and the  
3 means.

4 But what struck me is what I think could be  
5 classified as a movement in the debate from some of the  
6 written submissions that we received early in the life of  
7 the Commission which were much more strongly polarised in  
8 their views, and you could classify them along the  
9 environmental and fire protection - well, really, a  
10 dichotomy rather than a continuum; so a sense that the  
11 debate has moved following 7 February.

12 I think it would be fair to say that some of the  
13 quite powerful evidence that we received related to a  
14 major research project in the United States conducted  
15 under the auspices of the Brookings Institution which  
16 looked at the impact of nine megafires in the  
17 United States and came to the conclusion that they were  
18 uncontrollable, that we are likely to see more of these  
19 events in the future.

20 The expert from the United States who was  
21 involved in that research and spoke to the Commission saw  
22 the fire on 7 February as what the United States  
23 terminology would classify as a megafire and put the view  
24 that was a consistent view amongst the panel of experts  
25 that we are likely to see more of these fires in the  
26 future.

27 So the question broadly, I think, to the panel  
28 is, given the competing interest groups that you have in  
29 your local government but your overriding duty of care for  
30 the safety of the local community as well as the  
31 protection of the environment and, I suppose, the visual

1 aesthetic of the amenity, what does it mean for you and  
2 have you seen a similar movement in thinking at the local  
3 council level?

4 MR BUCKLEY: I think it probably increases the challenge in  
5 terms of trying to get the balance right between fire  
6 prevention, fire protection and environmental management.  
7 I think what it has brought out is that there needs to be  
8 this continuous improvement in working together amongst  
9 all of the agencies to make sure that we can get that  
10 balance right and that people understand the implications  
11 of fire and all those sorts of things and that the  
12 education and awareness campaigns continue to be run.

13 MR JACK: In terms of the challenges we have ahead of us,  
14 I understand why there are various policies and Acts and  
15 regulations put in place for environmental protection, and  
16 I applaud those, but we tend to have things in isolation.  
17 I think the commentary we had earlier was around the  
18 layers of different legislation, regulations, codes of  
19 practice, Acts, and not a lot of them are actually aligned  
20 or interwoven and assist you in navigating this minefield  
21 of challenges and Acts. I'm hoping that something out of  
22 this process is that we can impact on those and have a  
23 common sense approach to this rather than a polarised view  
24 on Road Management Act, vegetation management protection,  
25 planning and those sorts of things.

26 MR GREEN: Yes, I certainly support that. I think the issues  
27 that we have found in the couple of examples we have  
28 talked about are really about non-flexibility, and I think  
29 that's a real issue. The environmental authorities have  
30 some real challenges. The reality is that remnant native  
31 grasslands, the most places you find them are on roadsides

1 because the rest of them have been removed by our  
2 agricultural practices over a long time. So there  
3 probably needs to be some serious thought about where that  
4 goes, and I can understand the conflict between those  
5 things.

6 I think you are talking about February 7, and I'm  
7 not an expert, but I'm not sure that anything anybody  
8 could have done in relation to roadside clearing made a  
9 jot of difference to what happened at the end of the day  
10 on February 7. I think it really relates to us probably  
11 getting closer and, as local government, you are sort of  
12 at the delivery level but without a lot of authority and a  
13 lot of say. I think there needs to be a more  
14 participative approach because really it is getting to the  
15 stage where it is almost impossible to manage these things  
16 from a local government level with the level of resources  
17 that are available.

18 COMMISSIONER McLEOD: Do you think with the example that you  
19 described to us about the way at a local government level  
20 you have negotiated your way through that problem with  
21 the road that was used as a kind of case study, that what  
22 you were really doing at the community level was seeking  
23 to reconcile the different values that you struggle with  
24 at an administrative level which come out of different  
25 pieces of legislation that appear to be conflicting but  
26 which in practice in that simple example are perhaps at  
27 times better resolved at the community level because the  
28 outcome is going to affect that community? It is kind of  
29 democracy in practice, where the local community has got a  
30 real say in helping with the reconciliation of those  
31 competing objectives and that while from an administrative

1 point of view it may be much more comfortable and simpler  
2 and perhaps more efficient, in a sense, if the resolution  
3 of that potential conflict is at a higher level and you  
4 simply administer, it may tend to take away the  
5 opportunity for local communities to help to contribute  
6 towards designing the nature of the environment they want  
7 to live in.

8 MR BUCKLEY: I think that's the danger, that you take away the  
9 individual character of a municipality or the capacity of  
10 a community to influence that individual character, if you  
11 have a one-size-fits-all approach. I think that's one of  
12 the real challenges as well.

13 <CROSS-EXAMINED BY MS TRELEAVEN:

14 MS TRELEAVEN: Gentlemen, my name is Jane Treleaven and  
15 I appear on behalf of the Commonwealth, and of course that  
16 includes the Department of Environment, Water, Heritage  
17 and the Arts. I understand the three of you were in the  
18 hearing room this morning when Ms Doyle tendered a  
19 presentation which was given by DEWHA to state municipal  
20 fire prevention officers in June last year. Were any of  
21 you gentlemen present at that presentation or had  
22 representatives at that presentation?

23 MR BUCKLEY: I wasn't present and I'm not sure if I had anybody  
24 there.

25 MR JACK: I wasn't present and I'm not sure if we had anyone in  
26 attendance either.

27 MR GREEN: I believe that our municipal fire prevention officer  
28 was at that session.

29 MS TRELEAVEN: Can I perhaps call that presentation up. I'm  
30 not sure if I wrote down the TEN number correctly before.  
31 I have (TEN.239.001.0001). If we can go first of all,

1 perhaps to answer counsel assisting's question, to page  
2 0021 of that presentation. Unfortunately the document  
3 itself doesn't have page numbers, but it is approximately  
4 halfway through. As part of that presentation, council  
5 officers were informed as to certain species in Victoria  
6 which fall within the protection of the EPBC Act. There  
7 is a picture there of the striped legless lizard. It does  
8 look like a snake, only friendlier.

9 If we look at the pages following that, I think  
10 it is perhaps 026, which are the pages that Ms Doyle went  
11 through for the Commission, it identifies who is  
12 responsible in determining matters of NES and making  
13 applications, and that DEWHA will answer any questions  
14 which are asked of it.

15 Then on the following page there are "as of  
16 right" activities, which include roadside weed control,  
17 maintenance of access tracks and firebreaks, maintenance  
18 of existing infrastructure, maintenance of services and  
19 utilities, and day-to-day repair and maintenance. Again  
20 on the next page we have fire management activities which  
21 may not be significant and may not fall within the Act.  
22 These types of information programs are of particular use  
23 to councils in determining their obligations, are they  
24 not, and their compliance?

25 MR JACK: Sorry, what was the question again?

26 MS TRELEAVEN: That these types of presentations assist  
27 councils to understand the extent to which they may need  
28 to comply with the EPBC Act?

29 MR JACK: I believe presentations like this would assist  
30 municipal fire prevention officers and council.

31 MS TRELEAVEN: I'm not sure if the Yarra Ranges and Latrobe

1 City Council will have been involved but, Mr Green, you  
2 can perhaps tell us whether, as a result of the listing of  
3 natural template grasslands of the Victorian volcanic  
4 plain in December 2008, DEWHA have conducted a number of  
5 presentations over the last 12 months in respect of that  
6 for councils in your general area?

7 MR GREEN: I couldn't comment on that specific issue. I could  
8 say, though, that we believe that we have a good  
9 understanding of what DEWHA does. We certainly aren't  
10 claiming in any way that DEWHA doesn't provide us with the  
11 information.

12 In fact I have a note here somewhere along those  
13 lines which is saying that the council is regularly  
14 updated via bulletins from DEWHA and DSE on species  
15 listings under the Flora and Fauna Guarantee Act and the  
16 EPBC Act, and they are circulated within our organisation.  
17 Where new maps are provided by DSE, they are incorporated  
18 into council's GIS and steps taken to make planning scheme  
19 amendments where required. So we don't have any issue in  
20 relation to the level of information we have and the level  
21 of understanding we have in relation to the EPBC Act. The  
22 only issue we would comment on is that they don't give a  
23 lot of guidance and direction in relation to fire  
24 prevention works, but then I'm reading what you have on  
25 the screen and I see some there.

26 MS TRELEAVEN: In terms of your relationship with DEWHA, there  
27 was a specific presentation conducted for the Colac Otway  
28 Shire in April last year, was there not, and then a  
29 follow-up site meeting in November last year at the Cressy  
30 Shelford Road?

31 MR GREEN: Yes, that would be right.

1 MS TRELEAVEN: Perhaps I can then deal with the issues  
2 surrounding Cressy Shelford Road. The roadworks which  
3 were the subject of the breach or alleged breach occurred  
4 in April and May 2008, didn't they?

5 MR GREEN: That's correct.

6 MS TRELEAVEN: At that time, as I understand it, you were the  
7 general manager of planning and sustainable development  
8 for the council?

9 MR GREEN: That's correct.

10 MS TRELEAVEN: From November 2008 you were the acting CEO?

11 MR GREEN: That's correct.

12 MS TRELEAVEN: So you were, if not directly involved in the  
13 negotiations - - -

14 MR GREEN: Actively involved.

15 MS TRELEAVEN: Actively involved in the negotiations with  
16 DEWHA. You have also now informed yourself of the matters  
17 in the statement that you have adopted this morning. You  
18 gave evidence that a decision was made that no permit was  
19 required for the resealing works, and they were resealing  
20 works of the road?

21 MR GREEN: I think that's correct.

22 MS TRELEAVEN: At the time of the works the entire Cressy  
23 Shelford Road reserve was subject to a vegetation  
24 protection overlay and environmental significance overlay,  
25 was it not?

26 MR GREEN: Absolutely.

27 MS TRELEAVEN: You heard me asking questions of Mr Spence this  
28 morning as to those overlays?

29 MR GREEN: Mm-hm.

30 MS TRELEAVEN: I'm not sure if the Commissioners still have  
31 their copies of schedule 4 and schedule 2 to the overlays,

1 but I seek to tender those documents.

2 CHAIRMAN: Perhaps they can be part of 755.

3 MS TRELEAVEN: If the Commission pleases. To be fair,  
4 Mr Green, I understand that there have been some  
5 amendments to the planning scheme since April 2008, but  
6 the charts identifying rare and threatened species and  
7 communities that were present in that area formed part of  
8 the planning scheme at the time?

9 MR GREEN: Absolutely. We are not disputing any of that. It  
10 is quite clear we were well aware of it.

11 MS TRELEAVEN: Is it also correct that the council had  
12 previously undertaken works on that stretch of road and  
13 had in fact obtained EPBC approval for those works?

14 MR GREEN: I think that may be correct. I know that works had  
15 been done and an alternate practice was adopted. Those  
16 works were done by our own council works team.

17 MS TRELEAVEN: You said alternative work practices were  
18 adopted. Is it correct that they involved the placement  
19 of the laydown site on the other side of the road from  
20 the protected reserve rather than where the contractors in  
21 this instance placed it?

22 MR GREEN: They certainly didn't place them where the  
23 contractor did. I had an understanding they may have  
24 placed them on private land that wasn't impacted.

25 MS TRELEAVEN: In fact, as it turned out, the site where the  
26 laydown site was placed was a DSE monitoring site for the  
27 striped legless lizard.

28 MR GREEN: That's right.

29 MS TRELEAVEN: And there were a number of tiles placed across  
30 the ground under which the lizards were monitored to see  
31 whether they resided there?

1 MR GREEN: That is right.

2 MS TRELEAVEN: And a number of those tiles were smashed and  
3 destroyed and covered with large stockpiles of gravel?

4 MR GREEN: Basically what you are saying is correct and we are  
5 not disputing any of that.

6 MS TRELEAVEN: You gave evidence this morning about a private  
7 landowner having also breached the EPBC Act and providing  
8 an enforceable undertaking to DEWHA. The events that led  
9 to that enforceable undertaking occurred in March 2007 and  
10 April 2007, did they not?

11 MR GREEN: Don't know. I have no reason not to believe that.

12 MS TRELEAVEN: Was council aware of those matters by  
13 April 2008?

14 MR GREEN: I couldn't comment on that specifically, but I think  
15 in the context of what you are saying we are not disputing  
16 that we were aware of that roadside. What we are saying  
17 is it was a human error which led to what occurred. So  
18 that's not the dispute.

19 MS TRELEAVEN: The reason I'm pursuing these matters, Mr Green,  
20 is that in the statement of Mr Small and I think in your  
21 evidence this morning it was said that the road  
22 contractor's environmental management plan was inadequate  
23 in this regard, but what is in fact clear is that council  
24 had an enormous amount of information available to it  
25 which could have been provided to that roadside contractor  
26 and if normal processes had been followed would have been  
27 provided to the roadside contractor.

28 MR GREEN: Yes, that's true. I think what I have said  
29 consistently and what council have said consistently is  
30 that we have been very actively involved in identifying  
31 areas of that sort of significance. We have done an

1 enormous amount of work of getting our roadsides mapped.  
2 We are well aware of it.

3 What we have said all along is that we are not a  
4 council that went out and wilfully damaged or did any of  
5 this without having a real commitment to the environment.  
6 There was human error involved. I talked about this  
7 earlier about resource capacities of councils like us  
8 where, when people are under pressure, people make  
9 mistakes. That's what we are saying here. Quite clearly  
10 there was a process in place.

11 The only thing that we are saying is that in the  
12 discussions with DEWHA and DSE, and they were joint  
13 discussions, there was little regard - although the  
14 authorities said that the reason we didn't get prosecuted  
15 was because we had already shown that we had significant  
16 environmental measures in place and we were  
17 environmentally committed. I think that our concern would  
18 be that under that context this was quite clearly a lack  
19 of implementation of procedures. It was certainly nothing  
20 that was willingly done by council and nothing that was  
21 consistent with council's activities.

22 The reason that we proceeded with the enforceable  
23 undertaking, while there was a lot of pressure on us from  
24 within the industry to take it to the prosecution stage  
25 and argue those cases, we were advised that it would cost  
26 council significantly more if we were to lose that case.  
27 So we had to make a decision in relation to the capacity  
28 of our community and the impact it would have on our  
29 community.

30 So there is no dispute whatsoever and we have  
31 never disputed all the things you are saying. We know the

1 evidence was there. We know council were aware of it. We  
2 know council had in fact on their own initiative made  
3 significant efforts to make sure that those things were  
4 mapped and were identified because of our commitment to  
5 environmental issues and because of the nature of the  
6 environment that we live in where we believe that our  
7 community values those issues as well.

8 So there is no denying any of what you are  
9 saying. The issue from our perspective was that we had  
10 processes in place and, because of resource pressures  
11 which are significant for a council like us, a mistake was  
12 made.

13 MS TRELEAVEN: If I can just ask a couple of questions which  
14 flow on from that. The first is you said you received  
15 some advice. The advice you received, as I understand it  
16 from publicly available council agenda and a report that  
17 was tabled, was that the most likely result of a  
18 prosecution would have been a finding of guilt and that as  
19 a consequence of that advice the council offered up the  
20 undertaking to avoid prosecution, and that's what the Act  
21 provides, and then all those other factors that you have  
22 mentioned were taken into account; is that a fair  
23 assessment?

24 DR LYON: Can I object to the questioning at this stage and  
25 just ask the question how this helps the Commission on the  
26 issue of roadsides.

27 MS TRELEAVEN: This helps, Commissioners, because this has been  
28 held up as the example of how difficult it is for councils  
29 to comply with the regulation that's set out in the EPBC  
30 Act. The fact is that by Mr Green's evidence we have  
31 established that the council had processes in place to

1 deal with these things, had previously been able to comply  
2 with the Act without any difficulty and therefore the  
3 difficulties that are said to arise may not in fact arise.

4 CHAIRMAN: I'm prepared to allow the questioning.

5 MS TRELEAVEN: I will move on. In the context of that, is that  
6 a fair summary of what occurred?

7 MR GREEN: Yes, it is, although I don't think that is the  
8 context this issue is being raised in. The context this  
9 issue is being raised in is that when councils are working  
10 through what is a difficult regulatory process there  
11 should be a better relationship between the departments in  
12 terms of supporting what is being done.

13 As far as we are concerned, and it is probably  
14 not based on any legal principles whatsoever, the fact  
15 that council had done all those things and there was a  
16 human error points to a couple of really basic issues in  
17 relation to local government. One of those is that local  
18 government does not have the resources and a council like  
19 us with all the responsibilities that we have don't have  
20 the resources or the capacity to get the resources because  
21 we can't just continue to raise rates, we don't get enough  
22 support from higher levels of government as far as  
23 enabling us to do our job and then, by following the line  
24 that was followed by DEWHA and DSE in relation to this  
25 matter, what it did was exacerbated those issues for this  
26 council which still has to go out and try and meet all of  
27 its obligations.

28 So what it does to the industry, it points out  
29 that there is not that willingness and that partnership  
30 from government to support the enormous amount of  
31 obligation that we have to deliver your legislation. Now,

1 if we make that mistake - we are supposed to enforce those  
2 things to the public. We are not perfect, which we have  
3 just proven in a large way. But, unless we have a better  
4 relationship in how we work on those things and deliver  
5 those things and if we have shown such a commitment to the  
6 environment, then the measures that were taken were  
7 enormous for a municipality of our size and with our  
8 resources. To me that's the context of what's happening  
9 here and that's the context how other local government  
10 will see that that are also sharing the enormous  
11 difficulties we have to carry out our responsibilities  
12 under the current funding structures and availability of  
13 resources.

14 MS TRELEAVEN: So what I understand you to be saying is that it  
15 is not necessarily a matter of complexity of the  
16 legislation or the regime but a resourcing issue.

17 MR GREEN: No, it is the complexity of the legislation, how it  
18 combines with the other legislation that comes in and the  
19 lack of council's capacity in our case and in a lot of our  
20 councils' case to effectively deliver our obligations. It  
21 is a combination.

22 MS TRELEAVEN: Mr Jack, you were taken to the decision you  
23 received from DEWHA in respect of the vegetation  
24 management and you were told that it wasn't going to be a  
25 controlled action. That is effectively because the  
26 department - the document will speak for itself, of  
27 course, but it was found that there would not be a  
28 significant impact on the species listed in that  
29 particular part of the area because of the works that you  
30 were already undertaking and that in fact it was going to  
31 enhance the habitat for the Leadbeater possum in some

1 instances; is that correct?

2 MR JACK: Partially. In terms of the works that we were  
3 proposing, they were to comply with the Road Management  
4 Act and provide roads that were safe and trafficable for  
5 trucks that particularly access that area. What the  
6 council then did in terms of working with its community  
7 and friends groups and neighbouring property owners was to  
8 develop up a suggestion about having a roadside vegetation  
9 management plan put in place as our commitment to the  
10 environment and to align ourselves with the various state  
11 and federal Acts and policies and guidelines to achieve an  
12 overall net gain or an improvement or an offset, however  
13 you want to term that.

14 But the Shire of Yarra Ranges is committed to  
15 environmental initiatives and protection. We still  
16 wrestle with that balancing act between the various Acts  
17 and requirements. So I think the EPBC Act application,  
18 when we put all of that on the table, I think we probably  
19 went a long way to minimising that requirement.

20 MS TRELEAVEN: Mr Buckley, as I understand it, Latrobe City  
21 Council has not encountered any difficulties in this  
22 regard.

23 MR BUCKLEY: No, that's right.

24 MS TRELEAVEN: Thank you. I have nothing further.

25 MR GREEN: Can I make one final comment? We have just received  
26 an environmental report, a site assessment dated  
27 27/1/2010, and I'm happy to table this. While it is very  
28 difficult to pull a statement out of a document, and  
29 I know that's difficult when there is a whole document  
30 here, the comment made by the people doing the assessment  
31 is that overall the disturbed areas are regenerating well

1 and because of the timely rehabilitation works are  
2 unlikely to suffer permanent damage.

3 I was out on the site earlier this week and  
4 personally saw examples of spiny rice-flower, had saw in  
5 probably a two or three square metre place about seven or  
6 eight very healthy looking plants, and we are very pleased  
7 with the way the site is regenerating. I suppose in the  
8 context of that the punitive nature of the costs to this  
9 council need to be questioned. I just wonder whether the  
10 science is really there at this time to be that  
11 accurately - to be talking about the level of damage at  
12 such an early stage, because quite clearly it is  
13 regenerating very successfully and we are very pleased to  
14 see that. But I just thought that was worth throwing in.

15 MS TRELEAVEN: That is as a result of course of the works that  
16 were undertaken pursuant to the undertaking given to  
17 DEWHA?

18 MR GREEN: And the work that council leapt into the instant  
19 this occurred.

20 DR LYON: Commissioners, I am here under false pretences .  
21 I don't have cross-examination, but there is one matter  
22 that needs clarification. There has been some discussion  
23 through the Shire of Yarra Ranges about the use and  
24 enforcement of clause 53 of the Yarra Ranges planning  
25 scheme, and it is important for you to understand how it  
26 works. If I can just tell you in brief compass.

27 Although it is part of the local planning scheme,  
28 it in fact is a state planning provision. Under the  
29 Planning and Environment Act there is a part of the Act  
30 that deals with metropolitan green wedge protection. So  
31 that gets legislative enshrinement. It is section 46AA.

1                   From section 46AA we then go to section 46A,  
2                   which is the next part. So the green wedge then goes down  
3                   in the Planning and Environment Act to the part of the Act  
4                   called the Upper Yarra Valley and Dandenong Ranges  
5                   regional strategy plan, which puts into place certain  
6                   further legislative enshrinements to protect the idea of a  
7                   green wedge shire.

8                   Then from there we go to section 46F which says  
9                   that planning schemes are to comply with approved regional  
10                  strategy plans. So, in effect, a local plan is not to be  
11                  inconsistent with state planning policy through the Act.  
12                  So clause 53 is not an enactment. The Shire of Yarra  
13                  Ranges is not - - -

14 CHAIRMAN: It is not a local provision which is inconsistent  
15                  with the state provision.

16 DR LYON: Yes. So it cascades down through the state  
17                  provisions. I was just concerned that from some of the  
18                  comments or observations made the Commission may have  
19                  thought that - - -

20 CHAIRMAN: May have thought simply rather than in a complex way  
21                  that's how this operates.

22 DR LYON: Indeed.

23 MS DOYLE: I thank Dr Lyon for that explanation and for  
24                  confirming my decision not to practise in planning law.  
25                  Gentlemen, I thank you for participating in the panel, and  
26                  particularly Mr Green for stepping in at the last minute.  
27                  I would ask that the members of the panel be excused.

28 <(THE WITNESSES WITHDREW)

29 MS DOYLE: I had high hopes this morning. I had indicated to  
30                  VGS if they were able to get Mr Strickland ready I would  
31                  try to start him before lunch, and I think he is going to

1 be disappointed again. This afternoon we do have to fit  
2 in Mr Strickland, a lay witness and Mr Fogarty. We are  
3 doing everything we can to shorten timeframes, and I know  
4 that the Commission needs to finish right on 4.30 today.  
5 The only suggestion I can offer up is that if we even  
6 started at 1.45 I can get the preliminaries of  
7 Mr Strickland's statement out of the way sooner.

8 CHAIRMAN: Yes, we will start at 1.45.

9 LUNCHEON ADJOURNMENT

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1 UPON RESUMING AT 1.45 PM:

2 MS DOYLE: Commissioners, can I now call Roger Philip

3 Strickland.

4 <ROGER PHILIP STRICKLAND, affirmed and examined:

5 MS DOYLE: Thank you, Mr Strickland. Your full name is Roger

6 Philip Strickland?---That's correct.

7 And you are a fire investigator and senior wildfire instructor

8 with the CFA?---Correct.

9 You have prepared a statement for the Royal Commission and

10 I understand you want to identify a couple of small  
11 changes to it. They are in writing and we will provide  
12 them to the court reporter and ensure these changes are  
13 made, but just to identify them, there is a small change  
14 in paragraph 24 where you want to correct the reference to  
15 the state emergency control centre to the "SCC" and there  
16 is a correction in paragraph 39.9 where you want to insert  
17 the following words. The paragraph says, "I have been  
18 asked to comment specifically on the use of roadside and  
19 irrigation channels in pulling up this fire." You want to  
20 add the words, "Other than the comments above, it is  
21 impossible to provide further detailed analysis." I have  
22 in writing the changes in the form you want to make them  
23 marked up and they will be made. With those changes,  
24 Mr Strickland, are the contents of your statement true and  
25 correct?---Yes, I believe they are.

26 MS DOYLE: I tender that statement.

27 #EXHIBIT 759 - Witness Statement of Roger Philip Strickland,

28 dated 08 February 2010 plus 20 annexures

29 (WIT.3004.034.0025).

30 MS DOYLE: Mr Strickland, focusing on your expertise and

31 experience at the outset, you say in your statement at

1 paragraph 1 you joined the CFA as a senior wildfire  
2 instructor for the Gippsland area in March 2001?---Yes.  
3 And that you currently have a role as a fire investigator and a  
4 senior wildfire instructor. In terms of your background  
5 and other experience, what sort of training or courses  
6 have you done in relation to fire investigation?---I  
7 trained and qualified in my previous employment with  
8 the Department of Sustainability and Environment and  
9 I have since done at least one, possibly two, refresher  
10 courses whilst employed with the CFA.

11 At paragraphs 9 and 10 you set out the various qualifications  
12 you have. Paragraph 9 refers to the Diploma in Electronic  
13 Engineering, Advanced Certificates of Applied Science and  
14 Art and Design, and then in paragraph 10 you refer to some  
15 of the courses you have done while employed by the CFA,  
16 including wildfire firefighter and all of the courses set  
17 out there. Paragraph 11 notes that you are currently  
18 endorsed by the CFA operations manager for region 9 with  
19 all the endorsements set out there and you are currently  
20 endorsed by the chief officer as a fire investigator,  
21 level 3 planning officer and a near-miss incident  
22 investigator?---That's correct.

23 You also set out your career history prior to starting with the  
24 CFA in paragraph 12. You have 21 years background working  
25 with the DSE, Parks Victoria and other entities and you  
26 set out there the work that you have done while engaged by  
27 those entities. In paragraph 13 you refer to what you  
28 have done as a wildlife instructor through paragraphs 13  
29 and 14. In paragraph 15 you refer to the type of work you  
30 have done in terms of enhancing systems at the CFA?---Yes.  
31 Paragraph 16 is important because it is there you note your

1 fire investigation experience and you point out that since  
2 2001 you have had a secondment providing support to the  
3 team documenting certain incidents involving injuries and  
4 near-misses. You have conducted investigations as set out  
5 in paragraph 16.2. You undertook an investigation  
6 commissioned by the DSE regional fire manager in  
7 2006/2007, and then of course after the February fires you  
8 were seconded to the Bushfire CRC where you engaged in  
9 fire spread mapping in relation to three of the big fires  
10 that burned in February?---That's correct.

11 Obviously, as you set out in paragraph 17 onwards, you have had  
12 a great deal of experience to the practical work of  
13 firefighting and I won't go through that in detail, but  
14 you have set out the fires on which you've worked. You  
15 have also been involved in international and interstate  
16 deployments as is set out in paragraph 21. The final  
17 matter that's relevant to your knowledge and your  
18 experience in the field is your training as a fire  
19 behaviour analyst, and you set that out in paragraphs 22  
20 to 24. Now I want to take you to the work that you have  
21 done in order to prepare this statement. As you explain  
22 in the body of the statement, you were tasked with doing a  
23 large job and in the end you had to do it in a relatively  
24 short space of time. You were asked to look at at least  
25 three types of areas where roads and roadsides might be  
26 relevant to the fires of 7 February. You were asked to  
27 respond first generally to allegations and suggestions  
28 that have been made in various fora that roadside  
29 vegetation around Victoria might have acted as a wick or a  
30 fuse in some of these fires. Then you were asked  
31 generally to comment on whether conversely roadside

1 vegetation may have acted as a windbreak in some of our  
2 fires. The third limb of the work you were asked to do  
3 was to investigate a long list of particular roads where  
4 questions had been raised, in order to determine whether  
5 the vegetation on those roadsides had contributed to or  
6 changed fire behaviour. Now, that's giving the work  
7 you've done a very broad brush and the detail that you  
8 have provided is incredibly important, so we will go to  
9 some of the examples in a moment. I might take you to  
10 methodology first, paragraph 26. What methodology did you  
11 adopt when looking at all of these requested locations?  
12 What sources did you draw on to do your  
13 investigation?---Because of the coverage, fires spread  
14 right across Victoria and the number of them, I knew  
15 I couldn't do them on my own, so I relied on all the  
16 reports, a number of reports I could get hold of,  
17 including some of the fire investigation reports for each  
18 of the fires. I say in my statement I relied on the work  
19 in those reports. I also engaged another wildfire  
20 instructor, Peter Cecil, who I mention in the statement,  
21 to take some photographs and do some reporting for me.  
22 You note in paragraph 26.4 that where possible you conducted  
23 field investigations yourself, although that wasn't  
24 possible at every site, and Mr Cecil who assisted you  
25 visited sites relevant to Horsham, Weerite and  
26 Coleraine?---That's correct. The sites I visited were the  
27 ones nearer to home, that is Bunyip, Delburn and the  
28 Labertouche area.  
29 Where possible also, Mr Cecil and yourself conducted phone or  
30 face-to-face interviews with some of the eyewitnesses who  
31 had some experience of the particular roads where fires

1           crossed?---That's correct.

2   In paragraph 27 you start to talk about fire behaviour in the  
3           context of roadside vegetation, and this is an important  
4           background to all of the analyses you then undertake.

5           I want to take you through this in some detail. In 27.1  
6           you make the point that, "Fire behaviour in roadside  
7           vegetation will vary in the same way as fire behaviour  
8           varies in the general landscape." Can you expand on that  
9           a little and just educate us as to the way in which  
10          roadside vegetation can impact on fire behaviour in that  
11          way?---I know the Commission has heard quite a lot of  
12          evidence about fire behaviour and roadside vegetation and  
13          has been looking into that. Of course, observers are  
14          closer to that vegetation than any other, quite often.  
15          Hence, misperceptions can arise. But the bottom line is  
16          that the fire behaviour in that vegetation is influenced  
17          in exactly the same way as the fire behaviour in the wider  
18          landscape. That's really my general thrust there. It is  
19          subject to the same three major factors, that is fuel,  
20          weather and topography, just the same as the wider  
21          landscape is.

22   You point out in paragraph 27.2 that, "The issues caused by  
23          roadside vegetation are principally those of localised  
24          high fire intensity" adjacent to the road, and then you  
25          raise spotting activity and the issues of radiation. Can  
26          you tell us a little about those localised effects that  
27          people might see?---That's right. Again, because the  
28          vegetation is closer to people as they pass by, if it's on  
29          fire they are going to feel a lot more heat. The same  
30          heat out in the wider landscape is not going to impact on  
31          people and firefighters as much, of course. Hence that's

1 the issue for us really there.

2 Spotting, what's the relevance of spotting when you are trying  
3 to consider the role that roadside vegetation might have  
4 played on a fire or a fire spread?---One might expect on  
5 first glance that a mineral earth fuelbreak as wide as a  
6 road might stop a fire and it would if it were not for the  
7 effect of spotting; that is, the fire throwing embers  
8 ahead of the fire, carried by the wind and crossing the  
9 fuelbreak in that way, so spotting is a major problem.  
10 Once the fire starts to spot, there is no normal road or  
11 normal width road that's going to stop it, really.

12 Do different plant species - this is something you suggest in  
13 27.4 - produce different levels of spotting activity? Can  
14 you talk us through that? What would be the different  
15 capacity to spot of grass fuels, shrub fuels and then  
16 trees?---This is well known to firefighters, perhaps not  
17 so well known by the general public. Grass fuels spot the  
18 least, the shortest distance of all, perhaps. They have  
19 less material that can be lifted that will burn for a long  
20 enough time such as they are still glowing when they land.  
21 They will spot 10 metres to 100 metres typically, so tens  
22 to hundreds of metres. Also because the height of grass  
23 fuels is so much lower, they don't travel as far.

24 Can I pause you there and ask in relation to grass fuels.  
25 There has been a lot of evidence over the last couple of  
26 days about two types of dealing with grass at least,  
27 mowing and slashing. In the context of spotting, what  
28 impact or what benefit does mowing offer and/or slashing  
29 offer?---I'm not quite sure of the difference between  
30 mowing and slashing. Physically we are reducing the  
31 height of the grass either way. What that does is it

1 reduces what we would call the release height of the  
2 ember, so because the ember is taking off from a lower  
3 elevation, it is not going to be able to travel as far.  
4 If one does mowing or slashing, if they do carry the same  
5 meaning, in a way which leaves the cut portion of the  
6 grass in the vicinity, does that still assist in terms of  
7 fire behaviour or reducing fire behaviour, or not?---What  
8 that's done is changed the arrangement of the fuel in  
9 space so that the cut portion of the fuel - the volume of  
10 fuel is still there, but it is arranged in a more compact  
11 manner, and that slows the fire down. You have more of a  
12 smouldering burn rather than a blazing burn. Standing  
13 grass burns the hottest and the fastest and burns with a  
14 greater flame height.

15 Now, next in the hierarchy, I suppose, at least in the lay  
16 person's mind, is shrubs and other low-lying vegetation  
17 and in some of the places you investigated that did appear  
18 to be relevant. Can you just comment on that type of  
19 vegetation?---Yes. So, shrubs being taller, the general  
20 working rule of thumb for firefighters is that they will  
21 give a flame height equal to the height of the shrubbery,  
22 so straight away you are getting flame heights much, much  
23 higher than something like grass. The same thing with  
24 trees, because they are even taller again. If the bark is  
25 flammable and will carry the fire up the trunk, you are  
26 straight away getting vertical flame at a much greater  
27 height, which is of course an issue for greater radiation  
28 and heat load on firefighters trying to deal with it.

29 Is that why some types of barks are referred to as ladder fuels  
30 because they assist in carrying the flame up to the  
31 canopy?---That's right, yes. Some species tend to have a

1 characteristic of generating these ladder fuels.  
2 Stringybarks are one of the worst and probably about the  
3 most flammable tree we have in this country, being very  
4 fine in nature and persisting all the way up the trunk and  
5 out the branches out to the crown. So even in warm  
6 conditions stringybarks will carry fire up into the crowns  
7 quite readily.

8 Do stringybarks pose particular problems for firefighters  
9 especially when firefighters are working using a road or a  
10 track to suppress a fire?---Yes, they do. I wonder if  
11 I could refer to my first photograph, which is a good  
12 illustration of that.

13 Certainly. Is this the first photograph in annexure 3,  
14 I think, (WIT.3004.034.0073), and I think, Mr Strickland,  
15 you would know this photo as photo RPS1. Is that the  
16 photo you mean?---I believe so. I'll recognise it  
17 straight away because I took the photo some years ago.

18 So this is the one that has the notation "Embers from burning  
19 stringybark". Do I have the right photo?---That's  
20 correct.

21 This was taken at Lang Lang?---That's right, at a prescribed  
22 burn done by the CFA in that year in late autumn, very  
23 mild conditions. In fact, the fuel was verging on going  
24 out, it was almost too damp, but in spite of that you can  
25 see the fire carrying readily up the trunk of the  
26 stringybark. While snapping away with a camera, I managed  
27 to catch an image of some burning embers just floating  
28 across the control line into some dry leaf litter on the  
29 right-hand side of the photograph. You can tell how much  
30 wind is there by the smoke haze just sitting there,  
31 sitting over the road, almost virtually no wind. Yet,

1           because of the release height, because the embers are able  
2           to float from well up the trunk, they can easily cross a  
3           track like that.

4   As you note in your statement, burning embers or firebrands  
5           released from the upper branches of a tree, especially  
6           where the tree is greater than 40 metres itself, might  
7           travel between tens and hundreds of metres?---That's  
8           right. We start to think in terms of a wind blowing that.  
9           The embers will easily float tens to hundreds of metres  
10          and, in extreme conditions like February 7th, kilometres.

11   I want to take you back to paragraph 27.9 of your statement at  
12          witness page 0035. There you note that, "Roads and tracks  
13          can be useful to firefighters when they are attempting to  
14          stop the spread of wildfires in mild conditions or where  
15          there are light fuel loads." You make a distinction  
16          between that and severe conditions. To what degree and  
17          why do roads become less useful once the conditions get  
18          above the milder conditions? Do you see paragraph 27.9?  
19          You say there that roads and tracks could be useful to  
20          stop the spread of a fire in a mild condition, but you say  
21          it is different under severe conditions. Can you just  
22          explain why that is so?---Yes. The road or the track  
23          provides access to the fire suppression forces, obviously.  
24          So, in the case of the first photograph, if suppression  
25          forces are there in a timely manner or in time, they could  
26          for example wet down the trunk of the tree and stop the  
27          fire climbing those edge trees which are giving the  
28          problem. In severe conditions there is a lot greater  
29          intensity to deal with, especially from surface fuels in  
30          addition to the fire climbing the trunks, and the speed at  
31          which the fire is travelling up as well as across the

1 landscape and the distance of that spotting makes the  
2 whole thing much more problematic.

3 I want to take you to the points you make in 27.10 and 11. You  
4 said at the outset, Mr Strickland, of your statement that  
5 there is a great deal of variation in roads, vegetation  
6 and fires. You make the point in 27.10, "In Victoria this  
7 applies especially to western flanks of a fire because of  
8 the tendency for passing cold fronts to produce  
9 south-westerly winds changing the western flank of a fire  
10 into a low intensity backing fire," and then you note that  
11 "Conversely, roads on the eastern flank of a fire will  
12 tend to be less useful." Is the point you are making  
13 there that even the very position of a road compared with  
14 where the front of the fire is, whether the fire has  
15 already been affected by a change, all of those things  
16 impact on its usefulness in halting the spread of a  
17 fire?---That's correct. Because winds in this part of the  
18 continent tend to back to the west or veer increasingly to  
19 the west with the passage of a cold front, it puts the  
20 pressure and the headfire more and more on the eastern  
21 flank. The western flank tends to be more a backing fire;  
22 that is, the flames are leaning away from the direction of  
23 spread. I know that is sounding a bit technical, but  
24 backing fires are much more benign to firefighters. They  
25 are still spreading towards the firefighter but the flames  
26 are leaning away from them and the spotting effect is  
27 neutralised because the winds are carrying the spots into  
28 the burnt area. With a heading fire, which is what is  
29 occurring on the eastern flank as the wind veers westerly,  
30 the flames are leaning towards the firefighter and the  
31 fuels and the spotting also is being carried towards

1 firefighters and across any control lines or roads.

2 As I understand what you then say in paragraph 27.14, not only

3 does the position of the road compared with the front or

4 the flank of the fire matter, but also the angle of the

5 road compared with the direction of the fire spread and

6 then the topography in the surrounding area. Can you just

7 explain to us the points you are making in 27.14? I think

8 you may have a diagram about the angle of the road.

9 Perhaps if that could be put on the document screen. The

10 witness has the diagram. Just explain to us, when that

11 comes up, what point you are making about that?---The fire

12 on the left of the image is approaching a road at right

13 angles to its direction of spread. I have dotted in a few

14 spotfires coming out of it. They are all crossing the

15 fuelbreak of the road easily, as you can see, the

16 fuelbreak of the road only being a few metres. The other

17 thing that is happening with that diagram is the impact of

18 the fire on the road occurs over the entire width of the

19 fire all at once, so suppression forces trying to stop

20 that fire have a much more difficult job to do that.

21 Compare that with the diagram on the right of the image.

22 The fire is approaching the road at an angle. Spots from

23 the fire tend to fall more along the roadside. I have

24 exaggerated that a little. The other thing that is

25 happening is the impact of the fire on the road occurs at

26 a shorter distance along the road, so more at a point on

27 the road as the fire progresses towards the road. So fire

28 suppression forces are dealing with fire along a shorter

29 length of road as the fire impacts the road. As you can

30 see, as the fire becomes more and more parallel to the

31 road, that effect increases, making it more beneficial to

1 the firefighter.

2 With those comments and explanation in mind, can I take you  
3 back to paragraphs 28 and 29 of your statement. That's  
4 page 0037. In paragraph 28 you note how this has arisen.  
5 You were asked to respond to a letter in which it was  
6 reported to you that there have been allegations made that  
7 particular stretches of road acted as a fire corridor, a  
8 wick or a fuse on 7 February. Before we get to the  
9 particular examples, you make a comment in paragraph 29 in  
10 response to that terminology at the outset, and you say in  
11 paragraph 29, "The terms "fire corridor", 'wick' and  
12 'fuse' should be used with care. Once ignited, roadside  
13 vegetation will not invariably burn 'like a fuse',  
14 steadily and rapidly along the roadside, independent of  
15 the conditions. In general, this will only occur where  
16 the factors within the roadside vegetation that affect  
17 fire behaviour are different to that of the surrounding  
18 vegetation." Can you explain that and perhaps expand on  
19 the example you have given there about tall dry grasses  
20 along the road?---If the Commissioners would indulge me  
21 for a minute, I'm always reminded of Wile E. Coyote from  
22 my boyhood cartoon-watching days. Wile E. Coyote was  
23 always trying to catch Road Runner to make a meal of him  
24 with various things like rocks and bombs. I'm reminded of  
25 the big black bomb, that Wile E. Coyote always lit the  
26 fuse and the thrill, of course, watching it was that the  
27 fuse was fizzing down closer and closer to the bomb  
28 inexorably and unstoppable and completely independent of  
29 all Wile E. Coyote's doings. Somehow Wile E. Coyote  
30 always ended up copping it, for some reason or another.  
31 So the image that this term "fuse" gives can sometimes be

1 a bit misleading in that, yes, roadside vegetation can  
2 ignite and burn, but not independently of the conditions,  
3 the wind and all the other factors that are affecting that  
4 vegetation. So that's really what's behind that. The  
5 fire in the vegetation is affected by the same sets of  
6 influences as the rest of the fire.

7 In the rest of your statement when you go to the level of  
8 detail of looking at particular roads, you sometimes draw  
9 a distinction between whether the roadside variation had a  
10 localised effect or whether it contributed to intensity  
11 but not the forward spread of the fire and, thirdly, you  
12 sometimes mention the lateral spread of the fire. Now,  
13 before we go to the examples, can you walk us through the  
14 distinctions you are making there first? What about the  
15 first group where you say, "I have found a localised  
16 effect but no impact on the overall spread of the fire?"  
17 What does that mean?---That would mean an example like the  
18 fire impacting a road, say, at right angles, the roadside  
19 vegetation possibly or typically with a line of trees,  
20 which has provided a shower of embers across the road,  
21 allowing the fire to spread across the road and perhaps  
22 even giving the fire a momentary increased rate of spread  
23 by virtue of that spotting. But when you look at the  
24 spread map, there is really no change in the overall shape  
25 of the fire and undue spread in a certain direction, as an  
26 example.

27 Taking my second example, instances where you refer to possible  
28 impact on the overall shape or spread of the fire, I can  
29 say at the outset you found extremely few examples of  
30 that. But where that's happened, why can that sort of  
31 thing happen?---It can happen, and I did find one or two

1 examples where the roadside vegetation is a heavier fuel  
2 load, more continuous than the surrounding, and typically  
3 this might be in grasslands where the roadside vegetation  
4 for a range of reasons is taller or heavier or more  
5 continuous than, say, the pasture, which typically on  
6 Black Saturday was drought affected and fairly severely  
7 eaten out so the fuels in the pasture were lower, less,  
8 less continuous and, as I note in my fireman's handbook  
9 here, the textbook "Grassfires" by Cheney and Sullivan,  
10 which we refer to often, fuels in taller, more continuous  
11 grass burn at a greater rate of spread than eaten-out  
12 pasture, so you could get a faster movement in that  
13 particular situation.

14 What about lateral spread? There are some examples in the  
15 investigations you have done where you conclude that the  
16 roadside vegetation has had no appreciable impact on  
17 forward rate of spread, but that there has been noticed  
18 this effect called "lateral spread". What's that?---The  
19 fire is spreading in all directions, backwards, into the  
20 wind, sideways and of course forwards all the time. There  
21 was one particular fire where I noticed some lateral  
22 spread that occurred typically along roadsides and creeks.  
23 For the same reason the fuel was taller, more continuous  
24 than the surrounding vegetation.

25 The last introductory remark I want to make to you is that, in  
26 light of all of the roads that you surveyed, are you able  
27 to make any general conclusions about whether the impact  
28 of the weather, particularly the wind and heat on  
29 February 7th, had an effect on roadside vegetation across  
30 the state that you were able to draw any general  
31 conclusions about, or is it always a question of

1           investigating the specific road?---You are asking did the  
2           weather have an effect on the vegetation?

3    On the question of whether vegetation itself managed to impact  
4           the fire?---Yes, in terms of acting like a windbreak, for  
5           example? I had difficulty finding many examples of that.  
6           I found one that I could state categorically was the case.  
7           I'm sure it did happen in other places, but much less  
8           often. That's about all I can say there for the moment.

9    What I was also really putting to you, Mr Strickland, was this  
10           question: your statement sets out investigations of  
11           particular roads, particular places affected by each of  
12           the fires, and you have reached a different result about  
13           each road, a different conclusion about each road. But  
14           was the weather of 7 February of such a type that it  
15           overrode any local questions or is there a different  
16           answer for each road as to whether the vegetation  
17           contributed more or less than the weather?---The weather  
18           on 7 February was so extreme that in most cases roadside  
19           vegetation played little to no part in the overall spread  
20           of the fire, and this can be seen by the shape of the fire  
21           spread on the maps, for the most part.

22   Let's go to one of the examples?---I should just finish on  
23           that. That's not to say that the fire behaviour was  
24           extreme in all parts of the fire at all times. The fires  
25           on 7 February basically could be considered or  
26           characterised as having a life. Right near their  
27           ignition, if there had been suppression forces standing  
28           beside the ignition point, they could have put them out.  
29           As the fire developed away from that, no suppression  
30           forces could have stopped them, stopped the headfire. As  
31           I say, the fire is spreading on all flanks and some flanks

1           were still suppressible and in fact were suppressed with  
2           the aid of roads and active suppression. The fire was  
3           burning at different intensities at different parts, even  
4           in the body of the run of the fire, because of the effect  
5           of gullies, downslopes, moist areas, et cetera. So the  
6           work of Mr Crowe with Kilmore East fire, for example,  
7           throws that up in great detail.

8    I think that becomes relevant to what I'm about to ask you  
9           about. The Hume Freeway is one of the roads you were  
10          asked to look at. Paragraph 32.1 in your statement is  
11          where you start to address this. You were asked to look  
12          at comments that have been made by eyewitnesses to the  
13          effect that it may have acted in a way that contributed to  
14          the fire spread. We are able to look at Google map in  
15          order to just first of all see this portion of the highway  
16          where the Kilmore fire crossed. First of all, we are  
17          seeing it at a distance where you can see that the Hume  
18          Freeway obviously covers a vast distance and at least in  
19          some parts is dual carriageway. Does that fit with what  
20          you know about it?---Yes.

21   And in the sections where it is dual carriageway, there is  
22          usually some kind of vegetation on the strip in between;  
23          grass and shrubs?---That's correct. I did travel that  
24          section as part of my investigations and took some  
25          photographs.

26   Which crossroads are relevant to the area that you  
27          investigated? I know that part of your statement deals  
28          with O'Grady's Road. Can you see where that's marked  
29          running off the map?---Yes.

30   And another part of your statement refers to The Dene?---Yes,  
31          I see that.

1 Now, having looked at it to put it in context, perhaps if we  
2 move to the more detailed maps that you have prepared in  
3 relation to your fire investigation at this site. You can  
4 perhaps assist us in relation to which ones you find most  
5 helpful to refer to. There is one at annexure 4,  
6 (WIT.3004.034.0117)?---I have it.

7 Either by reference to that or just by talking us through it,  
8 what was the view that you formed about roadside  
9 vegetation on the Hume?---You can see the spread of fire  
10 northwards on this map that I have prepared, and the red  
11 arrows show the general headfire movement. This tongue of  
12 fire was the subject of a report by Mr Crowe and his team  
13 and another fire investigator whose name escapes me just  
14 at the moment. I took some photographs as well in part of  
15 my travels. The roadside vegetation is generally a grassy  
16 verge with some trees. There is a central median strip  
17 with more grass and some shrubbery and low trees. The  
18 general conclusion of the investigation report for that  
19 tongue of fire was that the tongue of fire was influenced  
20 by a southerly wind, so it was after the wind change on  
21 7 February. The topography in my view came into play in  
22 that there is a broad valley, the highway traverses a  
23 broad valley parallel with the highway of the Sunday  
24 Creek. All of that, that would have channelled the wind  
25 and influenced the fire northwards. The reason why it was  
26 moving northwards greater than moving to either flank may  
27 well have been the eaten-out nature of the pasture on  
28 either side, given the long severe drought at that date.  
29 If we can just see the caption at the bottom of this map, where  
30 you have noted in relation to this figure, "Hume Freeway  
31 anomaly. Fire spread was influenced by roadside fuels, a

1 southerly wind flow and access difficulties for  
2 suppression resources." When you use the term "anomaly"  
3 there, are you referring to the fact that the fire, at  
4 least when you look at a map after the event, appears for  
5 some period of time to take off up the Hume before it  
6 crosses over the Hume?---Yes. The term "anomaly" is not  
7 my term, it was used by the Crowe investigation team, but  
8 I would presume that's why that word is chosen. It does  
9 appear strange.

10 Do you agree with the comment there that the fire spread was  
11 influenced by things including roadside fuels? It seems to  
12 put it together with roadside fuels, southerly wind flow  
13 and issues of topography that created access  
14 difficulties?---Yes, that's correct. I had a phone  
15 conversation with a firefighter who was present on the  
16 day, mentioned in my statement, and he confirms that that  
17 was the case. The roadside fuels being slightly taller  
18 and more continuous and heavier than the pasture either  
19 side, that combined with the southerly wind influence  
20 helped push the fire up the road.

21 Was the firefighter you spoke to Mr Robinson?---That's correct,  
22 yes.

23 If we just go back to your statement, at 37.17 you recount some  
24 of what he was able to tell you. 37.17 is on witness page  
25 0045.

26 COMMISSIONER McLEOD: Before we move off that map,  
27 Mr Strickland - we probably don't need the map - there was  
28 a burnt mass to the left of the highway. In your  
29 judgment, was that burnt prior to the wind change which is  
30 suggested by the red arrow pointing to the south?---Yes.

31 And then, when the wind came, that area maybe would have been

1 perhaps reasonably well burnt, such that you would expect  
2 it not to have spread north after the wind change at quite  
3 the same rate as perhaps where the fire began to burn into  
4 unburnt country on either side of the Hume. Would that  
5 explain why or partially explain why that fire area to the  
6 left didn't continue to move at the same rate?---Yes,  
7 Commissioner, that plus perhaps the effect of suppression  
8 activity would be another reason.

9 Of course. It is easy for a layman to be confused because you  
10 are looking at the effect of burning over a different time  
11 series in the one map, aren't you?---Yes. The little  
12 black cross is the ignition point as determined by the  
13 Crowe investigation team.

14 I see?---That's where the fire actually started. You can see  
15 it has backed northwards for some distance. Crew leader  
16 Peter Robinson tells me there was some suppression  
17 activity, I'm not sure of the time, but at some point  
18 along I think it is Saunders Road. Sorry, Sunday Creek  
19 Road. So that would have had effect. He did also report  
20 difficulty gaining access to the fire edge along the Hume  
21 because of the broken nature of the ground in the Sunday  
22 Creek erosion gullies and all that sort of thing. So it  
23 is another reason why it may have spread further north  
24 than near the ignition point.

25 MS DOYLE: While we are still on maps, before going back to the  
26 statement, I might just ask you to look at a map that  
27 I showed you just during the luncheon adjournment,  
28 (TEN.231.001.0001). This one probably won't come up well  
29 on the screen, but, Commissioners, we will give you a hard  
30 copy. I think Mr Strickland still has his. This map is  
31 just indicative, Mr Strickland. It is at a further

1 distance from the one you were just taking us to. These  
2 photos, Commissioners, are from the Google map function  
3 and all we know is that they were taken before the fires.  
4 They can't be taken as proving or showing what the  
5 vegetation was as at 7 February 2009 and they are not  
6 being used for that purpose. They are really just being  
7 used to show in a pictorial way the width of the freeway  
8 at some points and the fact that it is dual carriageway,  
9 as Mr Strickland has confirmed. Mr Strickland, when we  
10 look at the outline of the Kilmore fire on this map, we  
11 can see the portion that was shown on the annexure 4 that  
12 you provided, but we are also able now to get a bit more  
13 perspective on the width at which the fire crossed the  
14 Hume Highway. When we were looking back at annexure 4, as  
15 you understand it, does that show the portion of the map  
16 where the fire first crossed the Hume or did it first  
17 cross lower down?---No, I believe it would have crossed  
18 lower down. My map at annexure 4 really only shows the  
19 very northern-most tip of the fire.

20 As I understand it, and I think you recount this in your  
21 statement, one of the reports in relation to the Kilmore  
22 fire is that just before 2 pm it crossed the Hume at  
23 Heathcote Junction, and that may well be the first point  
24 at which it crossed?---Near to Heathcote Junction is what  
25 I meant. Near the point where The Dene, the road called  
26 The Dene crosses under the highway is the likely point,  
27 and I believe there was a photograph taken by Richard  
28 Alder. I think this photograph was included in Mr Crowe's  
29 statement in evidence, of the crossing point.

30 I think that's right. Yes, I have that photo. It is part of  
31 Mr Crowe's statement during the Kilmore hearings

1 (WIT.3004.022.0423). That's the photo you are referring  
2 to?---That's correct.

3 A photo taken about 4 o'clock on 7 February and the caption  
4 says, "Photo illustrates flanking fire at the junction of  
5 Hume Freeway and Epping-Kilmore Road, Wandong"?---That's  
6 correct.

7 Now, to go back to the narrative and just one of the matters  
8 that you were told by a firefighter on the scene you were  
9 able to speak to, this is back in paragraph 37.17 of your  
10 statement at 0045, and you recount that Mr Robinson, who  
11 was on the scene, "observed the Kilmore East fire from a  
12 vantage point in Mount View Road as it crossed the Hume  
13 Freeway. The fire had been burning in pine and blue gum  
14 plantations when it crossed into the pasture in the  
15 triangular area bounded by Hume Freeway, O'Grady's Road  
16 and The Dene." Mr Robinson apparently told you he saw the  
17 plume building dramatically, it appeared to pause, drew  
18 the headfire back and then "surged forwards with a flame  
19 like a huge fireball ." Taking into account Mr Robinson's  
20 description of the day and the other materials you have,  
21 what view did you form about the role that roadside  
22 vegetation played in the period of time when the Kilmore  
23 fire was approaching the Hume Highway?---I formed the view  
24 that the roadside vegetation on and either side of the  
25 Hume would have played very little part or had very little  
26 effect in whether the fire had crossed or not. Because  
27 the fire was of such a size and being propelled by the  
28 fuels from the more general landscape to the north as it  
29 travelled southwards, that fire would have crossed the  
30 Hume Freeway whether it had been basically all concrete or  
31 not, because of the mass spotting and the distance of that

1 spotting coming out of that fire.

2 You also noticed, though, what might be called a localised  
3 effect contributing to the lateral spread that we saw  
4 depicted in annexure 4?---You are referring to O'Grady's  
5 Road?

6 The map we were looking at at annexure 4 that Mr Crowe  
7 described as the anomaly. Is that something you would  
8 refer to as a localised effect or lateral spread?---No,  
9 the photo in annexure 4, that tongue of fire that moved  
10 northward occurred after the wind change much later in the  
11 day, and that was actually headfire moving up the highway  
12 there.

13 Okay. I want to take you to the next example, Labertouche  
14 Road, which you refer to in paragraph 32.6 of your  
15 statement. We won't spend as much time on this example,  
16 but just to note this is one of the roads you were asked  
17 to look at. It is witness page 0039, and one where you  
18 did a site inspection yourself in late December last year.  
19 You were asked to look at the sections of the road and you  
20 did that between the Tarago River and a point just south  
21 of Kydd Road. You noticed that the western verge had a  
22 mix of pine trees, shrubs and grass to about 10 metres  
23 wide. You could see scorch and char patterns, et cetera.  
24 What impact did the sort of roadside vegetation in that  
25 portion of Labertouche Road have on the fire behaviour on  
26 the day, and we are here talking of the Bunyip  
27 fire?---Yes. There is a photograph I was able to take of  
28 that that will assist me to explain.

29 I think that is photos RPS-7 and 6. These are at  
30 (WIT.3004.034.0078)?---If we go to 6 first.

31 Okay, that is page 0078. Photo 6 shows the view south down the

1 fence line of Labertouche Road easement. Talk us through  
2 what you observed there and how that impacted on fire  
3 behaviour?---Looking south, we had the Bunyip fire moving  
4 as indicated by the red arrow in the photograph, from the  
5 right-hand side of the photo to the left. The shrubbery  
6 and trees that you see is the roadside shrubbery and trees  
7 on the west side of Labertouche Road. So the fire is  
8 moving out of the grass into that roadside vegetated  
9 strip. The flame height in the grass would have been  
10 considerably lower than what it attained in the roadside  
11 strip, as evidenced by the scorch and in fact the removed  
12 foliage within the forested roadside strip. The dotted  
13 orange line shows an approximate indication of the flame  
14 height as it came out of the grass as judged by the  
15 evidence of the removal of that crown. You can see a bit  
16 of intact green foliage on the upper right-hand corner of  
17 the trees, consistent with the lower flame height in the  
18 pasture. As it has moved into the trees the flame height  
19 has increased due to the more elevated structure of fine  
20 fuel within that vegetated strip and in fact resulted in  
21 crown fire, building to crown fire and removing that  
22 foliage.

23 So can I ask, Mr Strickland, does that indicate that the  
24 roadside vegetation on this strip of Labertouche Road  
25 impacted on fire behaviour on the day; namely, the flame  
26 height would have been higher in this thicket of trees  
27 than in the grassland? Is that what you are saying about  
28 the activity on the day?---Yes. On the day one can only  
29 conclude that from the evidence in the photograph.

30 But did it have any impact on the overall path or rate of  
31 spread of this fire?---Not that I can conclude from the

1 fire spread map for Bunyip. Photo 7, if we could go to  
2 photo 7.

3 That's the next page, 0079?---It basically finishes the story.

4 The same location looking south down the road edge showing the  
5 tree canopy. Tell us what's important about this  
6 photo?---Here you can see the road. You can see the trees  
7 on either side of the road and the canopy of the trees on  
8 the left-hand side almost completely removed, and that  
9 could only have occurred from flame actually reaching  
10 right across the road. The amount of fuel just below  
11 those trees would have been insufficient to cause crown  
12 fire in those trees of its own accord. So the crown has  
13 been removed by the conjunction of the fire on the  
14 right-hand side of the road plus the surface fuel on the  
15 left, all burning at the same time, pretty much. However,  
16 when we look at the spread, and there is a map for the  
17 Bunyip spread. I would have to find that. You may be  
18 able to assist me.

19 It is either annexure 5 or 6, depending on the detail of the  
20 map you are after. Annexure 6 starts at  
21 (WIT.3004.034.0121). That's the one you meant?---Yes.

22 Now, when we take into account fire spread overall, what impact  
23 if any did Labertouche Road vegetation have?---This map is  
24 a sketch of mine but it is based on the fire spread.  
25 I have taken the fire spread shape from a map at annexure  
26 5. We could come back to that in a minute.

27 Just sticking with annexure 6, what does it tell us?---The fire  
28 that's moved across, and this relates to the last two  
29 photographs we have just seen which were taken at about  
30 where the number 177 appears on the map.

31 Yes?---The fire shape is consistent with what you would expect

1 from a spotfire starting at that upper point, that  
2 northern-most point, and moving across the pasture and  
3 across the road and it has actually been halted or slowed  
4 by the environs of the creek, Labertouche Creek there.  
5 There is no change in the shape. It may have given it a  
6 momentary surge forward because of spotting coming out of  
7 the trees on the roadside, but because of the spotting  
8 distance that spotfire was always going to move across  
9 that bit of landscape with that shape anyway.

10 Mr Strickland, there are many examples in your statement and  
11 for reasons of time we are not going to be able to go to  
12 them all. They will all be given equal weight when  
13 considering your report as a whole. I want to take you to  
14 one further example which shows the interplay between  
15 roadside vegetation and fuel reduction work that's been  
16 done. When you were considering the Bendigo fire you were  
17 asked to look at Bracewell Street and Pascoe Street.  
18 I just want to ask you about your findings in relation to  
19 Pascoe Street. You deal with this in your witness  
20 statement at paragraph 46.4, and this is witness page 0054  
21 in your statement, (WIT.3004.034.0054), and the Pascoe  
22 Street narrative starts at 46.4. You were asked in  
23 relation to this street to consider the impact of roadside  
24 vegetation but also if the street had been used in a way  
25 that assisted containing the fire. It sounds as though  
26 you managed to have some interaction with people who were  
27 able to tell you about the bushland area close to the  
28 street. You say in 46.5, about halfway through that  
29 paragraph, "The area of land at Pascoe Street is one such  
30 site" where there has been an historical disturbance  
31 because of the recolonising vegetation. There had also

1       been apparently some quite recent fuel reduction burns,  
2       including 26 hectares burnt in 2008 close to Dean Street.  
3       When you looked at the road and looked at where there had  
4       been recent burns, what conclusions were you able to draw  
5       about the role the road played?---This is Pascoe Street  
6       itself that you are referring to?

7   Yes, and the surrounding controlled burn that seems to have  
8       been relevant to your conclusion?---Yes. The surrounding  
9       controlled burn had the greatest impact. Pascoe Street  
10      itself essentially would have been used as a boundary to  
11      delimit the area of the burn on one side. The  
12      significance of the burn is that it was quite recent, the  
13      year prior, and was effective in pulling up a fire as  
14      intense as the Bracewell Street fire in Bendigo on  
15      February 7th. It should be noted there were other burns  
16      in the path of that fire in, from memory, 2005 and  
17      earlier, 2000, that did also burn, so in that sense did  
18      not stop the fire. However, having said that, the thing  
19      about fuel reduction burning is that, whilst it won't  
20      always stop a fire, it will result in the fire burning at  
21      a lower intensity and therefore reduce spotting, increase  
22      the likelihood of it being able to be suppressed.

23   You have attached a diagram that helps us understand Pascoe  
24      Street. This is annexure 17, witness page 0143,  
25      (WIT.3004.034.0143). This map shows the older burns you  
26      referred to, or at least one of them, 2005, and then  
27      I think 2000 and one burnt in 2008. Where is Pascoe  
28      Street on this map?---It's a bit hard to see. Can I move  
29      over to point to it?

30   Or tell us by reference to the numbers. Which number along the  
31      bottom and which number along the side?---It is the brown

1 road marked just below the 2000 area. Basically in the  
2 dead centre of the map you can see a horizontal east-west  
3 road forming the boundary of the 2000 burn. I believe  
4 that's Pascoe Street.

5 The red arrows show the headfire movement. What did you  
6 conclude about whether Pascoe Street's ability to help  
7 with suppression of the fire was enhanced by these  
8 recently burnt areas?---The recently burnt area certainly  
9 stopped the head run of the fire as you can see by the  
10 map. It burnt to the edge of the prescribed burn and  
11 stopped. Pascoe Street itself, in the middle of that run,  
12 had no effect on stopping the headfire. It was the actual  
13 prescribed burn. It looks like it was a block further in.

14 In relation to each of the other roads that are referred to in  
15 your statement, you undertook investigations so far as you  
16 could and in each case you have had regard to materials  
17 and expressed a view about whether the vegetation at the  
18 local site had any impact on fire behaviour or fire  
19 spread. It seems overwhelmingly you concluded that even  
20 where there was an impact on fire behaviour, little or no  
21 impact on fire spread?---On February 7th, that's correct.

22 You were asked to investigate whether the suggestions that  
23 vegetation in some places might act in the opposite way,  
24 namely as a windbreak, whether there were examples of  
25 that. Could you find any examples of that in the streets  
26 given to you?---I did find one example in the Bunyip fire  
27 on Labertouche North Road.

28 Another part of Labertouche Road. I think you refer to that at  
29 paragraph 35.6, which appears at witness page 0042?---And  
30 I have some photographs or a photograph.

31 If we look at the text first, what you say in paragraphs 35.6

1 and 7 is you went to the part of Labertouche Road North  
2 where there is a row of oak trees and you note that oak  
3 tree leaves have high moisture content?---Yes, they do.

4 The photos you have taken of that are photos 8 and 9 in  
5 annexure 3, and we will just look at those. The first of  
6 those, I think, is going back to the photo we looked at  
7 before, 0080. No, it is a different part of the road.  
8 0080?---Yes. Photograph 8, yes.

9 There are the oak trees. How did that row of oak trees affect  
10 the fire behaviour there?---The scorch and char showed me  
11 that the fire came from the west, that is to the left of  
12 the photo, moving across the photo image from left to  
13 right. It is just possible to see the scorched lower  
14 leaves of the oak tree. The upper canopy is pretty well  
15 intact, unaffected by the fire. Downwind of the fire,  
16 across the road, there was no evidence of any fire or  
17 burning for that stretch of road downwind of those oak  
18 trees.

19 Mr Strickland, do you put that down to the way in which those  
20 trees are arranged, effectively in a row, or to the  
21 moisture content and the particular qualities of oak tree  
22 leaves? Which of the two has had the impact?---It is  
23 actually both. The trees are arranged reasonably closely  
24 together. The oak trees have quite a dense and very  
25 moisture-filled canopy. All of that would have had the  
26 effect of severely reducing the intensity and flame height  
27 as the fire came up to the road, essentially.

28 CHAIRMAN: Is a range of oak trees like that a common feature  
29 of the landscape, in your experience?---No, most uncommon.  
30 I recall the effect of Ash Wednesday on the Mount Macedon  
31 area, Commissioner. Whilst I wasn't there, I was at

1 Gembrook, I remember seeing aerial photos that showed the  
2 fire dividing around houses which had gardens full of  
3 deciduous trees. Again, the same thing, leaves full of  
4 water, and whilst they might have scorched, although a lot  
5 didn't even scorch, they did not burn, so did not carry  
6 the fire.

7 MS DOYLE: I want to move away from the particular examples and  
8 just ask you a couple of concluding questions.

9 Mr Strickland, the role of logs or fallen dead trees when  
10 they are found alongside roads, what role do they play in  
11 increasing fire risk?---Heavy fuels like logs do not carry  
12 the fire. They give the suppression and mop-up issues, in  
13 that they smoulder for very long periods of time, days or  
14 weeks. They take some time to ignite, but once they do  
15 ignite they will smoulder, whereas the fine fuels, and the  
16 rule of thumb is anything less than about a biro or six  
17 millimetres thick, ignite quickly. That is what you see  
18 burning, the flaming front of the fire, and creates the  
19 rate of spread of the fire. The logs do not, but the  
20 issues they create is more one of mopping up, putting  
21 those out so that they don't create re-ignitions days  
22 later.

23 If one needed to, for reasons of practicalities or resources,  
24 prioritise dealing with the types of fuels you find on  
25 roadsides, what would it be best to focus on cleaning up  
26 or minimising; the fine litter fuels, fallen logs or trees  
27 that are close to the roadside, standing trees?---The fine  
28 litter fuels, first and foremost.

29 I should have included grass in that list, if there is a  
30 difference?---No, that is the main fine litter fuel and  
31 there has been a scientific project being run funded by

1 multiple fire agencies recently for some years called  
2 Project Vesta, which has discovered that not only is it  
3 the surface litter fuels that carry the fire, there is  
4 another layer called near surface fuels, for want of a  
5 category name, that is very important in determining the  
6 rate of spread of fire as well. That's your grass layer.  
7 So keeping that to a low height would be critical in  
8 reducing fire spread.

9 And standing trees, how important are they if you were looking  
10 at ranking a hierarchy of roadside fuels?---It depends on  
11 the species of the tree, unfortunately. There are 700  
12 species of eucalypt, not all of them flammable or highly  
13 flammable. Red gums, for example, have very hard,  
14 impervious bark, relatively non-flammable. Stringybark is  
15 the other end of the spectrum, highly flammable.

16 I wanted to ask you about different weather conditions. You  
17 have reached your conclusions because you were asked to  
18 investigate the fires of 7 February and you were asked to  
19 investigate particular roads. Would the role of roadside  
20 vegetation be likely, in your view, to play a greater role  
21 in affecting fire behaviour and fire spread if the weather  
22 conditions were less severe in terms of fire risk?---Play  
23 a greater role, yes. In the conditions of February 7th  
24 they virtually played - they were insignificant. Whether  
25 they were there or not, the fire would have spread. In  
26 more mild conditions the roadside vegetation would more  
27 come into play in that sense.

28 Just a procedural matter I wanted to confirm. It is something  
29 known to you and known to me, but for the Commission's  
30 benefit it should be noted that in terms of the roads and  
31 fires you investigated, you didn't select them. A list of

1 roads that you were required to investigate was provided  
2 to you in terms of the scope of the task you had to  
3 undertake?---That's correct.

4 Finally, there is a quite separate matter you address in your  
5 statement which we won't go to in detail, but paragraphs  
6 51 to 61 you were asked to consider whether particular  
7 roads had posed access problems for firefighters during  
8 the fires of 7 February. You note in relation to a number  
9 of examples at paragraph 51 onwards that you have  
10 uncovered reports of particular difficulties faced by  
11 emergency services trying to get in to the lists of roads  
12 set out there. It goes without saying that, if a road  
13 becomes impassable or dangerous, it increases the  
14 difficulty for firefighters using those roads to go from  
15 one place to another or using those roads to aid  
16 suppression efforts?---That's right. I think this has  
17 been alluded to in other statements to the Commission as  
18 well. The issue of falling trees during and after fires  
19 is probably one of the biggest hazards that firefighters  
20 face. In fact, our only fatality was from a falling tree.  
21 I'm always amazed that we don't get more injuries and  
22 fatalities from them. They start falling as soon as the  
23 fire moves through and often for days or even weeks  
24 afterwards, I presume because of the weakening of the fire  
25 on the trees, although I'm not an arborist. So there were  
26 many examples of where trees and branches had fallen  
27 across roads and blocked roads to firefighters.

28 So, Mr Strickland, I gather you heard the evidence over the  
29 last couple of days about the new critical works program  
30 that's been undertaken for towns that are effectively one  
31 road in, one road out towns. Is that an important step,

1 in your view, in terms of improving access for  
2 firefighters to the list of towns so far that are the  
3 subject of those critical works?---I haven't heard that  
4 evidence myself, but I would say that issue of dangerous  
5 trees near roadsides would be well worth looking at  
6 closely with an aim of reducing the likelihood of trees  
7 falling and branches falling.

8 MS DOYLE: I have no further questions for Mr Strickland.

9 Commissioners, do you have any questions?

10 COMMISSIONER PASCOE: Mr Strickland, just a brief one relating  
11 to the issue of different species of trees and their  
12 capacity to slow the spread of fire. You have given us  
13 the example from Labertouche Road. Just this week we had  
14 a lay witness who showed us an aerial image of quite a  
15 large fire in an egg hatching business, but a row of  
16 deciduous trees around the home appeared to save the home,  
17 and I don't want to steal the thunder of our witness who  
18 is about to come, but I notice in his statement he is also  
19 attributing a species of trees and the arrangement of  
20 trees to saving a home. Yet there appears to be a limited  
21 amount of substantive research on this matter. Can you  
22 comment, given that you are a wildfire instructor and a  
23 fire investigator?---We could benefit from more  
24 information on that area. I also recall a photo, I think  
25 it was yesterday, from the 1977 Western District fires  
26 which showed some tree line shelter belts that actually  
27 stopped the fire. I was quite curious about that. There  
28 would no doubt be a reason for that. One reason could be  
29 that, because it was a shelter belt and animals and stock  
30 had camped under it, there was no surface fuel under those  
31 line of trees, so the fire would largely be a surface fire

1 and for some reason the line of trees stopped it. I'm  
2 guessing it was a stock camp, as the cow cockies say. The  
3 whole issue of trees, there are many different species,  
4 they all have different flammability and therefore a  
5 different effect on fire spread and spotting, and  
6 certainly something we would benefit from more information  
7 on.

8 MS DOYLE: If there are no further questions, may Mr Strickland  
9 be excused?

10 CHAIRMAN: Thank you, Mr Strickland. You are excused.

11 <(THE WITNESS WITHDREW)

12 MR RUSH: Commissioners, I call Mr Kevin Roberts.

13 <KEVIN ALAN ROBERTS, affirmed and examined:

14 MR RUSH: Mr Roberts, your full name is Kevin Alan Roberts and  
15 you reside at 40 Whitelaws Track in Callignee in  
16 Victoria?---I do.

17 You are a sustainability adviser for the Latrobe City Council,  
18 having held that position since 2004?---I am.

19 You, by yourself, stayed and defended your home at Callignee on  
20 7 February?---I did.

21 With the assistance of the lawyers to the Royal Commission,  
22 have you made a statement and are the contents of the  
23 statement true and correct?---They are, yes.

24 I tender the statement of Mr Roberts.

25 #EXHIBIT 760 - Witness Statement of Kevin Roberts plus two  
26 attachments (WIT.141.001.0001).

27 MR RUSH: Just to look at your role with the Latrobe Valley  
28 City Council, as adviser you deal in matters concerning  
29 the environment, matters of sustainability of the  
30 environment, that type of matter. That's your background,  
31 is it not?---That is correct. It covers a whole range of

1 things, from climate change to water, energy, native  
2 vegetation, weeds.

3 Prior to coming to Australia, in the United Kingdom that was  
4 also your background?---It was indeed.

5 You and your wife are members of the Callignee fire  
6 brigade?---We are, that's right.

7 And have been so for two or three years?---That's right.

8 Using your background or environmental background, if I can  
9 firstly ask you about your property of 10 acres. Had you  
10 developed that in, if you like, a series of different  
11 belts of vegetation?---We have. We have a series of  
12 concentric belts around the house with lower fuel belts  
13 nearer the house and the vegetation getting more dense and  
14 higher as it moves away from the house.

15 Perhaps if I ask you about that, Mr Roberts. Firstly, is the  
16 vegetation native vegetation?---It is all native  
17 vegetation, yes.

18 If you can describe to the Commissioners the belts as they move  
19 out from around the house and their approximate distance  
20 or width?---Certainly. Immediately around the house there  
21 are flower beds and very short areas, but when you move  
22 past that belt there is native vegetation which is low, up  
23 to about half a metre height. Beyond that there is taller  
24 scrub, say three metres or so high, and beyond that there  
25 are trees with undergrowth going up to 20 to 30 metres.

26 You refer to them in your statement, I'm looking at paragraph  
27 11, as being lawn, scrub and then a second zone of  
28 scrub?---That's right. The scrub is of two different  
29 heights. There is one lower one nearer the house and the  
30 taller one further away.

31 Within those various areas how do you manage the vegetation in

1 the scrubby areas?---Those areas are maintained by  
2 controlled burning each year in different patches to form  
3 a mosaic.

4 Do you yourself undertake that?---I do.

5 Do you also use a slasher?---I do. That's for firebreaks  
6 within and around the property within those belts, so  
7 there is a series of narrow firebreaks between the belts  
8 and around the edge of the property in addition to the  
9 controlled burning.

10 Just going back, you also note at paragraph 8 that since  
11 7 February you have become involved in the Community  
12 Fireguard program. Perhaps you could tell us about  
13 that?---That's a program where the neighbours living  
14 locally get together to discuss what their fire plans are  
15 to make sure they have means of communication during a  
16 fire and to discuss what the issues might be on their  
17 properties and how they might be addressed so we can all  
18 spot each other's strengths and weaknesses and learn from  
19 them.

20 Mr Roberts, jumping back to where we were, you describe at  
21 paragraph 13 a mosaic pattern in relation to this  
22 vegetation, and was it designed by you for the purposes of  
23 fire resistance?---It was. We wanted native vegetation on  
24 there because it gives a lifestyle and it gives wildlife  
25 forest, but we were also concerned about the fire risk, so  
26 we developed that mosaic to maximise both. We  
27 particularly wanted to reduce flame heights nearer the  
28 house, and that was the basis of the design.

29 Each zone, if you like, you indicate is approximately six to  
30 eight metres wide?---No, somewhat wider than that.

31 Paragraph 14?---No, sorry, the firebreaks are six to eight

1 metres wide. The vegetation belts are wider than that.  
2 How wide are the vegetation belts?---I have put that in the  
3 statement, I think. It is in paragraph 11. It mentions  
4 that the first scrub zone is about 50 metres wide and the  
5 outer belt of trees would be about 25 to 30 metres wide.  
6 You designed what we have been speaking about, the various  
7 zones?---I did, but based also on what was present on the  
8 site already, so trees that were there already were  
9 retained, but the management has aimed at reinforcing that  
10 zone structure.  
11 You note at paragraph 15 that you have undertaken the  
12 firebreaks in an irregular pattern, not dead straight.  
13 Why was that?---Because we were very keen to maintain the  
14 natural values of the site as well as maintaining it to  
15 reduce fire risk, and therefore I did not wish to remove  
16 any trees or any particularly significant vegetation. So  
17 the firebreaks have been arranged to avoid such clearance.  
18 You also refer to some gravel and surfaced roads?---That's  
19 right. There are roads also around the edge of the  
20 property on all except the east side, so they also form a  
21 firebreak around the property.  
22 Coming to the house yourself, did you have a gravity-fed micro  
23 sprinkler system on the house, and perhaps if you did you  
24 can explain that to the Commissioners?---Certainly. When  
25 we first got the house there were no fire systems of that  
26 sort in place, so we actually fixed micro-sprays around  
27 the eaves of the house fed from tanks up on the hill  
28 behind the house, so that even with no mains power that  
29 system can be turned on and water will be spraying around  
30 the eaves of the house just through gravity alone.  
31 You indicate that you have a 3,000 litre tank and also 30,000

1       litre concrete tanks, plural?---That's right. The smaller  
2       tanks are the gravity feed system. There are also  
3       concrete tanks beside the house but their height does not  
4       allow for gravity feed, so they require a pump.

5       Perhaps you can tell us did you also have a pump and fire hose  
6       for emergency situations?---Yes. We normally rely on  
7       mains electricity, but that goes off frequently and  
8       certainly during a bushfire we would expect that to go off  
9       and it did in this situation. So we also had installed a  
10      petrol fire pump by the tanks and flat hoses that I can  
11      attach to that which allow me to reach all around the  
12      house or a distance from the house.

13      You indicate that it was your intention - you live at the house  
14      with your wife and two teenage children?---That's right.

15      Was it the intention of the whole family to remain in the  
16      house?---Normally it would be, that's right.

17      In relation to your fire plan, does each of the family have a  
18      role or a responsibility?---They do, not specifically  
19      different. The children would stay by the house. Myself  
20      I might range further over the property, but the general  
21      plan would be for the rest of the family to protect the  
22      house area.

23      The circumstances as they eventuated on 7 February led your  
24      wife and daughters to in fact leave the property?---That's  
25      right. My wife did make strenuous efforts to get back but  
26      they had already put roadblocks in place and she was  
27      unable to return.

28      So approximately how long before the fire impacted in your area  
29      did they leave?---Look, it was probably something of three  
30      hours. I'm afraid I wasn't actually looking at my watch  
31      much at that time, so I didn't record the times and once

1 the fire was in sight I wasn't looking at my watch at all,  
2 I'm afraid.

3 You say at paragraph 21 that at the time they left you could  
4 see distant smoke?---That's right. There was no evidence  
5 at that time of the extreme severity of this fire, however  
6 we could see it in the distance.

7 Perhaps if we can turn to what is annexure KAR-1 at 0012 of  
8 your statement. There are a number of matters to come out  
9 of what you have prepared for the Commission here, but  
10 firstly can you indicate, looking at that aerial  
11 photograph, where your house is?---Yes, my house is in the  
12 block which is outlined in yellow and the house itself is  
13 the white block just above the head of the yellow fireman  
14 symbol I have put in there.

15 The dotted perimeter, what's that?---The dotted perimeter is  
16 the approximate position that the ground fire reached, so  
17 there were spotfires and so forth to the right of that,  
18 but all the area to the left of that dotted symbol was the  
19 ground fire.

20 When we look at that, it would appear that outside the greener  
21 area is the area that has been substantially impacted by  
22 fire?---That's right.

23 And the vegetation, if you like, leading from the left to the  
24 right into your 10 acre block has not been so  
25 substantially affected by fire?---Within the block, that  
26 has not been affected by fire. The spotfires I was able  
27 to put out and so there is still an extensive amount of  
28 green vegetation in that, but beyond that boundary it is  
29 quite different.

30 Each of the, if you like, yellow figures are firemen. Can you  
31 indicate to the Commissioners what they represent?---Those

1 are symbols to show where each property around me actually  
2 had somebody defending that against the fire. Some  
3 properties were undefended, but all the ones with that  
4 symbol had someone firefighting on them.

5 We see, for example, at the bottom of the aerial photograph the  
6 drawing of a house on fire. Does that designate a  
7 defended or undefended?---That would be undefended and  
8 that was a house that actually burnt down.

9 Again, up in the top left-hand corner of the photograph?---That  
10 similarly was an undefended house that burnt down.

11 Just below that a house that was defended?---In the block  
12 where - yes, that's right. That's a defended house.

13 Just to get some idea of your property and house, are you at  
14 the top of the hill?---There is some higher ground just  
15 above the road, but effectively from my house it slopes  
16 downwards, so I'm at the top of the hill on my block.

17 I take it your 3,000 litre tanks are above the house?---They  
18 are. They are nearer the top corner, to the north, at the  
19 top of the page.

20 And the quadrant in that photograph gives a closer detail of  
21 your house and where it lies on the block?---It does.

22 On 7 February you indicated you could see smoke in the  
23 distance. As we look at that aerial photograph, in what  
24 direction was the smoke?---It was to the west, so the  
25 arrow showing the fire, it is well behind that and well  
26 off the aerial photograph that we could see it from.

27 Over the course, and you might tell us in approximate terms,  
28 what developed from the smoke that you observed?---We  
29 could originally see the smoke and then some gouts of  
30 flame over, say, two ridges away. I couldn't tell you the  
31 length of time before it then appeared over the nearest

1 ridge to us and when it appeared over the nearest ridge,  
2 that's when I could actually hear it roaring and really  
3 see the very high flame heights that then came straight at  
4 our property. Even the nearest ridge is off that  
5 photograph.

6 Perhaps firstly from your own perspective, by this time had you  
7 put on your CFA uniform?---I had, yes. As soon as it  
8 looked as though that fire - when I saw it over the most  
9 distant ridge, it still had the Traralgon Creek valley to  
10 cross. I was not convinced it was going to get across  
11 that. Once it was obvious that it had, then I put all the  
12 fire plans into action, including putting on my uniform,  
13 turning on the sprays, getting the pump ready, laying out  
14 the hoses.

15 You say as it approached, your percentage of confidence about  
16 staying and defending lowered?---I have to say it lowered  
17 enormously. I had every confidence of protecting my  
18 property prior to this, very high indeed. Once that fire  
19 roared over the nearest ridge, the sound of it, the flame  
20 heights, were absolutely horrendous.

21 What were the flame heights in approximate terms?---They looked  
22 three times the height of the trees in general, with gouts  
23 shooting up out of that even further.

24 In approximate terms again, Mr Roberts, you say the sound was  
25 horrendous. How far away when you made that  
26 observation?---I must have been able to hear it certainly  
27 several kilometres away, as the ridge would have been a  
28 few kilometres, say three kilometres.

29 Did you consider leaving?---No, not at that stage because  
30 although I was extremely alarmed I reckoned leaving was a  
31 much better way of dying.

1 Did you put your sprinklers on?---Yes.

2 What was the position with power at this stage?---There wasn't  
3 any.

4 So you went to your petrol pump?---That's right. I made sure  
5 it turned on but I did not have it on at that stage  
6 because the fire was too far away for it to be useful.

7 As far as embers and spotting was concerned, what  
8 occurred?---The winds were very strong. The nearest I can  
9 think of is certain films I've seen where one side is  
10 shooting showers of burning arrows at the other side. It  
11 was like showers of burning arrows coming through the air  
12 and landing and sort of exploding on impact. That was as  
13 the fire got closer. There were also drifting embers in  
14 there, but it was those ones of burning material actually  
15 coming through the air and landing that seemed to pose the  
16 greatest risk.

17 Did you make any observation as to what seemed to be igniting  
18 as a consequence of those embers?---Yes. I was interested  
19 to see that a lot of those, although they were ablaze as  
20 they hit the ground, many of them would actually go out in  
21 the native vegetation areas where they landed. What  
22 didn't go out were the ones that landed in the grassland  
23 where there was more continuous fine fuel, so when I was  
24 running around trying to make sure they didn't catch and  
25 start larger fires, it was the ones in grassy areas that  
26 I was having to concentrate on because they were the ones  
27 that were catching and taking off and not going out.

28 Whilst doing that did you, in effect, lose yourself from the  
29 house because of smoke?---At one stage I did. At first  
30 I had a really clear view as the fire was coming across  
31 the ridges towards us. As it got closer the smoke got

1 thicker, it got really dark. At one stage when I was  
2 putting out a grass fire perhaps 50 metres or so from the  
3 house, it was so dark and so smoky, when I turned round,  
4 having put out that fire, I couldn't see where the house  
5 was. That was quite alarming because being outside if  
6 that firefront is coming at you is not a good place to be.  
7 So I wanted to know where the house was so I could get  
8 back to some shelter. Fortunately, I'd put solar lights  
9 along the paths and it was so dark that the darkness  
10 actually made those light up. I was able to see literally  
11 the last one in the row and follow those back to the  
12 house.

13 When you got back to the house, what did you do?---I basically  
14 stood at the house with the rake hoe and the other  
15 materials, but I couldn't give you the exact amount of  
16 time. Soon after that, the sky cleared and I was able to  
17 see again, but while it was dark and thick smoke I stayed  
18 by the house and didn't leave that again.

19 Were you having to use the fire pump and hose at that  
20 stage?---No, at that stage I didn't have to, no.

21 At paragraph 27 you make an observation that Commissioner  
22 Pascoe took up with the previous witness, that there were  
23 tall trees on the outer zone of your property and your  
24 observation was that they created a major  
25 windbreak?---Yes.

26 Perhaps you could explain the observation?---When I was trying  
27 to put out the spotfires, one of the key things was the  
28 wind speed. With high wind it was much more difficult to  
29 put out those fires. At the time I was able to get down  
30 to that edge of the property, the fire was burning on one  
31 side of the road and embers were drifting towards mine

1 where there was a row of trees. Where the trees along the  
2 roadside weren't there and there was open road or open  
3 paddock, they were streaming much faster and much harder.  
4 It was a very dramatic effect, that where the fire was on  
5 the opposite side of the road and I had a row of trees  
6 parallel with that, the embers were virtually mainly  
7 dropping on the road or the base of the trees rather than  
8 blowing through them. Beside that, they were actually  
9 blowing down the road and across the open land beside.  
10 I certainly found, trying to put out any of the fires that  
11 started, that that much reduced wind speed made it so much  
12 easier to stamp out any flames that were coming up.

13 What was the nature of the belt of trees? What type were  
14 they?---Basically there is a mixture of eucalypts and  
15 burgen there, all of which are inflammable trees, but  
16 there was basically a dense row of those parallel with  
17 the firefront.

18 COMMISSIONER McLEOD: Did they eventually burn?---No, they  
19 didn't. But I think if I hadn't been putting out the  
20 small fires that were forming in there, then I expect they  
21 would have done.

22 MR RUSH: Just in relation to the firefront from the perimeter  
23 that you marked on the aerial map that we observed, did  
24 the firefront actually impact into the property or were  
25 you mainly having to deal with embers?---Effectively the  
26 firefront got to the road around my property and from that  
27 point the firefront itself didn't - the ground fire was  
28 unable to cross, it was an open road, so it didn't come  
29 across. The fire spread would have been through the  
30 flames and the embers and those I was able to put out.

31 You make the observation in paragraph 9 - are they the houses

1 that we went to which were in a grassland area that were  
2 undefended and burned down?---That was my observation.

3 You set out what you refer to as some key factors that you  
4 think were important in relation to saving your property.  
5 One, you say, was the reduced wind as a consequence of the  
6 trees. Can I just ask you about the wind. Did the wind  
7 maintain its velocity throughout the period that you were  
8 fighting?---No, there was a reduction of the wind speed  
9 literally as it reached the edge of my property. I think  
10 with the very strong wind speeds I don't think anything  
11 would have made a difference if the wind speed had  
12 maintained itself. Just as the fire reached, literally as  
13 it reached the road, the main wind speed dropped and the  
14 winds after that were calm and it made it much easier to  
15 control the spotfires that appeared.

16 You refer to the vegetation as described around your property  
17 and active firefighting?---Yes. A lot of the embers and  
18 other material that was falling and burning failed to  
19 catch or were easy to put out. I put that down to the  
20 nature of the vegetation around me. The grassland areas  
21 were the ones I had most trouble with.

22 Over the course of the evening and into the next morning, were  
23 there continuing to break out spotfires in and around your  
24 area?---There were. In fact, later on that night, even  
25 after the main firefront had gone past and everything else  
26 was blazing, the fire to the north actually came around  
27 the hill and came back to the other side of my property on  
28 the northern tip, at 3.30 in the morning, well after the  
29 main firefront had gone past. I have to say it was my  
30 feeling that the fact that other neighbours were actively  
31 putting out that fire and preventing that fire taking hold

1           made a big difference to being able to defend each  
2           property.

3    You then refer to the difficulties that you encountered on  
4           8 February and thereafter in relation to the roadblocks,  
5           and perhaps you could tell the Commissioners of  
6           that?---I must admit that was a very disappointing aspect  
7           of the aftermath of this. Those of us who had stayed to  
8           defend, after the fire were very keen to leave briefly to  
9           get supplies, to contact our families. Just down the road  
10          literally we were stopped. We were told we could leave  
11          but if we left we would not be allowed to return. There  
12          were still fires breaking out. There were still areas  
13          that could burn. I think we all thought that, having been  
14          through that fire and saved our properties, if we left we  
15          would then lose what we had worked so hard to defend.  
16          I was just desperate to get a generator at the time so  
17          I had some power at the house and I could run the ordinary  
18          house pumps, some food, to see the family. That was not  
19          permitted. That was extremely disappointing, to say the  
20          least. Basically we just wanted to get out quickly and  
21          then get back in. I stayed in because of that, so did the  
22          others, and there were still fires breaking out. Again,  
23          the house just below me, we had to rush out shortly  
24          afterwards to put out fires that were coming up there  
25          again. We couldn't have left.

26    Did you have telephone or electricity on the 8th or the  
27          9th?---No, we had no electricity for several weeks after  
28          that. I'm sorry, I can't remember when the telephone came  
29          back on, but that certainly wasn't immediate either, so we  
30          had no direct contact. Because there was more than one  
31          set of roadblocks I was having to contact my family

1 through intermediaries during that period. We couldn't  
2 even see each other across the roadblock. They couldn't  
3 get anywhere near.

4 For how long did you maintain the position where you wouldn't  
5 leave because of the roadblocks?---Having stayed there and  
6 kept it, I was not prepared to leave until I was allowed  
7 back soon afterwards. I can't tell you how long the  
8 roadblocks stayed in place. I know the police at the  
9 roadblocks were making phone calls to try and get  
10 permission for us to leave and get back in. But they were  
11 being instructed - I could hear them on the phone - they  
12 were being instructed not to allow us to go back in if we  
13 left. We could leave; we were not allowed to return.

14 I take it it was three or four days?---Look, I'm sorry, I have  
15 actually blanked that from my brain. I cannot remember  
16 how long it was that that situation persisted.

17 You then, Mr Roberts, refer to at paragraphs 38 and thereafter  
18 what you really describe as the polarisation of views over  
19 roadside clearing?---Yes. Look, I think the problem is  
20 that native vegetation has been an emotive issue apart  
21 from the bushfires and to an extent it has been very  
22 difficult after an event such as the bushfire to have a  
23 reasonable discussion about what is the cause and what  
24 isn't. The two debates about whether vegetation has value  
25 or does not have value have been conflated with the  
26 bushfire as well, so people tend to have fairly fixed  
27 views of that. In my view, it would be much better to  
28 look very carefully at the evidence and to see what extent  
29 native vegetation and other land use types are actually  
30 influencing that. But there is a tendency for people to  
31 fall back on previous beliefs.

1 You make the point at paragraph 41 that it was your experience  
2 on the day that the fine fuels, if you like, were the  
3 problem?---Look, I have no doubt about that. I was  
4 actually surprised at how well the native vegetation did  
5 not burn. I expected it to burn significantly more than  
6 it did. The fine fuels without any doubt were a major  
7 problem, certainly on my property. They were the areas  
8 that burnt much more so than the native vegetation.

9 They are the matters, Commissioners. Any questions?

10 CHAIRMAN: No. Thank you, Mr Roberts. You are excused.

11 <(THE WITNESS WITHDREW)

12 MR RUSH: I recall Mr Fogarty, Commissioners. I intend to deal  
13 briefly with some matters that arose through the panel  
14 discussion on fuel reduction burning and a couple of  
15 matters on strategic firebreaks, and Ms Doyle will  
16 conclude on the roadside clearing.

17 <LIAM GERARD FOGARTY, recalled:

18 MR RUSH: Mr Fogarty, can I start by clearing up one matter  
19 that was raised during the panel discussion and you were  
20 here for it. If we can have (EXH.678.0005) brought up.  
21 What we see there is a pre-fire aerial map of  
22 Marysville?---That's correct.

23 One of the matters that was brought to attention from that map  
24 is that there is a track which comes down from the top  
25 left-hand side of this photograph, around that dam and  
26 proceeds down into the bottom of the photograph and also  
27 around, if you like, the other side of the town?---That's  
28 correct.

29 That is referred to, is it not, as - how would you refer to  
30 it?---Typically that sort of break would be referred to as  
31 a strategic fuelbreak, Mr Rush.

1 What is the purpose of the strategic fuelbreak?---The purpose  
2 of such a break in this sort of area is really to assist  
3 where it is close to homes in terms of reducing local  
4 radiant energy if a bushfire comes through, but more  
5 importantly it is to enable planned burning operations to  
6 be conducted around the edge of a town and/or provide  
7 opportunities for backburning in the case of a bushfire  
8 maybe threatening the area.

9 We have heard evidence from Mr Cobb and I think Mr Parsons that  
10 it doesn't look all that significant on the map, but it is  
11 slashed on both sides and, if you like, it is a  
12 four-wheel-drive track slashed on both sides?---That's  
13 right, a four-wheel-drive track with some degree of  
14 ongoing maintenance either side of it.

15 So is there any fuel reduction burning that has been conducted  
16 prior to 7 February in and around that track?---Yes, there  
17 is fuel reduction burning that's been done around the  
18 township of Marysville, and some of it is based off -  
19 using that track as a boundary.

20 If we have a look at the next photograph, which is 0004, and  
21 perhaps if we could go back down to the dam, was there any  
22 fuel reduction burning in the area that's shown in that  
23 photograph?---Yes, there is fuel reduction burning between  
24 the dam and the town and I commented on some of that in my  
25 statement and I described how, in the circumstances, that  
26 even an area of recently fuel reduced area in 2008, the  
27 fire spread - it still seemingly spread at high intensity  
28 through that area, Mr Rush.

29 What is the approximate dimensions of the fuel reduction  
30 burning that was conducted?---Sorry, I couldn't tell you  
31 just off the top of my head.

1 But it is fuel reduction burning, is it, between the dam and  
2 the township?---Yes. There is a sequence of burns moving  
3 out from that point, some that go back into town and then  
4 there are some other blocks that are going back sort of  
5 two to four years that move away from that area as well.

6 So was the purpose of that burning to create some sort of  
7 buffer around Marysville, or what was it?---Yes, that's  
8 correct.

9 You were present in the hearing room during the week when it  
10 was suggested that fuel reduction burning of that size or  
11 nature is really not going to be of much effect at all in  
12 relation to this sort of fire?---That's correct, and  
13 that's consistent with our reconstructive efforts as well.

14 So what's the point of it?---The point is that under certain  
15 conditions, lower fire danger conditions, then it will  
16 provide some advantage. But by and large, as we talked  
17 about last week, our aim has been to increase the extent  
18 and size of fuel reduction burns in line with sort of the  
19 recommendations and findings, thoughts that the panel had  
20 as well.

21 Whilst that might be the position for the lead-up to  
22 7 February, is the reality that that type of buffer for a  
23 fire even of moderate degree is unlikely to be  
24 effective?---No, I think if you look at a fire of more  
25 moderate intensities, then I think there would be some  
26 effective support there, but I agree on a day like Black  
27 Saturday we would need to have larger areas, and that's  
28 again consistent with the sort of work and scenarios that  
29 we were running in the Otways region.

30 I know this afternoon or this morning you have provided a much  
31 larger map, but I don't think it has been capable of being

1 reproduced on the system as yet. I might try and shortcut  
2 this, at (EXH.716.0009).

3 COMMISSIONER PASCOE: While that is coming up, for clarity,  
4 Mr Fogarty, is what I'm hearing you say that in the area  
5 that we were just looking at between the dam and the edge  
6 of the township, that either a larger area could have been  
7 burnt that may have had some impact on a fire like  
8 7 February or a more intense burn?---Look, I think there  
9 is a sequence of blocks that have been managed around  
10 Marysville for a long period and they have been managed on  
11 a rotational basis for many decades. The intent of  
12 burning in those areas is generally to try and burn fairly  
13 completely, because they are part of what we call asset  
14 protection and possibly better referred to as community  
15 protection burns. They were in existence at the time that  
16 the bushfire occurred.

17 So in relation to that notion of, let's call them the community  
18 protection burn, typically they would be high intensity  
19 burns of some hundreds of metres?---That's correct, yes.  
20 I think if you look there on the map just north of  
21 Marysville you can see where we were starting to head  
22 there. There is a much larger burn which was one I also  
23 referred to at the foot of Mount Gordon where there were  
24 some efforts there to actually make burns of a larger  
25 size. But even that burn that was done in autumn 2008,  
26 our reconstruction showed that the fire, while there were  
27 some local effects, that orange area just out to the north  
28 and west of Marysville, the fire as it moved through that  
29 area, there was some local reduction in fire intensity,  
30 but parts of it still burnt quite intensely and the fire  
31 seemingly moved over the top of it without any significant

1 retardation of fire spread.

2 MR RUSH: Mr Fogarty, when I put the word "moderate" in  
3 relation to fire, where do you see these types of blocks  
4 having an impact? At what sort of FDI level are you going  
5 to see the potential, if you like, to stop a fire or  
6 control a fire or halt a fire?---I would have thought it  
7 was effective up to the sort of bottom end of extreme,  
8 maybe severe type conditions.

9 So we are talking somewhere between - - -?---FDI 50 to 70, but  
10 there still would under those conditions be embers moving  
11 into the township of Marysville and then it is very much  
12 dependent on the state of gardens and so on as to how easy  
13 it is to stop fires starting in that area.

14 What we are looking at is the more detailed map provided today  
15 and the purple hatched areas are areas where it is planned  
16 to undertake fuel reduction burning?---That's correct,  
17 yes. As we talked about, we were coming out of 2002, we  
18 were on an upward trajectory trying to get more fire and  
19 larger fire into the landscape, and you can see there a  
20 lot of work that's gone on picking up some of the more  
21 flammable parts of the landscape associated with where  
22 people move along a number of the major roads and so on.  
23 You can see there has been quite a bit of burning in the  
24 recent period and they are building off that. You have to  
25 sort of find anchor points in the landscape that hasn't  
26 been burnt for a while, and they are starting to - you can  
27 see that patterning starting to occur in the plans.

28 What I suggest you see there is what is proposed is much larger  
29 areas for fuel reduction burning?---Yes, that's correct.

30 Can you put years on the areas? Say between Narbethong and  
31 Marysville, we see the pre-7 February 2009 areas are those

1 that are the mustard or yellowish colour on the map, is  
2 that correct?---Sorry, can you repeat the question,  
3 please, Mr Rush?

4 The areas between Narbethong and Marysville that are the  
5 off-yellow colour, the mustard colour, they are burns that  
6 have been done since 2000, is that the position?---2000 to  
7 2004 block you are talking about there?

8 Yes?---I think we are talking about the same thing, yes.

9 Why is it now chosen to say, "Okay, we will undertake much  
10 larger blocks"?---Just a bit of context here. This is the  
11 fire operations plan that was in place during  
12 February 7th. So our fire operation plans, and I think  
13 Mr Lawlor described this process, are produced on an  
14 annual basis and they are three-year rolling plans. Part  
15 of I guess the strategic intent that our chief officer,  
16 Ewan Waller, had put out with us wanting to move to  
17 getting more fire in the landscape was to actually get  
18 larger fires, so at that time you can see that intent  
19 coming into the planning process. We weren't anywhere  
20 near as far down the track as we would have liked and it's  
21 definitely the case that that's what that shows. These  
22 are not burns that have been planned since February 7th,  
23 they are burns that were planned before February 7th, with  
24 the intent of, particularly the ones that are the year  
25 2009 burns, with the intent of having them conducted in  
26 the autumn of 2009.

27 So it might be thought that with an increased percentage and  
28 better resources, that the type of burning that is there  
29 designated, quite large blocks around Narbethong, could  
30 have potentially had a substantial impact on the fire of  
31 7 February?---I guess we are speculating, but that's

1           certainly our view of it.

2   Again showing the importance of prescribed burning?---I guess

3           it's showing the importance of several things, Mr Rush.

4           It's showing the importance of prescribed burning, the

5           importance of it in a strategic context picking up the

6           parts of the landscape and looking at where fires start,

7           where are the parts of the landscape that most promote and

8           accelerate fire behaviour and where they have impact and

9           also the importance of a sustained effort.

10   I think on the map that is on the screen at the moment and also

11          the one I have, there are a light green and a dark green,

12          and the darker green is designated as treatable public

13          land and the light green is designated as other public

14          land.  What's the difference?---The difference is, and

15          again I think we have sort of touched on this, the

16          difference is that the lighter green areas are those

17          forest types that typically aren't adapted to fire or fire

18          is very difficult to use them in, and that can include

19          some areas of rainforest and so on, but a lot of it is our

20          regnans forest, our tall mist forests where they are

21          adapted to infrequent fire and they are very difficult to

22          burn in.  If we are able to burn in those areas in the

23          middle of summer, or we would be burning in the middle of

24          summer or in very dry autumn conditions and there is a

25          high risk that our planned fires could move 10s, to 20s,

26          to 30s of kilometres in a single day just because you have

27          that landscape level of dryness.  They are difficult

28          vegetation types to burn in.  The treatable areas are the

29          dry forest and some of that I guess would fall into what

30          the expert panel have called foothill forest, if you like,

31          those drier brown stringybark or whatever forests that are

1 more easy to use fire and fire is more conducive and they  
2 are more fire adapted.

3 So it does seem as though there have been treatment areas in  
4 what you refer to as the other public land?---Yes, what  
5 you can see there is it is a patchy landscape. You have  
6 areas with southerly aspects in an area, particularly on  
7 the slopes leading up to the more continuous areas of ash  
8 forest and where you move from ash forest into high  
9 quality rainforest. So what you do is you have areas of a  
10 mix of dry forest and wet forest and the aim in those  
11 areas is to take out the dry forest patches.

12 COMMISSIONER PASCOE: Would any of the land be regarded as  
13 untreatable for conservation values?---Look, there are  
14 some areas where that comes into play, particularly if you  
15 have very large continuous areas of rainforest, not that  
16 we would be looking to burn that anyway. But there are  
17 some of those areas where that is the case, yes. But  
18 these aren't pulled out on that basis; these are simply  
19 vegetation classifications.

20 Similarly, cultural values I imagine?---Yes, that's correct.

21 MR RUSH: Mr Fogarty, there is another map that's been provided  
22 that I'm going to ask to be put on the monitor. If we can  
23 just bring it in a little bit closer. The dark hatched  
24 areas on that map are what?---The purple hatched areas?  
25 I'm not quite sure.

26 As I look at it, they look like they're black, or they might be  
27 purple?---Yes. Those areas are, as I said, the areas that  
28 are scheduled for burning in our fire operations plan.  
29 So, as they were scheduled for burning in the autumn of  
30 2009, they are those areas that you referred to before as  
31 being areas that are put on the plan and linking into the

1 previously burnt areas.

2 But it would appear that there are substantial amounts of those  
3 areas which could be otherwise described as other public  
4 land?---Yes. That's the reality of trying to use fire in  
5 that landscape, that you have a mix of dry and wet forest.  
6 It is a high productivity, relatively high rainfall part  
7 of the state.

8 So is the position this, Mr Fogarty: whilst you might need to  
9 conduct it with more care, that on both what is referred  
10 to as treatable public land and other public land, that  
11 fuel reduction work can take place?---Yes, Mr Rush, and  
12 that was the intent at the time.

13 I just want to return briefly to strategic firebreaks. There  
14 has been evidence over the last two days that there are a  
15 number of options, it seems. There is a six metre wide  
16 strategic firebreak, there seems to be a 20 metre wide  
17 firebreak and DSE, it seems, for their own purposes may go  
18 to 40 metres for a firebreak, but other public  
19 organisations can't go to 40 metres unless there is an  
20 exceptional quality to the firebreak that they wish to put  
21 in?---(Witness nods.)

22 Ms Dripps informed the Commission that, in relation to the  
23 distances or the widths of the firebreaks, she has relied  
24 on you?---Yes. I have provided information and advice  
25 largely based on our program and I guess it is fair to say  
26 that in the context of that advice to other public  
27 agencies it is not entirely consistent with what I have  
28 had to say on this matter.

29 In what sense?---I think, and it is probably best if we get a  
30 chance to run through some of the points in that  
31 presentation. Essentially we have done quite a bit of

1 work on what makes an effective fuelbreak. In the sort of  
2 broad forested landscape like we have around our  
3 catchments we have looked at it closely and while there  
4 may be a tendency for people to always want to go out to  
5 40, 60, 80 metres, when you look at how closely fires  
6 spread and propagate, and it is a bit consistent with  
7 Mr Strickland's evidence, there is a point where the way  
8 breaks are breached is dependent on the fire behaviour and  
9 there is a point where it is largely driven by embers and  
10 the critical threshold there seems to be at around that 20  
11 to 30 metre mark where embers take over. So we have  
12 actually found that going much wider than that doesn't add  
13 a lot of value. When you are looking at fuelbreaks around  
14 towns, similar principles apply, but you look more closely  
15 at radiation intensity transfer, if you like, and in those  
16 instances because the properties of, say, a home are  
17 different to the properties of forest, you can get some  
18 added benefit by going out to 30 or 40 metres and it is  
19 largely consistent with the state's 10/30 rule, if you  
20 like, about the distance that you are trying to move out  
21 from. In terms of the breaks that we construct in the  
22 Otways where we are doing some trials with this sort of  
23 thing, we generally are looking at breaks between 20 to  
24 40 metres. There are areas where if it's in a part of the  
25 landscape where it's down a back southerly aspect that it  
26 is not likely to be hit by the full brunt of the fire, it  
27 may be 20 metres, but if we have a steep pinch and so on,  
28 then we are looking at the 40 metres. You have to  
29 actually vary it a little bit according to the context,  
30 but that range seems to provide the best level of  
31 effectiveness for a certain amount of resource that you

1 have available.

2 So just for a council that may put in an application for  
3 40 metres, what are the sort of exceptional features that  
4 the councils should be pointing out are necessary for a 40  
5 metre firebreak?---I think maybe let's look at two  
6 different scenarios. If you are looking at a small  
7 reserve where there may be a 10 hectare reserve where a  
8 fire is unlikely to grow to a large size, then that sort  
9 of break, a 20 metre break, is adequate. If you are  
10 looking at the sort of environment that we are looking at  
11 in the Otways where it is a more continuous - and I will  
12 use a more fire perspective on this - a more continuous  
13 high energy environment, if you like, with the high  
14 productivity forests and so on, then we would be looking  
15 more, as we are doing down there, in the 30 to 40 metre  
16 range. So the circumstance just need to be taken account  
17 of in that setting.

18 But for the council who may feel they have these sort of  
19 exceptional circumstances that you outline, I suggest they  
20 don't get much comfort from the correspondence of the  
21 Department of Sustainability and Environment that tells  
22 them, "Please note firebreaks greater than 20 metres in  
23 width are unlikely to be supported"?---I've only seen that  
24 correspondence as of yesterday, Mr Rush. I haven't been  
25 involved in that process.

26 So where does that correspondence generate from in DSE?---My  
27 understanding is it's from our biodiversity and ecosystems  
28 services section.

29 So is there a departure of ways between the two sections?---No,  
30 it is more the fact that we act as a fire agency and we  
31 undertake specific actions and work similar to what a

1 council does as a land manager, if you like. We do  
2 provide input into biodiversity and ecosystem services as  
3 required. It just wasn't requested from us at that point  
4 in time. So, when you look at the fact that you do  
5 probably get the best - you get about the best level of  
6 reduction in energy away from a fire or the most amount  
7 over that first 20 metres, the highest proportion over  
8 that first 20 metres, it is not inconsistent with  
9 discussions we've had. It has been represented in sort of  
10 more absolute terms than I think it need be.

11 Mr Fogarty, very briefly, you have provided during the course  
12 of the day a number of diagrams that you wish to go to to  
13 explain I think the strategic fire zone?---It really just  
14 helps to describe the science behind it a little bit,  
15 Mr Rush, as to where and how you might apply it and what  
16 the basis of our understanding and prescriptions are.

17 Perhaps if I can ask - - -

18 COMMISSIONER PASCOE: Mr Rush, before we go there, just to  
19 assist my understanding of the relationship between the  
20 divisions within DSE, Mr Fogarty, from what you have said  
21 it would seem that your division has provided advice to  
22 the biodiversity division who have set a limit that was  
23 certainly conveyed to us in fairly absolute terms of  
24 20 metres for a fuelbreak. It seems puzzling that that  
25 decision would be set by the biodiversity section of the  
26 DSE and not by the land and fuel management section of the  
27 DSE?---The biodiversity division manage the native  
28 vegetation elements, but I agree it would have, I think,  
29 improved the outcome if we had had input into that.

30 I think what has happened here is we have developed an  
31 approach to strategic fuelbreaks and it has involved a

1 number of discussions and negotiations since 2006, and  
2 I think that some of that information has been taken on  
3 board and used in this context but, as I said, probably a  
4 little bit more absolute than I would have liked to have  
5 seen it being used.

6 There are questions, I think, for the Royal Commission about  
7 the degree to which we get a true integration of the  
8 conservation and the land and fuel management functions  
9 within the one department, and perhaps the relative status  
10 and authority of those divisions within the department and  
11 their capacity to influence the directions of their  
12 policies?---In this particular instance, really in terms  
13 of a lot of the activity around private land, CFA are  
14 actually the referral authority and we provide input and  
15 often try and broker outcomes as needed. I think in the  
16 post-Black Saturday fire situation, then this obviously  
17 went through, as I said, in more absolute terms than  
18 probably it should have been.

19 MR RUSH: Is what you're saying that you broker solutions with  
20 CFA and it might be good if you brokered solutions with  
21 your counter-department within DSE?---Yes, well, when you  
22 look at the strategic fuelbreak program that we are doing  
23 in the Otways, that they are negotiated solutions and they  
24 are leading to good outcomes, so we do generally work  
25 together fairly closely, Mr Rush.

26 Mr Fogarty, at (TEN.240.001.0001) you have provided a  
27 presentation on the effectiveness of fuelbreaks. Just  
28 through the time that's available, I'm not going to go to  
29 every one of these presentations, but I think if we go to  
30 0004, flames and radiation landscape division breaks,  
31 I think this is perhaps what you were referring to earlier

1 in your evidence?---That's correct. What we did is when  
2 we were looking at establishing a framework and having the  
3 necessary discussion with, for example, our biodiversity  
4 managers, it was a matter of saying what do we need to do  
5 to be effective here and we simply looked at how we can  
6 model and predict fire behaviour at a location such as a  
7 break. What you can see there are some lines there that  
8 illustrate flame height, the lower light yellow line, and  
9 at different fire dangers and the line then where, if you  
10 are assuming a simple rule of thumb that works very well  
11 that breaks are generally breached by flame at 1.5 times  
12 flame height, that red line above it. Also in a lot of  
13 our forest types you get crown firing at around that sort  
14 of forest fire danger of 30 and localised crown firing.  
15 What that illustrated was that, as you are moving out to a  
16 height of around 20 metres, that breaks are starting to  
17 become marginal from a flame height and also when you get  
18 into that localised crowning, that's when you're getting  
19 that lot of embers being thrown and Mr Strickland showed  
20 that simple picture of a more moderate condition with  
21 localised embers and that embers become the dominant  
22 process in transferring fire over a break. So, that was  
23 just some of the basis as to why we have decided on that  
24 sort of level.

25 Perhaps looking at the second dot point, rule of thumb that  
26 breaks will be effective to 1.5 metres by flame height,  
27 what flame height will see out 20 metres?---It is about a  
28 15 metre flame height.

29 Perhaps if we can go to the next slide at 0005?---Again, just  
30 looking at this in a range of forest fuel types, picking  
31 up that as you go up in fuel load you get failure to some

1 degree earlier, but widening the break won't help because  
2 the failure is still largely driven by embers. You can  
3 get some increased effectiveness as your fuel loads go  
4 down and you have lower productivity forest. You can  
5 actually in those instances reduce the width of your  
6 break. But the main point is there that that critical  
7 width is still around 20 plus or minus five metres and  
8 that there is some advantage to thinking about locating  
9 your breaks on drier ridge lines and those sorts of things  
10 in terms of the practical placement.

11 And 0007?---The trick then is to try and find out what your  
12 critical, your most effective width is. If you are  
13 looking at the cost of constructing a kilometre of break,  
14 adding on the construction and native veg costs, then you  
15 get that point of inflexion where failure happens pretty  
16 rapidly at around that 20, 25 metres and that again for us  
17 is the most important part for those sorts of breaks that  
18 we are building in Melbourne water catchments.

19 So the second dot point, could you explain step change in width  
20 1.5 by 2?---So, as you get to that point where you are  
21 getting crowning and you are getting flames that are maybe  
22 10 metres on the ground to flames that are maybe 30 metres  
23 up a tree, you would need to actually undertake a step  
24 change in width to have that break effective from a fire  
25 perspective. However, as I said, at that point in time  
26 you are getting so many embers that it becomes  
27 inconsequential.

28 COMMISSIONER McLEOD: So does that suggest that with the types  
29 of fires that we saw on 7 February, for cost reasons it is  
30 impracticable to even contemplate fuelbreaks being in any  
31 way effective if they are unlikely to be more than

1 25 metres in width?---The issue there is that for fires  
2 that we saw on 7 February you go from a break being  
3 effective at around 20 metres under a range of conditions  
4 where you can use them, say, to do a backburn off, or  
5 whatever, under more moderate conditions. Once you go  
6 past that in a forested environment, they need to go out  
7 as you're going up the fire danger scale, anything from  
8 several hundred metres to several kilometres. In a  
9 grassland environment it's different, but even then  
10 I think Mr Cheney spoke the other day about, under sort of  
11 the conditions of 7 February, even in sort of grazed-out  
12 pastures you can have spotting several hundred metres  
13 ahead just picking up cow dung and so on. So you still go  
14 from a point of failure to having to go very wide once you  
15 actually want to have absolute protection.

16 MR RUSH: I don't propose to go to anything else in this except  
17 I would just like to go to 0013, which is headed "Cost  
18 effectiveness looking at the bigger picture". You say you  
19 need to look at the big picture and fuelbreaks are just  
20 one part of the solution?---That's correct, Mr Rush.

21 You refer to over 2,000 homes studied or studies?---2,000 homes  
22 studied. There are not 2,000 different studies.

23 What are the studies that you are referring to there?---These  
24 are a collection of works that have been done in the  
25 Como-Jannali fires in New South Wales in Sydney, Ash  
26 Wednesday fires. It is a collection of information that  
27 I gathered a fair bit of it off Justin Leonard, but this  
28 information is still pre-2009.

29 Just looking at the last dot point and I guess how it is  
30 relevant, but what it says, more particularly, "homes that  
31 have adequate defensible space". What is an adequate

1           defensible space for 7 February, for example?---Well,  
2           I think some of the information is still very much around  
3           the moving out to 100 metres, but in our instance here we  
4           are looking at having an integrated suite as being, for  
5           the breaks we are constructing, for more frequent and  
6           larger planned burns to be associated with that break.  
7   And people willing and able to stay and defend have close to  
8           90 per cent chance of survival?---Again, this information  
9           is pre-2009.  
10   Why put it in something that's produced to the Royal Commission  
11           in 2010?---Sorry, this was just something that we have  
12           been using to actually develop our break policy on.  
13   Because, just so it is clear, you say you rely on New South  
14           Wales studies. The New South Wales Rural Fire Brigade for  
15           the catastrophic days say, "Even well prepared and  
16           constructed homes will not be safe. Under no  
17           circumstances will it be safe to stay and defend."?---Yes,  
18           and as I said this was information that we used to help  
19           build our initial break guidelines.  
20   There are just a couple of other matters, Commissioners. You  
21           were in the hearing room when Mr Wilson was taken to the  
22           corporate plan of 2008-2011, which indicated that DSE  
23           would move to 4 to 6 per cent in relation to the public  
24           lands in relation to fuel reduction burnings. Mr Wilson  
25           indicated that would be an appropriate scale that we might  
26           go to. Having regard to that plan being developed when  
27           you were there and he wasn't, what was the basis of  
28           putting forward 4 to 6 per cent?---We talked about quite a  
29           bit of this in my statement - - -  
30   I know that and I don't want to go backwards. Is there any  
31           scientific, any analysis, anything in writing that points

1 to 4 to 6 per cent?---The scientific analysis at that time  
2 was largely a review of information from the south-west  
3 Tasmanian study and what was emerging out of the West  
4 Australian work that started to clearly show the links  
5 between increasing the amount of planned burning and being  
6 able to reduce the risk of fire by a measurable effect.  
7 It was largely based on advice derived from that work and,  
8 as we've talked about, the future fire work is really what  
9 we are doing to try to galvanise that type of analysis at  
10 a local level.

11 Is there anything that's changed in relation to the materials  
12 that were used by DSE for 4 to 6 per cent that would  
13 suggest that they were inappropriate figures?---I think  
14 the work that we're doing, it seems to corroborate the  
15 view that at 3 per cent, if you are being very strategic,  
16 you can start to make a reduced risk and you can get  
17 increasing levels of risk reduction by increasing your  
18 area after that.

19 But my question was has anything changed in relation to the  
20 scientific or fire research that would in any way impact  
21 on what was appropriate in 2008 when 4 to 6 per cent was  
22 put forward by DSE as where we should be aiming?---No.  
23 The tools have improved and I guess they reinforce that  
24 position.

25 If I can just take you to a couple of matters raised by the  
26 expert panel and the Western Australian evidence that we  
27 have, that burning less than 500 to 1,000 hectares in  
28 prescribed burning is of minimal value in reducing the  
29 scale of unplanned fire?---You have to look at the  
30 circumstance. I think in these higher energy, more  
31 continuous landscapes, it makes sense to have larger

1 burns, but you also go back to the Bracewell Street  
2 example that Mr Strickland talked about and I had  
3 discussed previously. They are more discontinuous, lower  
4 productivity landscapes and in those environments there is  
5 a need for smaller burns and they can be quite effective.  
6 So, again, context is important.

7 And ideally 70 per cent or 90 per cent of the area should be  
8 treated?---If you are looking at burns specifically for  
9 wildfire moderation and asset protection, then you do need  
10 to be getting up to higher levels of treatment coverage.

11 And the panel's view of 5 to 10 per cent, as I understand it,  
12 would accord with your own as given in evidence last  
13 week?---Yes, I think the 10 per cent of course is getting  
14 up well above where I thought it would be appropriate and  
15 that's partially on ecological grounds. Our tolerable  
16 fire interval work that we do have in terms of the  
17 tolerable fire regimes from a vegetation perspective that  
18 you would look at in the Victorian landscape, that would  
19 be getting well outside of those. But in terms of the  
20 lower end of that range, it is consistent with the work  
21 that we have done and the national and international  
22 studies.

23 What we do know is that wildfire, the fires that caused the  
24 most damage on 7 February and in the two or three days  
25 over the fires of 2003 and 2004 that took out 50 per cent  
26 of the total burned area over 50 days, that that sort of  
27 wildfire at high ignition and high intensity is the most  
28 ecologically damaging?---Yes, I would agree with that,  
29 that if your ideal for ecological management is a  
30 patchwork of age classes and mosaics and so on of  
31 different age classes across the landscape, having an area

1           that's been burnt severely of over a million hectares is  
2           not a good ecological outcome.

3 MR RUSH: They are the matters, Commissioners. I think  
4           Ms Doyle will deal with the roadside.

5 CHAIRMAN: Perhaps I can just ask some further comments on the  
6           expert panel. Are you aware of any other strong, contrary  
7           views to that which the panel was putting almost  
8           unanimously as to a significant number of matters?---Look,  
9           no, I think it is more matters of degrees. I understand  
10          the focus on the foothill forests, but I would for example  
11          like to make sure we looked at that in the context of risk  
12          across the landscape. I would hate to see us just blindly  
13          adopt that sort of process without thinking where that  
14          sits in the broader landscape context. So, I don't think  
15          there is any major disagreement that I'm aware of at the  
16          academic or probably broader fire community. I just think  
17          you have to be careful about adopting some of these things  
18          too simplistically.

19 Presumably the matter of cost is out of your hands, so really  
20          finding the money to achieve that kind of result is  
21          outside your ken?---Yes, that's correct, and Mr Wilson did  
22          discuss the point that he is in discussion with government  
23          and government were keen to take on the views of the  
24          Commission. One thing I think is important to note, and  
25          Dr Bradstock pointed this out, that in terms of the sorts  
26          of analysis, we can evaluate reduction in risk, reduction  
27          in potential area burnt and the work we are doing with  
28          Dr Tolhurst, the reduction of potential impact on  
29          communities and so on. There is no easy way to do a  
30          long-term cost benefit analysis of these sorts of things,  
31          yet the tools are still emerging in that space. We are

1 doing some work on trying to get an economic basis to it,  
2 but for us and for a lot of agencies in Australia and  
3 around the world, that's still some way off.

4 As to the staff situation, what they were suggesting was that  
5 it might take some time to build up the staff, but that's  
6 something that, if you were given the funds, you would be  
7 able to start working on as soon as possible?---Yes.

8 I think Mr Williams' point about this needing to be a  
9 programmatic approach with the right people to have that  
10 sort of oversight, understand how risk is changing,  
11 understand how our management is impacting on risk and  
12 ecological outcomes of the landscape level and then to  
13 deliver that on the ground is important and I think we  
14 have set the framework in place to do that with our  
15 bushfire strategy in some of the tools and planning  
16 processes that we are developing. But we are, as  
17 I mentioned previously, at capacity.

18 What about making a significant start in the Wombat State  
19 Forest, as was suggested?---From a trial perspective the  
20 Wombat has some advantages in that it has a long-term  
21 research history there. From a practical perspective we  
22 have a very different and very much more complex landscape  
23 than Western Australia and I think if we are going to deal  
24 with it properly we need to pick an environment that is  
25 actually systematic of the difficulties we face. I would  
26 have thought that some of the foothill forests maybe  
27 falling into the Latrobe Valley or somewhere like that  
28 that are much more complex and difficult to work in may be  
29 a better place to start off. I think we need to tackle  
30 the complexity head on.

31 What about the megafire phenomenon as expounded by Jerry

1 Williams? Do you think that that is largely irrelevant or  
2 that it bears much closer study?---We have studied the  
3 phenomenon to some extent and whether it's a megafire or  
4 the catastrophic fire or whatever, the underpinning  
5 factors are the same. It's still the link to the land and  
6 the people, it's having that sort of social and economic  
7 and environmental understanding of where you're working  
8 and making sure that your strategies are altering risk at  
9 a broader level over time. So, in terms of the lessons,  
10 I think there is a lot that we can pick up on. But, as  
11 I said, I think in our bushfire strategy that's where we  
12 were trying to head anyway.

13 COMMISSIONER McLEOD: And also to the possible influence of  
14 global warming. Jerry Williams spoke at some length about  
15 the experience in the US with, as they call them,  
16 megafires that have been increasing in the last decade,  
17 together with references to other spots around the world  
18 where very severe fires have been emerging against the  
19 pattern of history and I think he saw the February  
20 experience in Australia as part of that world experience.  
21 There seemed to be no disagreement on that point from  
22 other members of the panel. Do you have a view about  
23 whether the possibility of that reality ought to be  
24 starting to be factored into planning for the future in  
25 terms of trying to prepare the landscape to better deal  
26 with that situation?---Yes. I have very strong views on  
27 that particular topic. If you look at our past history,  
28 our major fire events are very strongly associated with  
29 protracted drought and what we would call periods of  
30 extended higher and elevated fire dangers and the  
31 correlations are just so strong. So we can expect that as

1 droughts become more protracted and we have worsening fire  
2 danger conditions associated with those droughts, that the  
3 potential for large and damaging fires increases and  
4 increases quite dramatically. I don't think it is a  
5 simple additive relationship; I think it is  
6 potentially - I'm falling back to science jargon speak,  
7 here - it is potentially non-linear. So, as you get  
8 subtle increases in drying, you will get major increases  
9 in the potential for large and damaging fires, so I think  
10 we have to factor that in. But we also have to factor it  
11 in from an ecological perspective as well and that our  
12 natural ecosystems are and will be under increasing  
13 pressure from fire. So, our fire regimes again, we just  
14 have to try and understand where changes in fire  
15 management and drought and climate will move those  
16 ecosystems to as well and be considerate of that.

17 Does that suggest we need to do more in terms of trying to  
18 manipulate, if you like, the landscape to avoid those  
19 higher level events occurring more likely without  
20 intervention or are you saying that's a barrier to being  
21 able to go as far as one might like purely from a fire  
22 suppression point of view?---I think the role of fire in  
23 that circumstance can be very positive in reducing the  
24 sort of event that Mr Rush was talking about, the large  
25 damaging fire, and that does I think make the landscape  
26 more exposed to heat and sun and less able to recover from  
27 fire. But, likewise, if our fire regimes are so  
28 heavy-handed, then we may actually push those ecosystems  
29 that way as well. So there is just a balance here and we  
30 have to do the sort of work that we're doing to try and  
31 work out where those tipping points are.

1 Are you suggesting they have been heavy-handed?---No, I'm  
2 saying if we were moving into being too heavy-handed we  
3 could have the similar sort of effect as large and  
4 damaging fires, so there is a balance there.

5 MS DOYLE: I will see how far we can get. We are trying to  
6 deal with availability issues and other questions and  
7 departure time for today. Mr Fogarty, you were also asked  
8 to prepare a statement in relation to roadside vegetation,  
9 fuelbreaks, firebreaks and some case studies of roads  
10 affected by the February 7th fires. Now, that statement  
11 is at (WIT.3024.004.0331). It is a statement dated  
12 6 November 2009. I understand that with that you want to  
13 tender a full CV which I have been provided with in hard  
14 copy that hasn't made its way through to your other  
15 statements. With the addition of that CV, is the  
16 statement of 6 November true and correct?---Yes, that's  
17 correct.

18 I tender that statement.

19 #EXHIBIT 761 - Witness Statement of Liam Gerard Fogarty, dated  
20 6 November 2009 plus nine attachments (WIT.3024.004.0331).  
21 Curriculum Vitae of Liam Gerard Fogarty, dated 3 October  
22 2005 (EXH.761.0001).

23 MS DOYLE: You will forgive me if I don't go through the CV at  
24 this stage. I want to ask you about some discrete matters  
25 dealt with in that statement. Working backwards, in  
26 effect, you were asked to do a similar task to  
27 Mr Strickland from the CFA. You were asked to consider  
28 the question of the role of roadside vegetation in  
29 relation to, I think it was three particular roads that  
30 fell within the spread of fires that at some stage were  
31 controlled by DSE. You deal with this in paragraph 36

1           onwards of your statement and the net result of your  
2           inquiries in relation to Myrtleford-Yackandandah Road, a  
3           portion of Labertouche Road and one area within the  
4           Redesdale fire is essentially in accordance with much of  
5           what Mr Strickland has said this afternoon; is that  
6           right?---That's correct.

7   Namely, while you found some localised contribution or change  
8           to fire behaviour, you did not find any particular example  
9           where roadside vegetation affected the overall fire  
10          spread?---That's correct.

11   Were you here for all of Mr Strickland's evidence?---I was.

12   Is there anything you want to add to what he has told us about  
13          roadside vegetation and fire behaviour?---Probably some of  
14          the phenomena that I point out in my statement are worth  
15          considering, in that when people see roads, fire spreading  
16          over roads, you get a point where the fire behaviour  
17          actually - the fire fans out ahead of the road and you get  
18          a flame rollover and it gives the appearance that the fire  
19          has actually become accelerated in the behaviour and it is  
20          really as much due to the local atmospherics of the road.  
21          I have a picture in there of that effect which may be  
22          worth just touching on. It is 0052.1786. It is  
23          attachment LGF6.

24   Yes, this photo at (DSE.HDD.0052.1786) shows an effect that  
25          I think you describe in your statement as rollover over  
26          the side of a road. What point do you want to draw out  
27          about that depiction there?---Purely that it just adds to  
28          the perception that fire behaviour around roads can be  
29          affected, and what it is is actually just the fact that  
30          there is some local atmospheric conditions that promote  
31          that and we have actually incorporated consideration of

1 that effect into our strategic fuelbreak design and the  
2 aim is not to remove all trees, because the local  
3 turbulence and so on that you get as a result of that,  
4 having an absolute clear opening without some transition  
5 into it, can be quite important.

6 You no doubt heard, then, Mr Strickland's overall conclusion,  
7 which was that in light of the particular weather  
8 conditions on 7 February, he reached his conclusion in  
9 relation to each of the roadsides he looked at. I asked  
10 him, though, if the weather conditions had been less  
11 severe, would he have expected roadside vegetation to have  
12 played a more direct causal role in affecting fire  
13 behaviour and fire spread. He said it could. What do you  
14 say in relation to the same question?---It could. I agree  
15 it could. It is probably unlikely to have a major impact  
16 in that, if it is only having a marginal effect, then  
17 there is every likelihood that, if it does spot-over out  
18 into a paddock, then local firefighting resources would be  
19 able to pick it up anyway because the effects are so  
20 localised that in the overall scheme of things I doubt it  
21 would be significantly different.

22 This is a matter you summarises in paragraph 34 of your  
23 submission at page 0341. At paragraph 34, just above that  
24 you summarise some general matters in relation to fire  
25 behaviour which we won't repeat, but you then say there  
26 are a number of factors that influence fire behaviour in  
27 and around fuelbreaks, of which roadside vegetation is  
28 only one of the factors. "In my experience roadside  
29 vegetation does not play a significant role in whether a  
30 fire will be contained." In light of what you have just  
31 said, should that be qualified by noting that, where a

1 fire is taking off in less than severe conditions, the  
2 quality of roadside vegetation might improve the capacity  
3 of firefighters to use a road effectively to engage in  
4 suppression activities?---Yes, and again in a forested  
5 environment context, for example, if we are looking to do,  
6 like we had to do following February 9th, large areas of  
7 backburning and burning out, then having more favourable  
8 roadside conditions can definitely help the firefighting  
9 effort.

10 Moving to a separate topic, your statement also addresses DSE's  
11 role as a road manager. We have heard a lot of evidence  
12 about what councils and VicRoads do in relation to the  
13 roads they are responsible for, and you note that of  
14 course DSE has its own road network within state forests,  
15 parks and national parks and reserves, to the degree that  
16 in fact DSE manages 48,000 kilometres of roads?---That's  
17 correct.

18 I assume that a lot of those roads would be used mostly by  
19 government employees and commercial enterprises that need  
20 to enter the state park and forests for various  
21 reasons?---Yes, and certain sort of more enthusiastic  
22 recreational users and bushwalkers and so on.

23 Your road network, as you explain in paragraph 15 of your  
24 statement, tends to be of a relatively low standard and is  
25 mostly unsealed. In fact, 99 per cent of your roads are  
26 unsealed?---Yes.

27 Some of those roads are also used as firebreaks or potential  
28 firebreaks, is that right?---That's correct, yes.

29 That then leads me to my next question, the difference between  
30 the terms that we have all been tending to use  
31 interchangeably, "fuelbreak" and "firebreak". What's the

1 difference?--We've tended to aggregate most things under  
2 a fuelbreak, reflecting a simple break in fuel. A  
3 firebreak we might refer to as a track we are cutting  
4 around a fire at a point in time with a bulldozer or a  
5 hand crew or whatever. So we tend to just largely stick  
6 to the fuelbreak as being any break in fuel and it can be  
7 any circumstance.

8 So a fuelbreak is really the umbrella term to refer to any area  
9 where you have modified the fuel in some way?---That's  
10 right.

11 Whereas a firebreak is a subset of that group and it is one  
12 where you have taken the area down to earth or mineral  
13 earth?---Yes.

14 In relation to fuelbreaks, when Mr Rush was asking you  
15 questions you referred to a PowerPoint presentation you  
16 prepared quite recently, as I understand it, but attached  
17 to this statement is what is called the "2008 strategic  
18 fuel and firebreak policy discussion paper". It is dated  
19 February 2008. It is attachment 4 to your statement. If  
20 we can go to the cover page of that first,  
21 (DSE.HDD.0052.1751). First of all, I want to understand  
22 how the two things work in together. I know your  
23 statement was prepared earlier and you attach to that this  
24 February 2008 policy. It contains a lot of detail about  
25 the way firebreaks work. Is this 2008 policy still in  
26 force after the February 2009 fires?---Yes, it is still a  
27 policy discussion paper. It is the discussion paper that  
28 informed our current policies.

29 Does this discussion paper inform the advice you give other  
30 sections within DSE?---Yes.

31 In terms of the material that was in the PowerPoint

1 presentation, first of all, is that also current? Is that  
2 information that's used to this day in - - -?---It still  
3 informs our consideration, but as Mr Rush pointed out  
4 there is a point in there that has carried over - - -

5 That is the material about household survival rates?---That is  
6 no longer correct, yes.

7 But didn't you prepare this PowerPoint today?---No, I sent it  
8 through as the material that we used to explain the  
9 capability of breaks under certain circumstances. That  
10 point doesn't actually have any major bearing on our break  
11 policy strategy because it is still largely associated  
12 with us constructing fuelbreaks and doing planned burning  
13 off them.

14 But it was under a heading on the slide which suggested that we  
15 have to look at fuelbreaks as part of the bigger picture.  
16 As I understood it, the big picture seemed to include the  
17 fact that you could be fairly well assured that people who  
18 stayed with their houses would survive. So it is no  
19 longer DSE policy to look at that big picture in that  
20 way?---The big picture still applies but, as I said, that  
21 point in terms of people making a decision to leave early,  
22 then that is obviously where we would like people to head.

23 When Ms Dripps gave evidence yesterday about strategic  
24 fuelbreaks and their biodiversity impact, she said that  
25 essentially you were the sole repository of advice she had  
26 received on this matter. Have you given formal advice to  
27 Ms Dripps about how your land and fire management division  
28 regards the importance of fuelbreaks? Is it contained in  
29 a document, for example, or a particular PowerPoint  
30 presentation?

31 MS JUDD: Can I make that clear. It was Mr Fogarty and those

1 in his department.

2 MS DOYLE: Okay, those in your department. How have you  
3 informed or trained Ms Dripps in relation to  
4 fuelbreaks?---As I said, the discussions have largely been  
5 around how we should structure our fuelbreak program.

6 Has she seen the PowerPoint presentation that we have now seen,  
7 do you know?---No, I don't think so.

8 Would she have been given this 2008 strategic discussion  
9 paper?---People in her division will have seen that paper.

10 I just want to clarify two matters within the paper because a  
11 lot of it is the same as the PowerPoint. At page 1756  
12 there is a reference to fuelbreak design and location.  
13 There it's noted that the primary role of fuelbreaks is to  
14 allow firefighters and equipment to be deployed to more  
15 safely and more rapidly control a fire. It notes that  
16 they might be particularly useful in controlling lateral  
17 spread. In the next paragraph it is noted that in remote  
18 country the achievement of lateral containment is often a  
19 race against time limited by suitable opportunities. You  
20 then note that when breaks are pre-prepared and located so  
21 as to meaningfully divide the landscape into units in  
22 which fires have a greater chance of being contained  
23 during favourable weather conditions that typically  
24 precede and follow a sequence of severe weather and cold  
25 front passage, they can offer a greater degree of  
26 strategic advantage. To summarise, what you are saying  
27 there, and I think you repeat it in your statement, is  
28 that their core utility is in assisting firefighters in  
29 their suppression efforts?---That's correct.

30 No doubt that sort of assistance needs to in some way deal with  
31 or at least militate the effects of radiant heat if a

1 firefighter is going to be standing there and using  
2 it?---In instances where a break is being threatened by  
3 severe fire, then we generally don't have firefighters in  
4 the vicinity.

5 So they are used for what?---A good example is the control of  
6 the fire in the catchments where we over several weeks  
7 construct - we actually backburnt off those breaks and  
8 then patched out that country with fire via aerial  
9 ignition to keep the fire out of the Thompson catchment.

10 You may not be able to answer this, but that is probably quite  
11 relevant to the country in which DSE usually fights its  
12 fires. But what about when CFA firefighters are using  
13 fuelbreaks? They are likely to be there, is what I'm  
14 driving at?---Even then, at any point in time, if you have  
15 a fast-moving fire moving up on an area, an intense fire,  
16 you have to stand back, let it move through and then move  
17 in behind it.

18 Ms Dripps said that part of the advice she received from either  
19 you or others in your section was that in building a  
20 strategic fuelbreak there is the question of width, and  
21 Mr Rush has taken you to that issue. But she said in  
22 addition she had received advice that you don't need to  
23 take out all of the canopy and in some circumstances you  
24 can even leave trees in the middle of the break so long as  
25 the overall width is kept to a reasonable size. Is that  
26 advice that you or your department have given Ms Dripps  
27 about fuelbreaks?---Yes, that's correct, and it comes back  
28 to that point of what you are trying to avoid in the break  
29 is a high level of turbulence and having the trees there  
30 actually reduces any drying of adjacent fuels and so on  
31 and any local promotion of fire behaviour. So, provided

1           you have left sound trees, then the trees can actually  
2           provide quite an advantage.

3   Having a tree in the middle of a fuelbreak tends to reduce the  
4           capacity of trucks to get into it and also increases the  
5           risk that, if that tree catches alight, the radiant heat  
6           will affect any firefighter who is there?---Yes. You make  
7           it such that if you have a break you can get machinery  
8           underneath it to slash it and so on, so it is not an issue  
9           from the point of view of access, it is designed to be  
10          open enough for that. The breaks, by having widely spaced  
11          trees there is very little chance of any sort of crown  
12          fire carrying through that break.

13   In light of your evidence this afternoon, Mr Fogarty, it sounds  
14          like these breaks are often constructed but rarely used,  
15          because the way you are describing them they are going to  
16          be vacant during a fire. During what sorts of fires are  
17          they used?---No, we used them quite extensively in  
18          February - well, we will go back to the basics of a  
19          fuelbreak. We use them, for example, where we are  
20          constructing them down the Otways to help us do planned  
21          burning close to homes. They are very difficult, complex  
22          environments. There is a lot of homes nearby and unless  
23          you have a good boundary it makes putting a burn in quite  
24          difficult with the risk of the burn actually impacting on  
25          homes. So that's one of the first purposes that we use  
26          them for. Secondly, then, if we do have a large fire in  
27          the landscape such as either the Black Saturday fires or  
28          the Great Divide fires, then it is a matter of saying,  
29          "What is our logical fallback line? Let's go in and  
30          actually do some backburning and burning out and secure  
31          that break." By the fact that the break is prepared, the

1 fact that the dangerous trees are removed, the fact that  
2 it has better road, visual clearance with smoke coming  
3 from fires means that we can actually conduct those  
4 firefighting operations much more efficiently.

5 I won't ask for it to be brought up again. You have looked a  
6 number of times at the photo of the firebreak around  
7 Marysville. Can I ask you two questions about it. Given  
8 its width, it was hardly likely to stop any significant  
9 fire in and of itself, was it?---Yes, it was never  
10 designed for that.

11 In light of your evidence, was it designed for any firefighter  
12 to ever stand in it and use it as an anchor point from  
13 which to defend the town of Marysville?---No.

14 So what is it for?---As I said, it was to help with actually  
15 backburning and burning out operations under different  
16 situations and planned burning operations.

17 So it was designed for planned burns, not unplanned  
18 fires?---Largely that's where you'll get the best benefit  
19 out of them. But, as I said, you've got to also look at  
20 the fact that there are instances where we are suppressing  
21 planned fires over several weeks and months and they  
22 actually provide an incredible amount of support in those  
23 circumstances.

24 So as far as town protection goes, we should look to planned  
25 burning regimes, including asset protection zone work,  
26 rather than to these areas called fuelbreaks or  
27 firebreaks?---Fuelbreaks help with making that efficient,  
28 but the backbone of it needs to be planned burns.

29 I have a question about your strategic fuelbreaks. Ms Dripps  
30 explained to us that one of the exemptions under clause 52  
31 of the Victoria Planning Provisions essentially grew up

1 out of or developed at the same time as a need was  
2 identified to get some strategic fuelbreaks around our  
3 water catchments and into the Otways. Is that your  
4 understanding as well?---That's my understanding, yes.  
5 That's an exemption which allows a public authority to submit a  
6 strategic fuelbreak plan to the secretary of your  
7 department?---That's correct.  
8 Breaks under that exemption can't exceed 40 metres and you need  
9 the secretary's approval?---That's correct.  
10 Pursuant to that plan, as I understand it, you have developed  
11 the breaks which are marked on the map at attachment 2 to  
12 your statement, (DSE.HDD.0052.1897). The lines there  
13 marked in purple and blue, are they the only strategic  
14 fuelbreaks that have been developed under the exemption in  
15 clause 52?---And there are also some down in the Otways.  
16 This is just showing the ones in the water catchments, is  
17 it?---I think the ones in the Otways are marked there as  
18 well.  
19 Okay. That's it, is it? That's Victoria's strategic network  
20 of fuelbreaks?---They are the breaks that we have in place  
21 at the moment, yes.  
22 What happened to the rest of the state?---Well, the catchments  
23 were seen as being an incredibly high priority area and  
24 that's where the program started and the Otways work has  
25 been done as part of - it's part of our area where we are  
26 trying to actually trial new approaches to managing fire  
27 and do the modelling around it, so that's where we have  
28 started there as well.  
29 Mr Fogarty, no-one disputes the value or the need to protect  
30 our water catchments. We need water, but what about  
31 protecting all the towns? Has any thought been given to

1 that?---The idea of the Otways project was several-fold.  
2 It was to actually understand all of the policy and  
3 legislative issues involved in actually dealing with areas  
4 where we had an intermix of people already living in  
5 environments and difficult forest to work in - - -

6 Can I just pause you there, Mr Fogarty. Doesn't your  
7 department control the intermix of all the legislation and  
8 environment? What did you need to understand?---It was  
9 really a case of saying, "Let's put some breaks in this  
10 sort of environment, get an idea of what the policy issues  
11 are, get an idea of what the costs are" and actually link  
12 that in with our Phoenix modelling, our fire management  
13 planning and again come up with reasonable measures of  
14 cost effectiveness.

15 Isn't it the case, and many witnesses over the last several  
16 days have attested to this, that there is an inherent  
17 tension between fire protection values and promoting  
18 biodiversity and maintaining our natural environment? You  
19 agree there is an inherent tension?---Yes, there is an  
20 inherent tension.

21 It is your department, the overall department, which is  
22 responsible for the legislative regime known as clause 52,  
23 the Victoria Planning Provisions?---That's correct.

24 We are talking about one exemption in that. Has your division,  
25 land and fire management division, made any  
26 representations to the department about changing the  
27 balance so that it falls back a little more in favour of  
28 fire prevention over protection of the environment?---From  
29 where we sit, essentially if we go to our biodiversity and  
30 ecosystem services division and discuss a project, then  
31 normally we get to where we need to get to, so - - -

1 Can I just pause you there, Mr Fogarty. You don't always get  
2 to where you need to, do you, because you've just said  
3 this afternoon that your own message about the utility and  
4 the desirable width of firebreaks might not have been  
5 correctly or completely conveyed to Ms Dripps, who works  
6 in the same department?---We are talking about internal  
7 projects on public land where we don't have those sorts of  
8 issues. If we go and say we want to construct breaks in  
9 the Otways, we get support to do that. We just have to go  
10 through the necessary sort of planning steps.

11 When you went through those steps - I didn't quite understand  
12 Ms Dripps' evidence on this. When you built this  
13 strategic network that is up on the screen now, did you  
14 have to provide offsets?---We are providing offsets, yes.  
15 Where are you putting them?---They are being purchased by,  
16 I think it is the Trust For Nature on behalf of the  
17 department.

18 But where is it? If you have taken out the trees to build these  
19 breaks, where are you putting the trees to offset what you  
20 took out?---I'm not aware of that detail. I focus largely  
21 on making sure the construction - the breaks are designed  
22 to a standard and are constructed.

23 Do you know whether you have been given a percentage that you  
24 need to offset? This is hundreds of kilometres of roads,  
25 presumably. Do you have to kilometre-for-kilometre plant  
26 the same number of trees that you have pulled out?---There  
27 is a formula that essentially says that if you're working  
28 in a certain type of vegetation, ecological community of a  
29 certain condition, that you need to offset an equivalent  
30 hectare of habitat.

31 Do you know what your percentage is for this project?---No,

1 I couldn't tell you that off the top of my head.

2 Who would know that? Would that rest with the biodiversity  
3 section or with someone in land and fire?---It is in our  
4 division. I just haven't calculated that. I just don't  
5 have my information at my immediate disposal.

6 Mr Fogarty, I have asked a number of witnesses in the context  
7 of roadside management and the complicated exemptions  
8 under clause 52 this question, so I will put it to you.  
9 The exemptions are quite technical and they overlap here  
10 and there, so what I have asked people who grapple with  
11 these questions is the following: would you see utility in  
12 an additional exemption to the prohibition on removing  
13 native vegetation in a form like this: that you can remove  
14 native vegetation so long as you are doing it for the  
15 purpose of reducing the risk of bushfire and I suggested  
16 perhaps that it also be work that is approved or  
17 recommended by the CFA, and for your purposes we can add  
18 or the land and fire division of DSE. Would that sort of  
19 exemption help you in rolling out the type of project that  
20 we are looking at now?---We haven't found any significant  
21 issues in rolling out the project we have now.

22 Have you submitted any other plans to the secretary, seeking  
23 his approval under that exemption for a plan of a  
24 strategic fuelbreak?---The project we are running at the  
25 moment, as I said, is focusing firstly on Melbourne water  
26 catchments and a pilot in the Otways. I think in terms of  
27 deciding how much broadly you would want to do this, we  
28 would actually need to go back and finalise the evaluation  
29 of the cost effectiveness and actually then look at which  
30 other parts of the state you would need to do it in. So  
31 we haven't submitted a plan because we haven't done that

1 work yet.

2 I want to make sure I understand this. So this is where we are  
3 up to in terms of what is actually being done, but at the  
4 moment the land and fire division has no other plan, even  
5 in draft, to add to this strategic network of  
6 fuelbreaks?--No, the idea was to actually, as I said,  
7 address all of the policy and practical issues of working  
8 in these pre-existing difficult environments.

9 What is difficult; the regime or the fires?---The fact that you  
10 are working in an environment like the Otways where there  
11 are already - suburbs have been developed. There hasn't  
12 been in a lot of instances adequate planning gone into how  
13 that's going to mix with forested environments. So we  
14 have to go through and work out firstly what the costs  
15 would be and then link that in with some of the work that  
16 we are doing in the Phoenix modelling and say, "Well, what  
17 is the benefit of these breaks, where are we best to apply  
18 them" and then go through the process of putting a plan to  
19 the secretary about where to next, and that work still  
20 needs to done.

21 When was the work on these breaks completed?---They are still  
22 in construction.

23 At the moment, from what you say, you are still at the stage of  
24 working out what the benefit of the breaks might be and  
25 whether they should be in any other additional parts of  
26 the state?---In terms of doing a detailed stocktake of  
27 other parts of the state, we haven't done that yet.

28 Mr Fogarty, the science or the utility of firebreaks has been  
29 known for a number of decades, hasn't it? Why is this work  
30 just starting now?---As I said, the issue has been largely  
31 the availability of models such as Phoenix to say what

1 does this contribute to reducing bushfire risk, and now  
2 we've actually got those tools at our disposal, so we  
3 still have to do that work. It is still very much a case  
4 of saying there are a number of strategies; we could be  
5 burning more, you can be doing more public education, you  
6 can be building more breaks, and it is a matter of working  
7 out where the cost benefits lie.

8 Presumably you are keeping good records of how much this costs  
9 so that we will be able to factor that in?---We are.

10 Commissioners, I understand that Ms Judd has at least 15  
11 minutes cross-examination. It is difficult, but of course  
12 it is to everyone's benefit, including the witness's, if  
13 we are able to finish today. We are asking a large  
14 indulgence, but if we are able to do that it is fairer to  
15 Ms Judd, the witness, and better in terms of ensuring the  
16 submissions on this topic are finished.

17 CHAIRMAN: Of course it is, but I'm only concerned for - - -

18 MS JUDD: I did ask for 20 minutes and I will try and keep it  
19 to much less than that.

20 CHAIRMAN: My main concern is with the OH&S problems of a man  
21 who has been going for far too long.

22 MS JUDD: I share that concern, sir, very much so.

23 <CROSS-EXAMINED BY MS JUDD>

24 Mr Fogarty, you received a request yesterday afternoon to give  
25 some evidence today in relation to a number of additional  
26 matters; is that right?---Yes.

27 Did you yourself receive that request close to  
28 4 o'clock?---Yes, late afternoon.

29 In preparing these slides, there has been a little bit of a  
30 criticism of you for including information as to the  
31 percentages of successful defence of a home and so forth.

1 Is it the case that the fact that the request came so late  
2 meant that you were very dependent upon using information  
3 that was already available rather than recreating  
4 information to accommodate the situation as at today's  
5 date?---Yes. I guess I did pick up that there was some  
6 discussion about the effectiveness of breaks in different  
7 circumstances and we did have some previous work that  
8 I thought would assist the Commission, and I do apologise  
9 for having that dated point in there, but that was the  
10 basis of that.

11 But the real point about that slide is that it is necessary to  
12 look at the bigger picture?---It is necessary to have a  
13 suite of solutions and they go from public land through to  
14 private land.

15 Was there anything else in those slides that you wanted to  
16 direct the Commissioners' attention to? There was, for  
17 example, a slide that you wanted to talk about at  
18 (TEN.240.001.0011), if we could bring that up. You have  
19 already talked about effectiveness in relation to  
20 landscape division breaks. Is there anything further you  
21 wanted to add in relation to asset protection  
22 breaks?---Yes. It is a little bit of the thinking behind  
23 why we are looking at that 20 to 40 metres in terms of  
24 strategic breaks close to assets, and it is really about  
25 identifying looking at radiation intensity curves and just  
26 the rate of heat loss over a distance. We've just tried  
27 to make an informed decision about where you get the best  
28 effectiveness from as well, and what you see there along  
29 that top line is the proportion of maximum radiation  
30 intensity over distance and what it suggests is that you  
31 lose about 50 per cent of your heat over the first 20

1 metres, 20 per cent over the next and less than  
2 10 per cent in the next 20, so that's why we focused on  
3 that 20 to 40 metre range. Again, it is really just  
4 looking at where you get your maximum benefit from and  
5 then, when that's coupled in with the ability of those  
6 breaks to support planned burning, you start to get an  
7 integrated package in the right environment.

8 Is that also shown at the next slide, 0012?---Yes. It is sort  
9 of in contrast to then the cost effectiveness of a break  
10 that you would build along a landscape division break, one  
11 that you would build, say, at the middle of the  
12 catchments, to the cost effectiveness, and you see the  
13 dip, if you like, at the bottom of the curve is nowhere  
14 near as sharp and again that's why we are extending those  
15 works out between 20 and 40 metres.

16 COMMISSIONER PASCOE: Can I just point out that I'm having  
17 difficulty reconciling this with the data that we got from  
18 I think it was the Macquarie University Centre for Risk,  
19 I can't fully recall the name of the research institute,  
20 but they were talking more in terms of a 100 metre break  
21 and danger from forest and danger to houses that only  
22 diminished at a fair distance?---Yes, and in part, though,  
23 what happens is the first 100 metres are the most  
24 significant as you move from a forest edge into a suburb,  
25 but house loss of course can go out for 500 to 700 metres,  
26 but the bulk of it happens in that first 100 metres. But  
27 that in part is driven by embers and house-to-house  
28 propagation and fire impacts as well. So, I think the  
29 context is a little bit different there. But if you are  
30 looking at designing new suburbs, then you often do go out  
31 further and it's consistent with the approach - well,

1 similar models are used to underpin the wildfire  
2 management overlay in the New South Wales planning system,  
3 if you're working in new areas. In pre-existing areas,  
4 then it's how do we get that best balance of, one,  
5 enabling us to do the burning and deal with the bulk of  
6 the localised radiation intensity, but we need the  
7 extended burning really to stop the embers because they  
8 are still the driving process in house loss.

9 Is it fair to say that what we have seen from that Macquarie  
10 University research would be the ideal if you are  
11 designing for a new suburb, but this is, if you like, a  
12 compromise because you are dealing with a legacy planning  
13 decision?---That's right, and this is what I consider to  
14 be how you get close to the best compromise, if you like.

15 MS JUDD: Mr Fogarty, could you now turn to that large map that  
16 you were looking at earlier. I don't have a coded  
17 version. This was also a map that you were asked to  
18 prepare for today's purposes; is that correct?---That's  
19 correct.

20 Mr Rush asked you a number of questions about the overlap  
21 between what's called the treatable public land and the  
22 other public land. Where you are burning in areas that  
23 cover both treatable public land and other public land,  
24 how do you accommodate in the burn the fact that you have  
25 got some areas that might be considered ordinarily  
26 untreatable?---More often than not there is a moisture  
27 differential. They are often more productive forest types  
28 on southerly and easterly aspects and quite often fire  
29 will move into the edge of them but not penetrate very  
30 deeply into them. As I said, if we are burning in  
31 conditions where those sorts of environments will burn,

1           then there is potential for very severe fires to run for  
2           10 to 20 to 30 kilometres over the landscape because  
3           things are just so dry.

4   We have talked about treatable and untreatable in your evidence  
5           at an earlier date, but can you just explain why it is  
6           that you are able to some extent treat those areas or  
7           attempt to burn in those areas, whereas you wouldn't be  
8           attempting to do that at other times of the year when  
9           those areas would in fact burn much more easily?---Again,  
10          the issue is that in those areas there is a mix of dry and  
11          wet forest and the regnans forest being an example where  
12          it is very difficult to safely burn under the regnans  
13          forest, but because we are burning in autumn, we are  
14          burning following the first initial rainfall or whatever,  
15          and then the drought codes have dropped to a sufficient  
16          level that we can start to apply fire in those landscapes  
17          a lot more safely.

18   There is also some other very small area of burns in the other  
19          public lands. So if you look, for example, south of  
20          Marysville?---Yes, those little dots down there.

21   Yes. What are those burns, bearing in mind that they don't  
22          overlap with the treatable public land?---They are  
23          silvicultural burns and we touched on silviculture being  
24          the process of regenerating forested environments and they  
25          are burns conducted in logging coupes and in that  
26          instance, by the looks of that, they are probably in ash  
27          timber species, logging coupes.

28   Now, staying with this map and at the risk of upsetting  
29          Commissioner McLeod, but I hope not, I just want you to  
30          explain in a little more detail as to some of the  
31          strategies behind the burns, the planned burns that had

1 taken place around Marysville, very close to Marysville,  
2 and the planned burns that had taken place and were  
3 proposed a little bit further north of Marysville. In  
4 answering that question, can you explain how likely  
5 ignition points impact on that type of strategy?---We  
6 talked, particularly I think with the Phoenix example and  
7 the Otways planning example last week, that we need to  
8 identify those parts of the landscape from where fires are  
9 most likely to start. If you're looking at the northern  
10 reaches of that map, areas north of Marysville and so on,  
11 they are areas where we have public access routes. There  
12 are some public camp grounds and so on and they are also  
13 the drier slopes that fall into those sorts of areas.  
14 It's the same when you are looking at the fall into  
15 Flowerdale, so the idea is to try and pick up those parts  
16 of the landscape where, if a fire starts, you have a  
17 chance of that fire running into a burnt area. Then if  
18 you go out getting closer to Marysville, there is Mount  
19 Gordon and you're starting to build some burning around  
20 Mount Gordon. Those are areas where you can get local  
21 increases in fire behaviour and are more likely to throw  
22 embers onto Marysville, and then there are the areas just  
23 around Marysville which, as we have talked about, we do  
24 acknowledge need to be larger, but we were thinking -  
25 well, I'm pretty sure the thinking in the area was get  
26 this broader landscape treated and get it treated more  
27 comprehensively in a strategic context.

28 In terms of a fire that is going to do the most damage to a  
29 township such as Marysville, is that fire likely to start  
30 immediately outside Marysville or much further out?---No,  
31 again, I think if we go back to the Otways example that we

1 put up, we looked at the fact that the areas that were  
2 likely to cause the maximum house loss were more areas  
3 sort of to the east and north of Deans Marsh, some 20-odd  
4 kilometres away. They are fires that can build up a head  
5 of steam, develop and then move in and it's similar for  
6 this sort of an environment, that a fire close to the town  
7 is less likely to cause significant impact on the town.  
8 It is really one that actually has some room to develop  
9 and generate a high degree of energy.

10 Is that why some of the planned burns around Marysville and in  
11 fact other parts of the state are in fact much further out  
12 from the township?---You can see some layering effects  
13 starting to be built up there as a result of that sort of  
14 thinking.

15 You were here when the expert panel discussed a hypothetical  
16 around Beechworth?---(Witness nods.)

17 And the expert panel referred to a large number of  
18 considerations that they would want taken into account in  
19 terms of working out a planned burn program for that Ovens  
20 district and in fact for the whole state of Victoria. Is  
21 that something that was news to you or is that something  
22 that you were aware of and in fact is taken into account  
23 by DSE already?---I think the process that Dr Tolhurst  
24 went through in the description of how he would go about  
25 it was pretty well consistent with what you can see  
26 represented here.

27 Just finally, in relation to your CV I would just like to point  
28 out a couple of matters. In addition to the education and  
29 your current employment that is set out in the CV, it is  
30 the case that you have experience in Canberra, Brisbane,  
31 Indonesia, Hobart, New Zealand and many other places;

1           that's correct?---That's correct.

2   And how does that help you in terms of your current

3           role?---I think it has given me an understanding of a wide  
4           range of approaches to fire management, but also a very  
5           strong, particularly when you work in an environment such  
6           as South-East Asia, a very strong understanding of the  
7           need to consider not only the science of fire which we  
8           have talked a lot about here, but also the fact that it is  
9           very much a socially-driven issue as well.

10   Thank you, Mr Fogarty.

11   MS DOYLE: I have no further questions for Mr Fogarty. May he  
12           be excused?

13   CHAIRMAN: Yes. Thank you, Mr Fogarty. You are excused.

14   <(THE WITNESS WITHDREW)

15   MS DOYLE: And we thank everyone, especially staff who have had  
16           to stay back, for allowing us to complete the topic. That  
17           concludes the evidence at this stage on roadside  
18           vegetation matters.

19   CHAIRMAN: Yes. We will be resuming at 9.30 on Monday, but in  
20           the annex, on the basis that we will be dealing then with  
21           the fire related death hearings further.

22   ADJOURNED UNTIL MONDAY 1 MARCH 2010 AT 9.30 AM

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