Board of Inquiry into the McCrae landslide

Before: The Chairperson, Ms Renée Enbom KC

County Court of Victoria, 250 William Street, Melbourne, Victoria

Friday, 16 May 2025 at 10.00am

(Day 7)

Mr M. Costello KC with Mr A. Di Stefano and Ms A. Kittikhoun appeared as Counsel Assisting.

Ms K. Evans KC with Ms E. Peppler and Mr C. McDermott appeared on behalf of the State of Victoria.

Ms K. Foley SC with Ms E. Bateman, Mr C. Viney and Dr W. Phillips appeared on behalf of the Mornington Peninsula Shire Council.

Ms D. Siemensma appeared on behalf of South East Water Corporation.

1 2	CHAIRPERSO Mr Costello.
3 4	MR COSTELLO: Good morning, Madam Chair. I call Lara Olsen.
5 6 7	CHAIRPERSON: Is Ms Olsen in the hearing room?
8 9	<lara olsen,="" sworn:<="" td=""></lara>
10 11	<examined by="" costello:<="" mr="" td=""></examined>
12 13 14 15	CHAIRPERSON: Pour yourself a glass of water if you would like one. A. Thank you.
16 17 18	CHAIRPERSON: Mr Costello will now ask you some questions. A. Sure.
19 20 21 22	MR COSTELLO: Could you state your full name for the record, please? A. Lara Olsen.
23 24 25	Q. And your business address?A. It's 101 Wells Street in Frankston.
26 27 28	Q. And your current occupation?A. The managing director of South East Water.
29 30 31 32	Q. Ms Olsen, you have made a witness statement for the purpose of this board of inquiry; is that correct?A. That's correct.
32 33 34 35	Q. Do you have a copy of it there with you?A. I do.
36 37 38 39	 Q. All right. Now, as I understand it, there's two amendments that you would wish to make to that statement? A. Yes, please.
40 41 42 43	 Q. Could you turn, please, to paragraph 72, which is on page, it's described as, 12 of 19 in the top left-hand corner? A. Yes.
44 45 46 47	Q. All right. Can you see there you say, "SEW's lawyers have commissioned an expert report that has not yet been finalised"?

1 2	A.	Yes.
2 3	Q.	Is that one of the paragraphs you wish to amend?
3 4	Q. A.	Yes.
4 5	л.	165.
6	Q.	And do you wish to amend it to delete the words "has
0 7		en finalised" and insert in their place "has been
8		led to the board of inquiry and to the affected
9	reside	
10	A.	Yes.
11	<i>,</i>	
12	Q.	Could I ask you to make that amendment by hand on your
13	copy?	
14	A.	Yes, I've written it down.
15		
16	Q.	You've done that already?
17	Α.	Yes.
18		
19	Q.	Thank you. Did you wish to make the same amendment to
20	parag	raph 73?
21	А.	Yes, please.
22	_	
23	Q.	And have you made that amendment?
24	Α.	I haven't yet. I can.
25	0	
26	Q.	All right. Thank you. Are there any other amendments
27		bu wish to make?
28 29	A. and 24	Yes, please. On question 3 about our contracts on 23
29 30	anu z-	+
31	Q.	Could you just - sorry, question 3, what paragraph
32		er are you speaking of?
33	A.	Sorry, on paragraph 24.
34		
35	Q.	24. This is at the bottom of page 4 or the top of
36	page 5	5?
37	A.	I'm sorry, on my copy it would be the bottom of
38	page 4	4.
39		
40	Q.	Thank you.
41	Α.	It's just to note that some of those contracts have
42	transit	tioned. I can be more specific if that's helpful?
43	0	
44	Q.	What do you mean by "transitioned"?
45 46	A. Sorvio	Yes, so contract that we've got in 24(a) for Detection
46		es, that that one has been finalised, and now that
47	WUR	s being transitioned.

1	
2	Q. So that contract's no longer on foot?
3	A. That's right.
4	
5	Q. And the work that was previously done by Detection
6	Services Pty Ltd is now being done by another entity?
7	A. That's right.
8	
9	Q. That's what you mean by "transitioned"?
10	A. Yes.
10	A. 165.
	• All right And what's the other entity?
12	Q. All right. And what's the other entity?
13	A. So that Service Stream and Downer continue the work on
14	that. They do - and, sorry, I'll explain it and then I'll
15	come back to the words, if that's okay?
16	
17	Q. Please. Yes.
18	A. Service Stream and Downer do the work on our reactive
19	leak detection, and they also have the ability to do the
20	work on our proactive leak detection as well. So they are
21	continuing to do that work, and then a new proactive leak
22	detection only is going with Service Stream.
23	
24	Q. I see. And did you wish to make an amendment to your
25	witness statement to reflect that, or are you happy just to
26	have given that additional evidence?
20	A. I just wanted to note it because it said "to date",
28	•
	which was right on 30 April but not now.
29	• Ver low dension of Themesons, let theme eventhing
30	Q. Yes. I understand. Thank you. Is there anything
31	else that you wish to correct or amend?
32	A. No.
33	
34	Q. All right. Well, with the amendments that you've just
35	made and the additional information in respect of
36	paragraph 24, are you content that the witness statement is
37	true and correct?
38	A. Yes.
39	
40	Q. Could I ask you then to sign it on the final page,
41	please.
42	A. Sure.
43	
43 44	Q. There's provision for a witness but you can ignore
44 45	
	that. I tender that statement with its amendments, and the
46	exhibits referred to therein.
47	

1	CHAI	RPERSON: Yes. The statement of Lara Olsen and the			
2	docur	documents referred to in that statement are exhibit CA25.			
3					
4	EXHI	BIT #CA25 STATEMENT OF LARA OLSEN AND THE DOCUMENTS			
5	REFE	ERRED TO THEREIN			
6					
7	MR C	COSTELLO: Now, Ms Olsen, you've been served with a			
8	notice	e to appear and to attend and give evidence today?			
9	Α.	Yes, I have.			
10					
11	Q.	And you're attending in answer to that notice?			
12	Α.	Yes, I am.			
13					
14	Q.	Thank you. In addition to your statement South East			
15	Wate	r has filed a submission with the board of inquiry; are			
16		ware of that?			
17	Á.	Yes, I am.			
18		,			
19	Q.	Were you involved in the preparation of that			
20		ission?			
21	A.	Yes, the team worked on it with me.			
22					
23	Q.	All right. And you approved it?			
24	A.	Yes, I did.			
25					
26	Q.	Thank you. Now, Ms Olsen, would you mind just			
27	- •	ining to the chair your professional qualifications?			
28	A.	Yes. So I've got an undergraduate degree in chemical			
29		eering and arts, and then I've got a masters of			
30		ess association.			
31	00000				
32	Q.	Did you say "business association"?			
33	A.	Administration, sorry.			
34		······································			
35	Q.	Thank you.			
36	A.	Thank you.			
37					
38	Q.	Did you work as a chemical engineer?			
39	<u>Α</u> .	No, I didn't. I've overseen different infrastructure			
40		cts, but I don't have the sort of in-depth technical			
41	• •	eering that some of the other engineers would have.			
41	Chym				
43	Q.	Thank you. You've been the managing director of South			
43 44	East	Water Corporation since 17 February 2020?			
44 45	A.	That's right.			
45 46	Π.	mato nynt.			
40 47	Q.	Did you work at South East Water before that date?			
וד	હ.	Dia you work at oouth Last water before that date:			

1	A. No, I didn't.
2 3	Q. Had you worked in what I might broadly describe as the
3 4	Q. Had you worked in what I might broadly describe as the water industry before that date?
4 5	A. No, I didn't.
5 6	A. NO, I diditt.
0 7	Q. All right. Thank you. I want to start more generally
8	before we come to the specific events that this board of
9	inquiry is most directly concerned with. South East
10	Water's network extends approximately from Port Melbourne
10	to Portsea?
12	A. That's right, and then out east about 30 kilometres
13	past Pakenham.
14	
15	Q. Thank you. In your witness statement you mention four
16	primary types of infrastructure. The first is stormwater
17	infrastructure, which you say is the responsibility of
18	local councils, not South East Water?
19	A. That's right.
20	U U U U U U U U U U U U U U U U U U U
21	Q. The second is sewage. That's South East Water's
22	responsibility generally?
23	A. That's right.
24	
25	Q. There is a slight limitation that you give in your
26	statement to that, which is where the sewer main is inside
27	a property?
28	A. So depending on for both - staying with throughout the
29 30	moment, depending on where the sewer main is, there's different instances, and we've got some diagrams if that's
30 31	helpful, of where that responsibility transfers from South
32	East Water to the property owner.
33	Last water to the property owner.
34	Q. Generally speaking, there is something called the
35	first inspection opening?
36	A. That's right.
37	
38	Q. And what's that?
39	A. It's sort of a cap, if you like, so it allows for
40	inspections to take place.
41	
42	Q. And South East Water's responsibility in general terms
43	extends to the first inspection opening or one metre inside
44	the property, whichever is the less?
45	A. I was going to say, if it would be okay, Mr Costello,
46 47	there's
41	

4	
1	Q. Yes, of course.
2	A written words, and I just find that helpful, the
3	diagram
4	
5	Q. Yes, of course.
6	A just because it differs between water and sewer and
7	depending if the main is in the property boundary or
8	outside.
9	
10	Q. You're right, it does. It does. If I could have on
11	the screen, please, SEW.0001.0001.0109.
12	A. Thank you.
13	
13	Q. Is this the diagram that you were speaking of?
15	A. Yes, and the text underneath it just talks about where
16	our ownership goes up to, and you can see it sort of
17	depends. So it's up to a metre from the sewer main or the
18	inspection opening, which is that sort of cap that
19	I mentioned, whichever is less. And if an inspection
20	opening doesn't exist, then it's one metre.
21	
22	Q. This is in circumstances where the sewer main's inside
23	the property boundary?
24	A. That's right. And then there's a
25	
26	Q. Would you like me to show the next diagram as well?
27	A. Yes, please.
28	
29	Q. All right. Could we have the next page, please. This
30	is circumstances where
31	A. The sewer main's outside of the boundary, and that's
32	up to one metre from the property boundary or the
33	inspection opening, whichever is less, or one metre if an
34	inspection opening does not exist. There's a further one
35	as well, as shown in the third diagram.
36	
37	Q. All right. So that generally covers sewers. There's
38	a slightly different position for mains water?
39	A. That's correct.
	A. Maisconeci.
40 41	Q. All right. Perhaps if we go to the next page you can
42	explain that by reference to the diagram?
43	A. So this top one is the responsibility for drinking
44	water or recycled water up to two metres inside the
45	property boundary, and where the primary - the second one
46	shows where the primary meter is greater than two metres
47	inside the property boundary, and in that case the water

1	corporation maintains up to the property boundary, and then	
2	the other section as shown in the diagram is maintained by	
2	the property owner.	
3 4		
	Q. Thank you. So far as you understand, where do thes	
5		e
6	rules come from concerning the extent to which South East	
7	Water is responsible or the owner is responsible?	
8	A. Good question. I'm not sure.	
9		
10	Q. All right. Thank you. But it's the general	
11	understanding at least within South East Water?	
12	A. Yes, that's right. Yes.	
13		
14	Q. Did you have this general understanding before you	
15	signed your witness statement, or are these matters you	
16	earned in the course of preparing a witness statement?	
17	A. I would say I had a general understanding but	
18	certainly not specific that I could have drawn those	
19	diagrams.	
20		
21	Q. Thank you. That's three of the four forms of	
22	nfrastructure. The fourth is groundwater infrastructure.	
23	Could you explain generally what you mean by groundwater	
24	nfrastructure?	
25	A. So that would be any infrastructure that relates to	
26	water that emanates from the ground.	
27		
28	Q. In lay terms, does that generally mean bores?	
29	A. Yes.	
30		
31	Q. And	
32	A. I should say I'm not an expert in groundwater, so	
33	······································	
34	Q. And you're not an expert in groundwater in part	
35	because your corporation doesn't have responsibility for	
36	t?	
37	A. That's correct.	
38		
39	Q. That lies with Southern Rural Water?	
40	A. That's correct.	
41		
42	Q. Okay.	
43	A. For the licensing of bores.	
43 44		
44 45	Q. The licensing of bores. So do you consider South Ea	act
45 46	Water to have any responsibility for groundwater?	
40 47	A. No.	
-77		

1	O All right Thenk you. That can some down places
2 3	Q. All right. Thank you. That can come down, please. Can I just seek to understand in general terms again
4	something about the limits of South East Water's
5	responsibility concerning mains and sewer infrastructure.
6	Is South East Water the owner of sewer trenches?
7	A. I'm not sure.
8	
9	Q. That's all right. Do you know if South East Water is
10	responsible for maintaining sewer trenches?
11	A. I'm not sure, but - I'm not sure.
12	
13	Q. That's all right. Are you sure whether or not South
14	East Water is the owner of mains water infrastructure?
15	A. Yes.
16	
17	Q. So you are in fact an asset owner of at least those
18	assets?
19	A. Absolutely.
20	
21	Q. But you don't know whether that is or - the situation
22	for sewer trenches?
23	A. For - do you mean the sewer pipes, sorry, or the
24	trenches around them?
25 26	Q. The trenches.
20 27	A. I'm not sure but I believe we would be.
28	
29	Q. All right. In terms of water leaving South East
30	Water's infrastructure, do you accept at least at a general
31	level that South East Water can be liable for losses caused
32	by water leaving its infrastructure?
33	A. Absolutely.
34	
35	Q. Thank you.
36	A. Where it's our fault, yes.
37	
38	Q. Yes.
39	A. Yes.
40	
41	Q. Now, where South East Water infrastructure fails and
42	causes damage
43	A. Yes.
44 45	O for example to a council read
45 46	Q for example to a council roadA. Yes.
40 47	//. TOS.

1	Q who's responsible for the repair of the road?
2	A. In terms of who actually does the work, that might be
3	different depending on the situation, but in terms of where
3 4	it's our asset has caused a fault then it's our
5	responsibility for that.
6	
7	Q. When you say responsibility
8	A. Unless there's
9	
10	Q. I apologise. Finish your answer, please.
11	A. I was going to say if it's 100 per cent our fault then
12	it's our fault and it's our accountability.
13	
14	Q. Do you attend to the repair of the road, or would the
	······································
15	physical work be organised by the council in that
16	circumstance?
17	A. I couldn't say in all cases what happens. I can
18	imagine that there might be either case in terms of who
19	actually does the work, and then in terms of who pays for
20	the work, if it's our responsibility, then it would be us
21	that should have that accountability for that.
22	
23	Q. It might be that council sends you a bill?
24	A. Again, I don't know the specific circumstances, but
25	certainly if others - we'd certainly have cases where
26	others do work, but it's us that have caused it and then we
27	pay for it.
28	pay for it.
	O la it the same situation if there's domage to private
29	Q. Is it the same situation if there's damage to private
30	property?
31	A. That's right, yes.
32	
33	Q. That the works might be organised by the property
34	owner
35	A. That's right.
36	
37	Q but South East Water might foot the bill?
38	A. That's right.
39	
40	Q. Thank you. And the two questions I've just asked you
41	were concerned with mains water?
42	A. Yes.
42 43	A. 100.
	O But apparally appaking would the same situation apply
44	Q. But generally speaking would the same situation apply
45	if it were sewage infrastructure that had failed?
46	A. Yes, it would.
47	

1 2	Q. A.	Thank you. And does.
3 4 5 6 7	Q. leak d A.	Thank you. You speak in your witness statement about etection testing? Yes.
7 8 9 10 11	Q. that. A.	And I just want to ask some general questions about You speak of a network operations centre? Yes.
12 13 14 15 16		Where is that? It's a group of people that sits in our digital and ormation group. Those people either work in our or can work from home as well.
17 18 19	Q. refere people	So the network operations centre is not so much a nce to a physical place but to a collection of e?
20 21 22	A.	Yes, it's a collection of people. They tend to locate area that has a large number of screens.
23 24 25	Q. A.	I see. And that's at your headquarters, did you say? Yes, that's right.
26 27 28	Q. A.	But some of them work from home? Yes.
29 30 31 32		All right. In paragraph 15 of your statement - and if point in time it would assist you to have your nent put on the screen, Ms Olsen, you only need to
33 34	A.	Thank you.
35 36 37 38		At paragraph 15 of your statement you say that various s may be triggered from time to time indicating a le in performance of SEW's network? Yes.
39 40 41 42	Q. A.	Do you recall saying that? Yes.
43 44 45	Q. might A.	Could you describe some of the types of alarms that be triggered? Yes. So in terms of our network we've got over 600
46 47	pump	stations and eight treatment plants and about 27,000 etres of pipelines in total. And so those alarms

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1 2 3 4 5 6 7	indicate if there's a change in performance. So most days we'd get between 1,500 to 3,000 alarms. That might be that a pump has stopped. That might be that a cabinet has been opened, and that allows us then to understand if we're expecting that cabinet to be opened or if that be a sign of intrusion. And also flow alarms as well.
8 9 10 11 12	 Q. All right. What's a cabinet in this context? A. So it might be a cabinet at one of our assets that might contain, you know, important switchboards or something else.
12 13 14 15 16 17 18	 Q. I see. A. So we have different telemetry to try and trigger when there's a change across our network, and then our network operators look at that to understand if that's expected or not.
19 20 21	Q. Do some of the alarms relate to water pressure?A. Yes. I believe so.
22 23 24	Q. Do any relate directly to leaks?A. Yes, they do in relation to our digital meters.
25 26 27 28	 Q. All right. We'd better just explore that for a minute. Through your network Port Melbourne to Portsea, 30 kilometres west of Pakenham - east of Pakenham? A. East, yes.
29 30 31 32	Q. There are some areas that have digital meters?A. That's correct.
33 34 35 36	 Q. What percentage of the network is on a digital meter at the moment? A. We are just over 100,000. I believe we might be 120,000. But we could get that exact number.
37 38 39 40	 Q. 100,000 to 120,000 premises? A. That's right.
41 42 43 44	Q. And how many premises do you service water - do you provide water to?A. About - just over 800,000.
45 46 47	Q. I see. And was it your evidence that some of the alarms that can trigger in the operations centre relate to leaks in areas where there are digital meters?

1 2	A.	That's right.
2 3	Q.	I see. But not in respect of areas where there are
4	not di	gital meters?
5	Α.	Just to add to that, we've got flow - in terms of
6	rathe	r than alarms that relate to leaks, if you like
7 8	Q.	l see.
o 9	Q. A.	there's flow alarms, and so what that would relate
10		change in flow compared to what's expected.
11		
12	Q.	l see.
13	A.	Sorry, I think, yes
14		
15	Q.	No, that's useful.
16	A.	I should clarify that.
17	~	
18	Q.	Thank you. So there are flow alarms
19 20	A.	Yes.
20	Q.	but those flow alarms are extant only in areas
22		e there are digital meters?
23	A.	No, sorry, I haven't done a good job at this.
24		
25	Q.	No, not at all.
26	Α.	There's sort of two parts if you like. So across our
27		f full network it's not necessary that we can have an
28		that says, "Yes, you've definitely got a leak." But
29		we do have is alarms that measure flow, and then we
30	Q.	In a pipe?
31 32	A.	Or between different parts of the network.
33	Q.	Yes.
34	<u>а</u> . А.	And then you can set an alarm so that if it goes above
35	a cert	ain level an alarm is triggered. So that may not
36		sarily indicate that there is a leak, just that that
37	flow is	s higher than where you set that limit.
38	_	
39	Q	What about if it's lower? Can an alarm be triggered
40		ower flow?
41 42	A.	I would have to - I'm not sure about that. I suppose
42 43	THY TO	cus has been on the high one, but
43 44	Q.	Thank you.
45	Q. A.	Yes, I don't know. And
46		,
47	Q.	Do you know - sorry, you finish your answer.

1 2 3 4 5 6 7 8 9 10 11 12	A. Sorry. Yes, so that's the sort of broader - sorry, that's the sort of broader network which sort of looks at flow and unexpected flow, which is used to see there's a problem or, to your point, that's one way to detect a leak. And then the digital meters that I was referring to, they are able to both measure the flow but also then trigger the same way if there's an unexpected flow, so if the flow is higher than we'd expect, and we also put in a listening device into those meters to go back down our network to try and see if we also might have a network leak. So it allows us to better indicate customer and network leaks.
13 14 15 16 17	 Q. All right. Do you know how significant the change in performance needs to be for a flow alarm to be triggered? A. Again, I don't know. It would most likely differ depending on that part of the network.
18 19 20 21	Q. The tolerances might be fixed at different levels for different parts of the network?A. That's right. But I'm not an expert on that.
22 23 24 25 26 27 28 29	 Q. Are you aware of whether or not there was any flow alarm triggered in the McCrae area in the period November 2024 to 5 January 2025? A. Yes, we looked at that as part of understanding what had happened. So there is a flow alert on 11 December. As mentioned, when there's an alert, someone then looks at it and it doesn't necessarily mean that an action is taken, depending on if they believe at that stage there is an alert.
30 31 32 33 34 35	issue or not. I know we'll come to it later, but that leak grew over time. So one of the issues I suppose about alarms is you can sort of look at it, it might be a particular point in time, but actually it changes over time.
36 37 38 39 40	Q. Thank you. I asked you this already, but I can't quite recall your answer. Do you know if any of the alarms relate to water pressure?A. I'm not 100 per cent sure, sorry.
41 42 43 44 45 46 47	 Q. Thank you. That's fine. I just want to ask you some other questions about the set-up of the infrastructure here. If you know, you can answer; if you don't, you won't. There's some reference in your witness statement to valve and hydrant maintenance? A. Yes.

1 2 3 4 5 6 7 8 9 10 11	 Q. Are you able to explain the relationship that a valve has to a main? A. I could in rough terms, but I don't think I'm probably best to explain it, Mr Costello.
	 Q. All right. What about a hydrant? A. Yes. So we have access points across our network that allows people to access water. Sometimes that's for firefighting purposes. And so that, if you like, is a fitting, as is a valve is a fitting as well.
12 13 14 15	 Q. All right. Does South East Water have a program for the replacement of pipes based on age? A. We've got an asset renewal program, and it's based on a number of different factors. It's based on - age or
16	condition is one part of it; impact, if that pipe or that
17 18	main fails in terms of both customer impact and other impact; and then also another set of sort of risks, so what
10 19	impact; and then also another set of sort of risks, so what would the impact be in terms of if that fails both from
20	customers or more broadly. So for a sewer, for instance,
21	that might also include the environmental impact if that
22	sewer is to fail.
23	
24	Q. I see. There was some evidence given earlier this
25	week that the pipes around the burst site here with which
26	we're concerned were installed in the 1960s. Does that
27	accord with your knowledge?
28	A. Yes, that's my understanding, that in speaking with
29	the team, 1963.
30	
31	Q. And is there anything surprising about that, or is
32	that a perfectly natural lifespan for this type of
33	infrastructure?
34	A. Yes, that is a - in terms of our network age, some of
35	our network assets are older than that. They're more like
36	up to 100 years old. So it ranges across our network.
37	• All right And as there is nothing over right a chart
38	Q. All right. And so there's nothing surprising about
39	the fact that there are pipes from the 1960s in this area?
40	A. No.
41	• All right And there's no particular reason why the
42 42	Q. All right. And there's no particular reason why the
43 44	fact that a pipe was installed in the 1960s might mean that
44 45	that pipe ought be renewed? A. No, not in itself, no.
45 46	
40 47	Q. Thank you. At paragraph 18 of your statement you make
.,	a. mana jour su purugraph to or your olatomont you make

1	some reference to South East Water's leak detection
2	program.
3	A. Yes.
4	
5	Q. I think it's fair to say that there are proactive and
6	reactive measures to leaks?
7	A. That's correct.
8	
9	Q. One of the proactive measures is - I think it's
10	actually somebody physically walking the streets with
10	acoustic detection devices searching for leaks?
12	A. Yes, that's right. So in terms of a leak they make a
13	sound, and some people equate that to water coming into
14	your washing machine or when your toilet cistern fills up;
14	so it's got an acoustic pattern to it. So one of the
	•
16 17	proactive ways we look for leaks is specialists walk our network. There's generally a form of fitting every 10 to
17	
	30 metres, and so what they're able to do is to put their
19	acoustic device into there and to see if they can detect
20	any of those sounds. There's some times or different
21	conditions when that makes it harder or easier to do.
22	
23	Q. And you say in your witness statement that this
24	particular program works on a seven-year frequency?
25	A. That's right.
26	• Meaning that each gives of infrastructure is to be
27	Q. Meaning that each piece of infrastructure is to be
28	tested once every seven years?
29	A. That's right. And I suppose the advantage of the
30	digital meters that I was speaking about then is they are
31	sort of constantly on. So that's a key advantage of those.
32	
33	Q. Yes. All right. We'll come to digital meters. Just
34	in terms of this proactive program, what it in fact means
35	is that there needs to be a leak in the particular street
36	that the person is walking at that point in the seven-year
37	period in order for it to be detected?
38	A. That's right, of the proactive one.
39	• · · ·
40	Q. Yes.
41	A. There's also, as you were speaking about, the reactive
42	one, which is often how we find leaks.
43	
44	Q. Yes. Plainly, that proactive measure alone would be
45	an inadequate form of leak detection?
46	A. That's right. It is a form where we're able to pick
47	some up. There's also, if there's changes in flow, so

1 2 3 4 5 6	there's alarms that we spoke about before, and then there's the reactive one where either our people in the field, you know, our direct team or meter readers that we might have around, or other people, customers or other agencies, will contact us about what they believe to be a leak.			
7 8 9	Q. And they're the reactive measures?A. That's right.			
10 11 12	Q. Just to finish on the proactive measure, do you know how many people that South East Water employs or contracts to do the proactive leak detection?			
13 14	A. I don't, sorry.			
15 16	Q. Thank you. You say at paragraph 19 that, moving to reactive measures now, "South East Water's reactive leak			
17	detection methods include a 24-hour faults and emergency			
18 19 20	contact service and a Snap Send Solve application"? A. Yes.			
21	Q. What's a Snap Send Solve application?			
22	A. It's an application that allows people to take a			
23	photo, so they might see water pooling or water moving,			
24	they can take a photo and send it in as a way of reporting			
25	rather than calling us.			
26	• • • • • • • • • • • • • • • • • • •			
27	Q. I see. And you say that those reports, that is that			
28	come through the phone service or through the app, are			
29	prioritised based on available data?			
30	A. That's right.			
31	And then issued to CEV//a maintenance contractor for a			
32	Q. And then issued to SEW's maintenance contractor for a			
33	field investigation?			
34 25	A. That's right.			
35 36	Q. In terms of the prioritisation based on available			
30 37				
37	data, does that data extend beyond the information in the report from the customer?			
30 39	A. I believe it would. In terms of generally what would			
39 40				
40	happen is a customer might ring up, and then the faults and emergency person makes an assessment in terms of impact on			
42	o , i			
43	safety or impact on number of customers impacted, and so - to understand the number of customers impacted then I don't			
43 44	believe that the person ringing would know that. So			
44	I believe it would. I'm not 100 per cent sure.			
45 46				
47	Q. Thank you. Does the South East Water staff member			
.,				

1 2 3 4	responsible for prioritising take into account the location of the complaint? A. Yes.
4 5 6 7 8	Q. Are you aware of a concept of an erosion management overlay?A. I am.
9 10 11 12	Q. Is that a concept that you've become aware of in the course of this board of inquiry?A. Yes, it is.
12 13 14 15 16 17	 Q. Are you aware of whether or not prioritisation includes whether the complaint area is within an area subject to an erosion management overlay? A. I'm not.
18 19 20 21 22	 Q. At paragraph 20 of your statement you talk about the source of the leak being unknown, electrical conductivity tests being performed? A. Yes.
23 24 25 26	Q. And that's one of the methods that South East Water will use to investigate?A. Yes.
27 28 29 30 31	Q. And you say that if the results of that testing are within the parameters for drinking water SEW deploys a specialist employee?A. (Witness nods).
32 33 34 35 36 37	 Q. And does that necessarily mean that if the results of the testing are not within the parameters for drinking water South East Water does not deploy an employee? A. I'm not sure. I think it would depend on the circumstance.
38 39 40 41 42 43 44 45 46	 Q. All right. What would be the circumstances in which an employee would be deployed notwithstanding an electrical conductivity test indicating that it's not tap water? A. So depending on the circumstance, if there was, you know, a safety issue or if there was very upset customers - it's not like there would definitely not be a specialist sent, and I can see in a number of our records where that test might be outside the electrical conductivity but others are sent. Might it be helpful just to explain that
47	type of - the standard practice for our testing and

1			
1 2	Q. For conductivity?		
3	A. For conductivity.		
4			
5	Q. We'll come back to that.		
6	A. Okay. Sure.		
0 7			
8	Q. But thank you. I'll try and remind you. Who within		
9	the organisation is making the decision about whether to		
10	deploy somebody in these circumstances, for example, where		
11	there has been a conductivity test performed that suggests		
12	the water is not yours?		
13	A. So our water maintenance team oversee those type of		
14	things, and then in different cases they will ask for our		
15	specialist leak detection.		
16			
17	Q. I see. In paragraph 21 you say that SEW reads water		
18	meters in the McCrae landslide area on a quarterly basis?		
19	A. Yes.		
20			
21	Q. That's indicative of the fact that there are not smart		
22	meters in this area?		
23	A. We've just started deploying them since late April.		
24			
25	Q. Yes. Thank you.		
26	A. In McCrae.		
27	O In Ma One of the million of the one have been a will it takes for		
28	Q. In McCrae; thank you. And how long will it take for		
29	the whole of McCrae to have smart meters installed? A. It's scheduled to start on 28 April and scheduled to		
30 31	A. It's scheduled to start on 28 April and scheduled to finish in June.		
32	lilisi in June.		
33	Q. I see. And is it fair to say that that has been		
34	prioritised in more recent times?		
35	A. So it was - McCrae was one of the areas, but certainly		
36	we are focused on doing it now, yes.		
37	the are recalled on doining it notify your		
38	Q. Well, what do you mean when you say "McCrae was one of		
39	the areas"?		
40	A. So it was already scheduled for this year in terms of		
41	being rolled out.		
42	-		
43	Q. But has it been brought forward?		
44	A. I think what - post the landslide we sort of then just		
45	checked to see if customers would want it or would see it		
46	as, you know, a distraction. It was clear that customers		
47	wanted it, so we kept going with our schedule.		

1			
2	Q. I see. What are the sources of water that South East		
3	Water draws upon? Do you have your own reservoirs or?		
4	A. Overall our sort of wholesale supplier is Melbourne		
5	Water, and then they - we take water from them. In some		
6	cases we take it directly from them, in some cases we take		
0 7	it to one of our reservoirs or tanks and then feed our		
8	customers from there.		
9			
10	Q. There's a bit of talk in your statement about tanks.		
10	Could you describe the role of tanks in your system?		
12	A. Yes. So, as mentioned, we get that water from		
12	Melbourne Water, but then we've got tanks throughout our		
13	network that are closer to customers, and that allows us to		
15	have a certain amount of storage, depending on that		
16	customer base that they serve. In other times it might be		
17	that actually that tank doesn't have enough pressure to		
18	serve the customers that it's near, so it's used as a step,		
19	if you like, a storage, and then it feeds up to another		
20	tank that is used to serve customers.		
21			
22	Q. Does rainwater affect tank level?		
23	A. Our tank levels?		
24			
25	Q. Yes.		
26	A. It doesn't if it's a closed tank. It would if it's an		
27	open reservoir, but we have covers across reservoirs.		
28			
29	Q. So do you have any reservoirs that are uncovered?		
30	A. I don't believe so, but I'd have to check.		
31			
32	Q. Okay. What about tanks? They're all covered?		
33	A. Yes, that's right.		
34			
35	Q. All right. Thank you. So in general terms in terms		
36	of inferring that there's a leak in a premises, one way		
37	that that can be - sorry, not in a premises; I withdraw		
38	that. In terms of inferring a leak in an area, it's easier		
39	with smart meters because you've got much more current		
40	information about actual water usage of households; is that		
41	fair?		
42	A. That's right. I could give you an example of		
43			
44	Q. Please.		
45	A. So we have deployed just about 2,000 digital meters		
46	now in that McCrae area. Of that, we've found 150 what we		
47	call continuous flow alerts. So it doesn't necessary mean		

1 2 3 4 5 6 7 8 9 10 11 12 13 14	 it's a leak because customers might be - have that continuous flow, a 24-hour flow for a reason. Of those 150 continuous flow alarms, 20 have got over - usage of over 1,000 litres a day, and one had 30,000 litres a day, and in that case what we do for those large leaks, so those large 20 continuous flow - again, it doesn't necessarily mean a leak; it just means that a customer property is using 1,000 litres or, in that case, 30,000 litres a day - we send them a notification to tell them about it, and then in the McCrae case at the moment, obviously given the sensitivity of water, we're working with them to help them find the leak. Q. All right. So that's in circumstances where there are
15 16	smart meters? A. Yes.
17 18 19 20 21	Q. Where there are not smart meters you're taking meter readings on a quarterly basis?A. Yes.
22 23 24	Q. And just so I can understand the extent of the data available to SEW, you need two inputs to understand whether - at least two inputs to understand whether there's
25 26 27 28	a burst. One is the usage of water by premises within the relevant area, and the other is water in effect through the main or mains into that area; is that generally correct?A. There's different ways to do it. So one way, as you
29 30 31	suggest, is that first way, where you can see the flow, and then a - sort of it's information shared with the customer to work out if they're expecting that flow, I suppose. And
32 33 34	that's one way to detect a leak. The second way is sometimes we get called out because there's water pooling or a customer's concerned about a leak on our side, and
35 36 37	then we're able through those investigations to find a leak on their side in terms of that.
38 39 40 41	Q. I'm just interested in circumstances where there's an increased use of water but that increase is not reflected in the meters at premises. What that tells you in those circumstances is it's not customers using the water?
41 42 43 44	A. Oh, right, yes. Yes, sorry.
44 45 46 47	Q. Now, in terms of ascertaining - in terms of the second piece of the data, which is the increased water usage, how do you obtain that data? Do you have meters on your own mains, for example, to see the amount of water that's flown

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1	through?
2	A. Yes. Sorry, I think I misunderstood.
3	
4	Q. No, not at all.
5	A. Yes. So we've got telemetry at different points
6	across our network that allows us to, I suppose, calculate
7	that difference, and at sort of the full network scale
8	that's what one of the - that's what Mr Hutchings was
9	referring to
10	
11	Q. Yes.
12	A when he sort of said that our overall leak across
13	the network is sort of comparable to others but at sort of
14	10 per cent. It's 9 per cent at the moment, but it is of
15	that nature. I recognise that that sounds like a lot of
16	water, and we do know that water is precious, but it is the
17	nature in terms of a large network.
18	nature in terms of a large network.
19	Q. Yes. In terms of the area that we're concerned with
20	here, that what you describe in your statement as the
20	landslide area
21	A. Yes.
22	A. Tes.
23 24	Q is it right that there are a number of mains that
24 25	Q is it right that there are a number of mains that provide water into that area?
26	A. So I think that it's right to say that, whether it's
20 27	
	mains or - there's water mains that go into that area, and
28	then there's large mains that feed those mains as well.
29	O Thank you So in terms of accortaining the size of
30	Q. Thank you. So in terms of ascertaining the size of
31	the leakage from the water main that Mr Hutchings spoke to,
32	for example, and Mr Bolch, how is it that one comes to a view about the amount of water that's leaked out?
33	
34	A. Yes. Unfortunately, for that - I'm not sure if we
35	could call it the Bayview Road leak?
36	
37	Q. Yes, please.
38	A. We don't have the telemetry that means that we can
39	accurately say what the size of that water lost is, and so
40	the way that we've been looking at it internally is to do
41	data analysis of that water balance that you were alluding
42	to before to look at sort of the water in and then take the
43	water out. The other part about different parts of our
44	network is it differs over time. So in - it's seasonal.
45	In holiday areas, like down the peninsula and some other
46	parts of our network, we tend to see water usage go up over
47	summer generally and then when there's high occupancy as

1 2 3 4	well. And so there's been work - I've just seen the latest version on 8 May - to work out what that is from a data perspective, trying to take all of those different things into account.
5 6 7 8 9 10 11	 Q. When you say "the latest version on 8 May", what are you speaking of? A. So our organisation's been trying to estimate what that volume of that burst is because we can't say for certain what that volume is.
12 13 14 15	Q. All right. And the most up-to-date estimate was computed on 8 May; is that right?A. That's the last version that I've seen, yes.
16 17 18	Q. All right. We'll come back to that.A. Sure.
19 20 21 22	 Q. I just want to continue through these general topics first and then A. Sure. Sorry.
23 24 25 26 27 28 29	 Q. No, no, not at all. It's been very useful, but we'll return to the Bayview Road leak. Just to assist, could I please have Ms Olsen's statement on the screen. It's SEW.0001.0001.0110. Could we go to page 4, please. Just to assist you, Ms Olsen, I'm just going to refer to some of these paragraphs rather than read them to you. A. Sure.
30 31 32 33	 Q. Paragraph 22. Do you see the reference there to undertaking CCTV monitoring A. Yes.
34 35 36 37	Q and inspection in the sewage network?A. Yes.
38 39 40	Q. Now, the CCTV monitoring, that's by permanently placed cameras, is it?A. No. It's generally a device is put in with CCTV.
41 42 43 44	 Q. I see. A. I must admit I've been following those ones. I'm not sure if there's also permanently placed CCTV.
45 46 47	Q. So that means when somebody attends to inspect a piece of infrastructure they might take some video footage?

1	A.	Put a device in, that's correct.		
2 3 4 5 6 7		I see. Can you see in the third line there you speak sets categorised as critical owing to factors such as cale of anticipated customer impact in the event of a age? Yes.		
8				
9	Q.	And assets that are in environmentally sensitive		
10	areas			
11	А.	Yes.		
12 13	Q.	Such as proximity to waterways?		
13	Q. A.	Yes.		
15	73.	105.		
16	Q.	Is that the full extent of matters that would make an		
17	asset	a critical one; that is, scale of anticipated		
18		mer impact and assets in environmentally sensitive		
19	areas			
20	А.	I'm not sure, and stop me, but certainly we have what		
21 22		all like an asset management strategy, and that asset agement strategy oversees how we plan for assets, repair		
22				
23		assets, et cetera, and, obviously since our learnings here, that asset management strategy now includes landslides as		
25		part of a consideration in terms of our asset management		
26	strate	•		
27				
28	Q.	All right. Are you aware of whether there's any		
29	interr	nal definition of "critical assets"?		
30	А.	Yes, there is a process - part of that asset		
31		management strategy looks at what we call critical assets,		
32 33		and that's part of determining how those get treated. As		
33 34		mentioned, it's been updated now. It now also includes vulnerable assets as well.		
35	vunic			
36	Q.	And when was that update undertaken?		
37	А.	In April.		
38				
39	Q.	In April of?		
40	А.	This year.		
41	0	This was an Anglith at an data is all the baston of the		
42 42	Q.	This year. And that update included categorising		
43 44	A.	s in landslide-prone areas; is that right? What it includes is both critical assets and		
44 45		rable assets that should be looked at as part of our		
46		management strategy and a range of risks. We had		
47		ously included bushfires, et cetera, and now that		
	•	-		

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1 2 3 4 5	extends to landslides as well. We're going through the process across our service area to work out where we have landslide susceptibility. Q. Why was that updated in April?
6 7 8 9 10	A. I think from the learnings of this process, in understanding the different risks in terms of customer impact, then that's been a part that we didn't have before that we think is important.
11 12 13 14 15 16	Q. Do you know how within that process landslide-prone areas are identified?A. I believe we're going through that process now in terms of understanding across our service area what's been mapped.
17 18 19 20 21	Q. Is there any current view as to how they are to be identified?A. I'm probably not the best person to ask, but we could come back with that information.
22 23 24	 Q. Do you know if it involves examination of topography? A. I'm sorry, I'm - but we could come back on that.
25 26 27 28 29	Q. All right. Who is the person within South East Water with responsibility for the development of that policy?A. It's in the general manager area that is run by Charlie Littlefair.
30 31 32	Q. Sorry, what was the surname?A. Littlefair.
33 34 35 36 37	Q. And does that area have a general description?A. Yes. So we call that our liveable water solutions, and amongst other areas they're responsible for planning and our capital works.
38 39 40	Q. And so that policy is still in development at the moment?A. No, that strategy has been finalised.
41 42 43 44 45 46 47	 Q. It's been finalised. But the finalisation doesn't include a method for identifying landslide-prone areas? A. That's right. So the finalisation is the strategy level, I suppose, and then there will be a set of policies and processes that come.

1	Q. I see. And is there an expected timeline for the		
2	implementation and finalisation of those policies?		
3	A. I'm not sure.		
4			
5	Q. All right. Are you aware of whether or not South East		
6	Water is obtaining expert advice in relation to the		
7	question of identification of landslide-prone areas?		
8	A. Yes, I know that's being sought - or understand that's		
9	being sought.		
10	And do you know who that's boing cought from?		
11	Q. And do you know who that's being sought from?		
12	A. No, I don't.		
13	Q. Thank you. On leak detection, does South East Water		
14 15	,		
15 16	have its own leak detection personnel or is it all done by contractors?		
10	A. No, we also have our team members that also do leak		
18	detection.		
18			
20	Q. All right. And is there any particular split between		
20	contractors and employees?		
22	A. Sorry, how do you mean?		
23			
23	Q. Do contractors and employees do the same type of work?		
25	A. No, we've got a sort of - there's more contractors or		
26	contract partners than compared to the size of our team.		
27			
28	Q. Okay. So how does one determine whether a contractor		
29	attends at a particular site or an internal employee?		
30	A. I'm not sure.		
31			
32	Q. All right. That's a call made by somebody in what		
33	might be generally called the maintenance department, is		
34	it?		
35	A. That's right.		
36			
37	Q. Okay. If we could go over the page, please. Starting		
38	from paragraph 26, you give some evidence in connection		
39	with the fourth question that was put to you?		
40	A. Yes.		
41			
42	Q. Regarding leak detection. And you speak there about		
43	the network being broken into zones?		
44	A. Yes.		
45			
46	Q. How many zones are there?		
47	A. There's 209, is my understanding.		

1 2 3 4 5 6 7 8 9 10 11 12 13 14	 Q. All right. Are zones only relevant for leak detection purposes or are they relevant for other purposes as well? A. No, my understanding is that the zone is set sort of by topography or about maintaining pressure across particular zones. Q. All right. Some zones are then identified as a high leakage distribution zone? A. Yes, that's right. So particularly our maintenance team is familiar with the areas that are higher in terms of leakage. Q. Do you know how regularly SEW assesses whether a zone
15 16 17	is a high leakage distribution zone? A. No, I don't.
18 19 20 21 22	 Q. All right. Do you know what benchmark is used to determine whether or not a particular area is a high leakage distribution zone? A. No, I don't.
23 24 25 26	Q. In paragraph 27 you speak about abnormal network events?A. Yes.
27 28 29 30	Q. For the supervisory control and data acquisition system?A. M'hmm.
31 32 33 34 35 36 37	 Q. What's an abnormal network event in this context? A. They were the events that I was describing before. So "abnormal" is maybe not the right word that I should have used there, but unexpected or a change event. So they're sort of the 1,500 to 3,000 alarms that I was describing before.
38 39 40	Q. An event that would trigger an alarm?A. Yes, that's right.
41 42 43	Q. On the question of zones, how many did you say there were?A. I believe there's 209.
43 44 45 46 47	 A. I believe there's 209. Q. Is the whole of the McCrae area in a single zone? A. I don't know.

1	Q. Do you know if any of the McCrae area is in a zone			
2	that's characterised as a high leakage distribution zone?			
3	A. I don't know.			
4				
5	Q. Thank you. I might just bring up another exhibit to			
6	your witness statement, please. It's SEW.0001.0001.0108.			
7	Are you familiar with this document, Ms Olsen?			
8	A. Yes, I am.			
9	A. 163, 1 dill.			
9 10	Q. This is exhibit 4 to your witness statement?			
	,			
11	A. Yes.			
12	A When we this desument prepared?			
13	Q. When was this document prepared?			
14	A. I don't know.			
15				
16	Q. Do you know who prepared this document?			
17	A. I don't, no.			
18				
19	Q. Do you know if it was prepared for the purpose of your			
20	witness statement or if it was a document that existed			
21	within South East Water before your witness statement came			
22	into being?			
23	A. No, I actually don't know.			
24				
25	Q. All right. Do you know in what range acoustic leak			
26	detection is effective?			
27	A. I've got an understanding, but I don't know to be			
28	correct, so I'm not going to guess.			
29				
30	Q. Can you give a ballpark, or would you just be			
31	guessing?			
32	A. It would be an understanding - no, I'm going to say			
33	I don't know.			
34				
35	Q. Thank you. Does acoustic leak detection rely upon			
36	having the ability to touch the relevant pipe with an			
37	instrument?			
38	A. In terms of from the digital meter perspective, no.			
39	So that's a sensor that just sits in there, and then			
40	nothing's required, if you like. It goes through. In			
41	terms of our			
41				
42	Q. All right. Let me pause you and then we'll go to the			
43 44				
44 45	next one because that's quite interesting. Is it the case			
45 46	that in a digital meter there is a permanent acoustic leak detection device?			
47	A. Yes.			

1				
2	Q. Embedded within the unit?			
3	A. Yes. That's what I was trying to say, yes.			
4				
5	Q. And when you're speaking about a digital unit here are			
6	you talking about a smart meter in a premises or are you			
0 7	talking about a digital device somewhere else on the South			
8	East Water network?			
9	A. Yes, good question. When I was speaking the digital			
10	meters there, that's on the customer's premise. So where			
10	their normal water meter would - not normal. Where their			
12	analogue water meter would be, we replace that with the			
13	digital one. There's also telemetry across our network.			
14				
15	Q. All right. So the digital device is categorically			
16	different from the more old-fashioned of the two?			
10	A. Yes.			
18	<i>A</i> . 100.			
19	Q. On the more old-fashioned of the two, does it			
20	necessitate an operator being able to touch a relevant pipe			
21	or piece of infrastructure with a device in order to			
22	perform the acoustic leak detection?			
23	A. Again, I've got an understanding, but I'm going to say			
24	I don't know because I couldn't say in 100 per cent of			
25	the categories that that is the case. Maybe - that's my			
26	understanding is probably the best, but I'm not an expert			
27	on this.			
28				
29	Q. Do you know if acoustic leak detection is being			
30	manually performed			
31	A. Yes.			
32				
33	Q that is, in the circumstance where it's not a smart			
34	meter - does it require an assessment by the operator or			
35	does the instrument make the call?			
36	A. It's not sort of possible I suppose to make a call			
37	because sometimes there can be a variety that - in terms of			
38	that instrument there's a variety of factors that impact			
39	why you may be able to hear noise well or not hear noise or			
40	what it might mean.			
41				
42	Q. All right. It's called an acoustic leak detection.			
43	Is it entirely reliant on sound?			
44	A. This acoustic leak detection one relies on sound, but			
45	people when they're doing leak detection can also observe			
46	different factors that might lead to leaks being			
47	discovered.			

1			
2	Q. All right. I'll leave that document on the screen at		
3	the moment, but I'll just remind you of something that you		
4	say in your witness statement at paragraphs 30(a) and (c).		
5	There you point to some of the challenges that can be faced		
6	in detecting a leak?		
0 7	A. Yes.		
8	A. 163.		
	Q. You say in (a) that there can be limited accessibility		
9			
10	and visibility, for example, assets running through rural		
11	areas or vegetation that makes identification of leaks		
12	complex?		
13	A. Yes.		
14			
15	Q. In (b) you talk about areas of significant noise,		
16	assets near railway tracks, for example; and in (c) you		
17	talk about other unforeseen difficulties, for example,		
18	weather conditions?		
19	A. Yes.		
20			
21	Q. Are there methods of overcoming those particular		
22	difficulties so as to get a meaningful reading from an		
23	acoustic leak detection device?		
24	A. My understanding is not always, no.		
25			
26	Q. All right. Thank you. I just want to make sure that		
27	I understand your evidence in respect of the other category		
28	of leak detection, that is the embedded digital form of		
29	leak detection. Are there acoustic leak detection devices		
30	embedded on infrastructure outside of people's homes		
31	outside of smart meters?		
32	A. There's telemetry. I don't know if it's acoustic, so		
33	I'm not sure, but there is		
34			
35	Q. When you say "telemetry" you mean that there are		
36	devices that		
37	A. Measuring devices. I just don't know if sound is what		
38	they use for those ones.		
39			
40	Q. Right. So you don't know whether there is the		
41	equivalent of the type of acoustic leak detection that is		
42	embedded in a smart meter embedded anywhere else on your		
43	network?		
44	A. No, I'm not sure.		
45			
45 46	Q. Thank you. Can we go back to the witness statement,		
40	please, which is SEW.0001.0001.0110, and if we could go to		
-11			

1 2 3 4 5 6	page 6 now, please. Sorry, 7. Ms Olsen, at page 7 you give some evidence in answer to a question that sought a description of SEW's systems and procedures for repairing or otherwise addressing water leaks? A. Yes.
7 8 9 10 11 12	 Q. And at paragraph 33 there you talk about, once a report's been received about a possible leak, an assessment and priority being undertaken based on conditions, including safety; you see that? A. Yes.
13 14 15 16 17	Q. What are the criteria that determine whether or not something ought be prioritised on the basis of safety?A. I don't know those detailed criteria. But we could get them to you.
18 19 20 21 22	Q. Can we seek to understand the process in a little more detail. If a possible leak is reported, there will be this assessment made and somebody within South East Water will determine whether or not a runner ought to be sent out; is that right?
23 24 25 26 27	 A. So there will be a determination made on the priority, and what that means is the - it sets the amount of time that we have on average to get to site. So it indicates that. So, for instance, our priority 1 means that the person going to site on average needs to get there within
28 29 30 31 32 33	an hour, and then it goes down from there. And then depending, in many cases, as you say, what happens is a runner is sent to site to assess the situation and be able to determine what's needed to do that repair or work as effectively as possible.
34 35 36 37 38 39	 Q. And is it the case that the runner might form a view that a field crew is necessary? A. That's right. So the runner might be able to repair it themselves or they might know that different permissions are needed, we're going to need permissions from another utility, we'll need traffic management, et cetera.
40 41 42 43 44 45	 Q. All right. At paragraph 37 you say that in the event the reported and identified issue does not relate to an SEW asset the matter is referred to the relevant party's attention; do you see that? A. Yes.
46 47	Q. How is that determination made?

1 2 3 4 5 6 7	A. Someone will assess that. It might be - again, there will be different circumstances, but it might be the person attends site and the customer might have called up or someone else might have called up and thought it was our asset but it's not our asset, and then that's generally referred to the relevant party.			
8	Q. So in some circumstances that might be readily			
9	apparent?			
10	A. That's right.			
11				
12	Q. For example, the runner might spot a water tank in a			
13	premises with a hole in it?			
14	A. That's right.			
15				
16	Q. Outside that easy and obvious case, it's a question			
17	for the runner to determine?			
18	A. I don't believe that it would just be the runner.			
19	I couldn't say. But someone would aim to determine that,			
20	yes.			
21	,			
22	Q. Well, if not the runner, who?			
23	A. Sometimes the field crew might go before that's			
24	determined. So it could be different stages of the process			
25	that that's determined.			
26				
27	Q. But the runner might determine no field crew is			
28	necessary because it doesn't relate to an SEW asset?			
29	A. I couldn't say, but that seems very plausible to me,			
30	yes.			
31	y = -			
32	Q. Do you know if runners are given training on this			
33	question of determining the source of water leaks?			
34	Á. I don't know.			
35				
36	Q. It would be an important part of their job, wouldn't			
37	it?			
38	A. Again, I'm not sure if it's them, only them, or others			
39	that determine that. But I take your question would apply			
40	to anyone who does determine it.			
41				
42	Q. Do you know if field crews are given particular			
43	training on that question?			
44	A. In terms of determining if it's our asset or not?			
45	-			
46	Q. Yes.			
47	A. We have a standard practice in terms of determining,			

1 2	let's say in this case, a water leak that we go through to determine if it's ours.		
3 4 5 6	Q. Is that standard practice set out in a document?A. Yes, it's a document of our - yes, of our contractor who does this.		
7 8 9	Q. Sorry, what did you say?A. Of our contract partner who does this, yes.		
10 11 12 13	Q. So these are not calls being made by SEW-employed staff; they're being made by SEW contractors?A. I think it would be a mixture of both.		
14 15 16 17	 Q. All right. If it's a mixture of both, doesn't SEW need its own policy as well? A. I'm not sure if we've got one or not. I can come back 		
18 19 20	to you. Q. You don't know?		
21 22	A. I don't know.		
23 24 25	Q. Is one of the methods that a runner or field crew might use to determine whether or not an identified issue relates to an SEW asset undertaking conductivity testing of		
26 27	the water? A. Yes, that's right. That is one part of two.		
28 29 30	Q. What's the other?A. So the standard practice that occurs is our water has		
31 32 33	a electroconductivity, so in South East Water that average is 83. And it's a process then of testing that water to see if the characteristics resemble our water. If it's a		
34 35	different characteristic, much higher, then it's often determined not to be our water. Then there's a second		
36 37 38	process for that. So even if it tests to be mains water, so maybe it's around 83, that doesn't - and it's in the environment, that doesn't necessarily mean that it's a leak		
39 40	from our asset, because there's water in the environment from people watering their garden or car washing or they		
41 42 43	might have a leak, and so a second step of acoustic detection is also done, if you like, and we're generally looking for those two ones to be yes, so that, yes, it		
44 45	resembles our water and, yes, we've got an acoustic issue that signifies it's one of our leaks.		
46 47	Q. All right. Let's make sure we all understand		

1	electrical conductivity testing and its relevance.			
2	Conductivity is a measure of water's capability to pass			
3	electrical flow?			
4	A. That's right.			
5	/ indio nghi			
6	• And it relates to the concentration of ions in the			
0 7	Q. And it relates to the concentration of ions in the			
	water?			
8	A. I'm definitely not an expert on this, although I did			
9	chemical engineering, but that's my high-level			
10	understanding too, yes.			
11				
12	Q. Do you know where the most obvious source of ions in			
13	water would be?			
14	A. No, I do not.			
15				
16	Q. Do you know that dissolved salts are a source of ions			
17	in water?			
18	A. I do not.			
19				
20	Q. Do you know that the more ions that are present in			
21	water the higher the conductivity of the water?			
22	A. Again, I'm not an expert on this.			
23	3 <i>i</i>			
24	Q. Do you know what the accepted measurement of			
25	electrical conductivity in water is?			
26	A. I just know what our average is across our network.			
27	,			
28	Q. Okay. And what did you say that average was?			
29	A. 83.			
30				
31	Q. And do you know how that compares, for example, to			
32	seawater?			
33	A. No, I do not.			
34				
35	Q. Do you know how that compares to the water that might			
36				
	be supplied by other water suppliers in Victoria?			
37	A. No, I do not.			
38	And do you know the renge that water eventied by Couth			
39	Q. And do you know the range that water supplied by South			
40	East Water might be within in terms of electrical			
41	conductivity?			
42	A. I've got an understanding of that. I'm not			
43	100 per cent sure, so			
44				
45	Q. Did I understand your evidence to be that the average			
46	reading for electrical conductivity was about 83?			
47	A. That's correct.			

4		
1		
2		You said 83?
3	A. Y	és.
4	~ F	
5		Do you know what the range is?
6	A. I	believe it to be 50 to 200.
7		
8		hank you.
9		n terms of drinking water. I'm not sure if that's
10	South E	ast Water, but that's my understanding in terms of
11	drinking	water.
12		
13	Q. I	see. And when you say 83 you know 83 is the
14	headline	e number but you're not sure what the unit of
15	measure	ement is?
16	A. N	lo, I'm not.
17		
18	Q. Y	ou don't know, for example, if it's millisiemens or
19	microsie	emens?
20	A. I	do not.
21		
22	Q. A	Il right. Are runners and field crews trained on the
23		electrical conductivity?
24	•	do not know.
25		
26	Q. A	are they trained on doing electrical conductivity
27	testing?	
28	•	m not sure.
29	,	
30	Q. D	Do you have any understanding of how the electrical
31		ivity of water might change by reason of
32		mental factors if the water escapes a pipe?
33		lo, I don't know.
33 34	A. N	NO, I GOITT KHOW.
34 35	Q. A	Il right. Do you have any understanding of the
35 36		- sorry, of the groundwater salinity in the McCrae
30 37	area?	- sorry, of the groundwater samily in the McChae
38	A. N	lo, I don't know.
39	0 5) a year have any understanding of whether ar not
40		Do you have any understanding of whether or not
41	•	vater salinity is relevant to electrical
42	conducti	•
43	A. I	don't know.
44	•	
45		Ve'll come back to it soon, but just so I can
46		and your position and questions that I can
47	reasona	bly expect an answer from you, South East Water,

1 2 3 4	I think I'm right to say, through its solicitors commissioned a report from a company or firm called SMEC? A. Yes.
4 5 6 7	Q. Which I'll call SMEC?A. Yes.
8 9 10	Q. And they produced a report dated 5 May?A. Yes.
11 12 13	Q. Into the McCrae - what they call the McCrae landslip?A. Yes.
14 15 16	Q. Have you read that report?A. I have.
17 18 19 20 21	Q. All right. We'll come back to that report later. In terms of the training of others within your organisation on the question of electroconductivity of water, do you know whether runners or field crew have test equipment on them to test electrical conductivity? Is it part of their
22 23 24 25	ordinary kit? A. I don't know apart from seeing all the records when we go out that that's tested.
26 27 28 29	Q. I see. So far as you understand it, is it the primary method by which an assessment is made about whether the water is South East Water's water or the water has come from another source?
30 31 32 33 34 35 36 37	A. I wouldn't say it's the primary method because there's the different ways that I sort of described. So one is sort of visual observation, the practice of electroconductivity and of the acoustic testing, and then often people - there's also observations from people around. So often there might be residents or others as well that provide additional information around the situation.
38 39 40 41 42 43 44 45 46 47	 Q. And is it important to use more than one tool so as to come to the most accurate conclusion that's possible? A. I think one of our key learnings from this has been to relook at our standard practices in terms of leak detection. Maybe to give you an example, you know, we've got about 2,500 to 3,000 bursts or leaks of mains each year, and the practice that I described before is the practice that we use, and obviously our learnings from this means that we're relooking at what we need to do to try and

1	find a leak like this one that's obviously different to
2	what we've had before.
3	• The fact that you have easid that electropenductivity
4	Q. The fact that you have said that electroconductivity
5	testing is not the primary method but there are in fact
6	four methods - that is visual, electroconductivity,
7	acoustic testing and observation - I'm not sure if
8	observation is different to visual?
9	A. All right. No, it's not, sorry.
10	
11	Q. All right.
12	A. I meant when people go out often there's people around
13	that provide additional information, sorry.
14	
15	Q. I see.
16	A. Maybe feedback or
17	O Yao Thankway That is other sources of
18	Q. Yes. Thank you. That is other sources of
19	information?
20 21	A. That's right.
21	Q. And are those four methods co-equal in determining
22	whether or not the water that's been identified is South
23 24	East Water?
24 25	A. I'm sorry, I don't know.
26	A. Thi sony, ruont know.
20 27	Q. All right. But, in any event, the fact that there are
28	four methods used is indicative of at least the fact that
29	electroconductivity testing in and of itself might not be
30	definitive; do you accept that much?
31	A. I do, because that - it's that first test. So even if
32	it's - you know, says it's similar to our mains then we do
33	another test. We don't then assume it's ours.
34	
35	Q. All right. Are you familiar with the term "task
36	summary"?
37	A. Could you - do you mean in relation - sorry.
38	
39	Q. No, that's all right. It might be used in some
40	various forms. I'll put one on the screen and you can tell
41	me if you would consider that a task summary or you call it
42	something else. SEW.0001.0001.0085.
43	A. Yes.
44	
45	Q. I called it a task summary because that's what it says
46	in the top left-hand corner. But that doesn't mean that's
47	the colloquial name used within South East Water. Do you

1 2	know what this document is? A. Yes.		
3 4	Q. Sorry, I withdraw that.		
5	A. I refer to it as a Montage record, which is our works		
6	management system.		
7	management by storm.		
8	Q. A Montage record?		
9	A. Yes.		
10			
11	Q. Montage is the name of a system?		
12	A. That's right.		
13			
14	Q. And is Montage used for a variety of different aspects		
15	of the business?		
16	A. That's right. It covers different parts of our works		
17	management, if you like, or tasks.		
18	• All vight And one recease that data might be invested		
19 20	Q. All right. And one reason that data might be inputted		
20 21	into Montage is after a runner or field crew have attended a particular site?		
21	A. That's right. So it's also if there's a job		
23	allocated. So that might be the job to actually allocate		
24	the runner.		
25			
26	Q. I see. So looking here, so that we can understand the		
27	way these documents work, there's a task number. That's a		
28	number allocated to it by the system; is it?		
29	A. That's right, and - yes. That's right.		
30			
31	Q. There's then an address, which is here 1 Charlesworth		
32	Street?		
33	A. Yes.		
34			
35	Q. The task work type is planned maintenance repair.		
36	There's then two fields that are not completed, source of		
37 38	work and facility, and then we get to the meat of it, which		
30 39	is the task story, and that starts with a name. Who would that person be?		
40	A. I'm not sure.		
41			
42	Q. Okay. What about the next name in square brackets?		
43	Do you know who that person is?		
44	A. No, I'm not sure.		
45			
46	Q. Okay. And so the first name, which is Kate, there's a		
47	date and then it says "awarded". Do you know what the		

1	"awarded" means in this context?		
2	A. I understand that means that it's been allocated, but		
3	I can see there's a different allocation, so I'm not sure.		
4			
5	Q. Okay. And then there's then a reference to [Name redacted for personal information]. You don't know if that's a person		
6	within your organisation?		
7	A. No, I don't.		
9			
10	Q. Okay. And then that says "allocated" and then it says		
11	"checked by Donna Nguyen"; do you know what that means?		
12	A. No, I don't.		
13	-,		
14	Q. Okay. It then says in square brackets "in transit".		
15	Do you know who's in transit?		
16	A. No, I don't.		
17			
18	Q. Okay. Just before we step through the document, could		
19	you just explain to the chair what this - what is being		
20	recorded in this record in the Montage system?		
21	A. Do you mean what - sorry, could you repeat that?		
22	A. Do you mean what sony, could you repeat that:		
23	Q. What's going on here?		
24	A. Oh, right, yes. So, just in reading the record, it's		
25	a description of the person that's called in or has spoken		
26	to us, and then our actions that we're taking to understand		
27	the matter.		
28			
29	Q. The names of the people in here might be SEW staff but		
30	might equally be contractors?		
31	A. That's right. That's my understanding.		
32			
33	Q. Do your contractors input data directly into the		
34	Montage system?		
35	A. I'm not sure.		
36			
37	Q. Is it important that South East Water have a record of		
38	the work undertaken by its contractors?		
39	A. Yes.		
40			
41	Q. But you don't know how it is that that work is		
42	reported in to South East Water?		
43	A. Personally, no, I'm not sure.		
43			
45	Q. Okay. So you saw the first date there at the top is		
45	28 November 2024?		
40	A. Yes.		
17	,		

1			
2	Q. I should ask you have you seen this document before?		
3	A. Yes, I've - I mean, I don't know if I've gone through		
4	all of them, but I've tried to understand in the lead-up in		
5	terms of the discovery of the leak.		
6			
7	Q. All right. So it says in the first line of the task		
8	story 28/11/2024, and then if you drop down about six		
9	lines, perhaps seven, there's another square box that says		
10	the same date, although the time has moved on a little bit,		
11	and it says "on site". Do you understand that to mean that		
12	an SEW contractor or employee has arrived at the site?		
13	A. That would be my understanding.		
14	, ,		
15	Q. All right. And it says there, "Arrived and the		
16	council are on site. Found water is seeping out of the		
17	middle of the road opposite number 3. The road is very		
18	spongy. Council have filled in a small pothole. I tested		
19	the water a few times and got readings of over 1350, which		
20	is well out of mains range"?		
21	A. M'hmm.		
22			
23	Q. Now, you don't know whether this is an employee or a		
24	contractor, but whoever it is has conducted a test and got		
25	a reading of 1350. Do you know or can you infer what that		
26	test was?		
27	A. I can only assume that it's an EC test, but I don't		
28	know.		
29			
30	Q. You mean electrical conductivity?		
31	A. Sorry, yes.		
32			
33	Q. Then speaks of "I sounded nearby services"; do you		
34	know what that means?		
35	A. Yes. So that is that acoustic leak detection that		
36	I was speaking about before.		
37	r was opeaning about belefe.		
38	Q. Okay. "Picked up no sounds"?		
39	A. M'hmm.		
39 40			
41	Q. "Looks to be a drainage problem from the heavy		
41	downpour from last night. Told the council blokes of my		
43	findings and they have put bollards around the area and		
43	they are going to get a crew to come back tomorrow		
45	morning"; see that?		
46	A. Yes.		
40	<i>/.</i> 100.		

1	Q. So, just so we all understand exactly what this is,				
2	this is somebody on South East Water's behalf attending to				
3	an issue connected with a road where there's water seeping				
4	out of the middle of the road and the road's very spongy.				
5	Can you tell from looking at this document whether or not the - to be neutral about it. I'll call it the South East				
6	the - to be neutral about it, I'll call it the South East				
7	Water representative who's attending is attending because a				
8	local resident has called them out or attending for some				
9	other reason?				
10	A. No, I can't tell.				
11					
12	Q. Okay. But, in any event, this is the type of data				
13	that is logged when an attendance is made by South East				
14	Water in response to something that may be a leak?				
15	A. That's right.				
16					
17	Q. Okay. Have you gone through quite a number of these				
18	documents in connection with the McCrae area in preparation				
19	for giving evidence to this board of inquiry?				
20	A. Yes, I wouldn't say that I'm an expert across each of				
21	them, but I've tried.				
22					
23	Q. Do you accept that there were a number of complaints				
24	made by members of the local community between November				
25	2024 and 31 December 2024?				
26	A. Yes, I do.				
27					
28	Q. I won't ask you to verify this, but you can take it				
29	from me on my count there were at least 10 complaints made				
30	by local residents in that period about leaking water or				
31	damage to property?				
32	A. Yes.				
33					
34	Q. And on my count South East Water conducted at least				
35	eight onsite inspections in the McCrae area before the leak				
36	was located?				
37	A. I don't know the exact number, but I certainly take				
38	your point in terms of, you know, yes, absolutely not what				
39	we would want.				
40	• Without Loove sight angelts in an estimation in the MaCross and				
41	Q. When I say eight onsite inspections in the McCrae area				
42	I mean generally Charlesworth Street, Waller Place and				
43	Coburn Avenue, which is a relatively confined area within				
44	McCrae. As you have read through those task summaries have				
45	you formed any views about South East Water's conduct?				
46	A. As part of understanding this incident, as mentioned,				
47	we're reviewing our full leak process, including the alarms				

1 2 3 4 5 6 7 8 9	that you spoke about and including the process that we generally go through. As I mentioned, we do go to a number of leaks each year and we use that, you know, EC testing and the acoustic detection, and that's obviously worked for other leaks, and in this area clearly it didn't work for us here, and so that's why we're relooking at that process in terms of what to do in a case where you're going back to site multiple times.
10 11 12 13 14	 Q. All right. But have you formed any views about the efficacy of South East Water's conduct in November 2024/December 2024 in connection with these particular callouts? A. Yes, as mentioned, it was our standard practice and it
15 16 17 18 19	previously worked. I think what, you know, is clear is that it's not - we want to find every leak and we want to find it as soon as we can, and that's why we're reviewing that process.
20 21 22 23	 Q. I understand that you're doing a review, but the question that I've now asked you twice A. Sorry.
24 25 26	 Q and I'll ask a third time A. Sorry.
27 28 29 30 31 32 33	 Q is whether you've formed any views about the efficacy of South East Water's conduct in November and December in response to these callouts? A. And please ask me again and I'm trying to answer it. It was standard practice at the time but we recognise it needs to be better.
34 35 36 37 38	Q. You accept it wasn't good enough?A. We want to try - it was our practice at the time, but we want to try and find all leaks we can as soon as we can, and so that's why we're relooking at it.
39 40 41 42 43 44	 Q. Let's just assess it objectively. Do you think that it is defensible that it took somewhere between six and eight weeks to identify the source of the leak? A. It's certainly not what we would want to happen, so that's why we're relooking at it.
44 45 46 47	Q. Ms Olsen, plainly you wouldn't want it to happen.A. No.

1	Q.	Nobody would want it to happen.
2	Α.	Sorry.
3		
4	Q.	I'm asking you in more definitive terms than that.
5	A.	Oh, sorry.
6	7	Ch, Cony.
	\circ	I want to know if it is your ovidence that South Fast
7	Q.	I want to know if it is your evidence that South East
8		's conduct in ascertaining the source of the leak of
9		urst water main was acceptable?
10	Α.	It was our practice at the time and we're relooking at
11	it, and	l, yes, I am sorry that it took us so long.
12		
13	Q.	Do you think that there are particular circumstances
14	conne	ected with this particular leak that meant that six to
15		weeks was a defensible time to have taken to find and
16	-	he leak?
17	A.	I certainly wish it was better.
18	Λ.	reertainity wornt was better.
	\circ	Wall I'm pat as much as part ad with what you wish
19	Q.	Well, I'm not so much concerned with what you wish.
20	A.	Sure.
21	-	
22	Q.	I'm concerned with the views that you as the managing
23	direct	or of the organisation have formed.
24	Α.	Sure.
25		
26	Q.	Have you caused yourself to investigate the
27	circun	nstances by which this leak was ultimately found?
28	A.	Yes, sorry.
29		
30	Q.	Have you read the callout notes
31	A.	Yes, I have.
32	л.	163, 111006.
	0	of the field around
33	Q.	of the field crews?
34	Α.	Yes.
35	•	
36	Q.	Have you seen the circumstances, for example, of
37	the ma	ain that was burst?
38	Α.	Yes, I have.
39		
40	Q.	Taking all of that information into account and any
41	other	information that's been provided to you by your
42	staff -	
43	A.	Yes.
44	<i>,</i>	
44 45	Q.	do you consider that the time it took for this leak
45 46		identified and stopped was acceptable?
47	A.	It was our practice at the time, but, no, I don't

1 2	think that it's okay that it took so long.
3	Q. Do you think that it ought to have been identified and
4 5	stopped at an earlier date? A. We would have if we could have, but we couldn't find
6	it, and we were using the practices that we had at the
7	time.
8	une.
9	Q. What do you consider to be the reasons why it took so
10	long?
11	A. Yes. I think partly because we were using our
12	standard practices that had worked previously. When I read
13	through the records about what's happened you can see that
14	there's a conclusion made using those practices or through
15	discussions where our team members conclude that it's not
16	our asset, that it's groundwater or something else.
17	
18	Q. Could I go to SEW.0001.0001.0076, please. This is
19	another collection of what I refer to as task summaries?
20	A. Yes.
21	
22	Q. You can see that this one is dated 16 December 2024?
23	A. Yes.
24 25	O Convou and that it's concerning 4 Waller Diago
25 26	Q. Can you see that it's concerning 4 Waller Place, McCrae?
26 27	A. Yes.
27 28	A. Tes.
20 29	Q. Do you have a general idea of where that is?
30	A. Yes, I do.
31	
32	Q. Can you see about mid-way through the block of text
33	there's square brackets with "data complete" in it?
34	A. Yes.
35	
36	Q. Can you see there there's a reference to Margaret
37	Campbell calling with another report for this one?
38	A. Yes.
39	
40	Q. She was advised that SEW had already attended
41	A. Yes.
42	
43	Q and there doesn't seem to be any leaks from
44 45	the mains or nearby?
45 46	A. Yes.
46 47	Q. She reports water bubbling up from the ground around
71	

1	number	1 on the corner of Charlesworth Street?
2	A. Y	es.
3		
4	Q. Y	ou see that?
5	A. Y	es, I can.
6		
7	Q. S	o this is 16 December, and there's a further call
8	that's be	en made by Ms Campbell in respect of water
9	bubbling	up from the ground?
10	A. Y	es.
11		
12	Q. A	nd you can see there that it's said that there
13	doesn't s	seem to be any leaks from the main or nearby?
14	A. Y	es.
15		
16	Q. N	low, how would that be determined?
17	A. G	ioing up - again, I can just read this in terms of
18	rather th	an being there, but they do that standard process,
19	if you like	e, in terms of they test it and then they do the
20	sounding	g, and so they've - again, I'd be inferring it, but
21	l believe	that they've probably used those two to - in our
22	standarc	d practice to then suggest it's not our asset.
23		
24		o you accept, though, that at this point in time the
25		Bayview Road was burst?
26	A. Y	es.
27	_	
28	- •	his is 16 December?
29	A. Y	es.
30		
31		here can't be any doubt of the burst by this point in
32	time?	
33	A. N	o, absolutely, yes.
34	~ •	nduur uur tallin ala fana ala sut data asta
35		nd we were talking before about datasets
36	A. Y	es.
37	0	and the chility to acceptain usage and promises?
38		and the ability to ascertain usage and premises?
39 40	A. Y	es.
40 41	Q. F	rom meters?
41		es.
42 43	Α. Γ	es.
43 44	Q. A	II the more accurate and timely if it's a smart
45	meter?	
46		es.
40 47	<i>i</i>	

1 2 3	 Q. And the other source of information being water passing through A. Our telemetry.
4 5 6 7	Q the network in a relevant area?A. Yes.
8 9 10 11 12 13 14 15 16	 Q. And how is it that your telemetry hasn't told you that there's a leak in this area at this point in time? A. Yes. So in terms of that when we've looked into the alarms, there's one on the 11th and then there's one on the 16th, and in terms of that 16th then it gets associated with this job. That's why we're also looking at the telemetry in terms of as part of that process, leak review process.
17 18 19 20 21	 Q. I directed you to the square brackets that says "data complete". Can you see above that there - so it looks as though that's perhaps 17 December 2024 that relates to? A. Yes.
22 23 24 25 26	 Q. And that was relating to a second callout. The first callout is the one above. Do you see it says, "17 December 2024, 6.35 on site"? A. Yes.
27 28 29 30 31 32 33	 Q. "Water seeping from the nature main on the other side of the roadway. Sounded all along and short side. Services sounded nearby valves and fire plug, no noise. Gained access to number 1. Water sitting in front yard tested at 225"? A. Yes.
34 35 36 37 38 39 40 41	 Q. "Meter not turning." Where it says, "Water sitting in front yard tested at 225," if this was to be slightly more grammatical, would you put a full stop after that, or do you think the words "meter not turning" relate to the 225? A. "225 meter not turning raining on site". I think it would be after the 225 maybe, yes, a full stop, comma. The "meter not turning" I think is a separate thing, yes.
42 43 44 45 46 47	Q. Yes. In any event, it moves to a different topic?A. Yes, yes.Q. And so when it's speaking of "water sitting in the front yard tested at 225", do you understand that to be a conductivity test?

1	A.	I don't know, but I'd absolutely assume so.		
2 3	Q.	Is there any other reading that you're aware that is		
4	condu test?	conducted on site other than an electrical conductivity		
5 6	A.	No, not that I'm aware of.		
7	<i>,</i>			
8	Q.	All right. And so is it safe to assume that that's		
9		s being referred to here?		
10 11	A.	I would absolutely assume so, but - I don't know, but,		
12	Timea	n, I think		
13	Q.	I'm not asking you to attest what		
14	Α.	All right. No, yes, I think absolutely, yes.		
15	-			
16	Q.	But only to your understanding as you read it?		
17 18	Α.	Absolutely, yes.		
10	Q.	And was your evidence earlier that you would expect		
20		s water generally, not necessarily within your network,		
21		to be within the range of 80 to 200?		
22	А.	I think ours is 83, and my understanding was at like		
23	50 to	200, but I could have that wrong.		
24 25	Q.	50 to 200?		
25 26	Q. A.	Yes.		
27	73.	100.		
28	Q.	Thank you. So if that's accepted to be the range,		
29		you would accept that 225 is getting pretty close?		
30	Α.	Absolutely. I think that's why we sort of do those		
31		ests, do you know what I mean, because there is		
32 33		times - and I just want to acknowledge, like, we utely missed the Bayview Road leak. It's not that.		
34		terms of the standard tests that we do we sometimes		
35	see w	vater that tests in our range and then they do		
36	listen	ing on the assets to see, though, is it our assets		
37	versu	s just water in the environment.		
38	0	Vee Vee Lunderstand that		
39 40	Q. A.	Yes. Yes, I understand that Yes. Sorry.		
40 41	73.	Too. Cony.		
42	Q.	there's good sense in doing more than one check?		
43	Α.	Sure. Sorry.		
44	~			
45	Q.	But in this particular circumstance the reading at 225		
46 47	WOUIC	be at least a cause for concern, wouldn't it? Yes, I agree so; yes.		
47	д.	100, 1 ayiee 20, yes.		

1			
2	MR COSTELLO: All right. Madam Chair, is that a		
3	convenient time?		
4			
5	CHAIRPERSON: Yes. We'll have a break for 15 minutes.		
6			
7	SHORT ADJOURNMENT		
8	MR COSTELLO: I apologise, Madam Chair.		
9 10	MR COSTELLO. Tapologise, Madam Chair.		
11	CHAIRPERSON: No, I think I'm a bit early.		
12			
13	MR COSTELLO: That's the first time for me to ever be		
14	late. Ms Olsen, I want to try and do this in a fairly		
15	efficient way.		
16	A. Sure.		
17			
18	Q. And, if need be, I'll go to each particular task		
19	summary. But, in general terms, do you accept that from at		
20	least 28 November 2024 there were reports of water seeping		
21	from roads and footpaths in the McCrae area?		
22	A. Yes, I do.		
23			
24	Q. And do you accept that at various times staff or		
25	contractors of South East Water attended so as to		
26	investigate whether or not there was a leak of South East		
27	Water infrastructure?		
28	A. Yes, I do.		
29 30	Q. And do you accept that at various times South East		
30 31	Q. And do you accept that at various times South East Water staff and contractors conducted electrical		
32	conductivity tests and concluded that the water was likely		
33	not South East Water water?		
34	A. And in addition to that that they go out and they do		
35	their soundings as well and those tests that you mentioned,		
36	speak to residents, yes, I do.		
37			
38	Q. And those various investigations caused them to think		
39	that the source of the leak was not your infrastructure?		
40	A. That's correct.		
41			
42	Q. Do you accept that in that period there were reports		
43	of very significant amounts of water running through the		
44	stormwater system?		
45	A. Yes, I do.		
46			
47	Q. Are you aware that on 20 December 2024 Fulton Hogan,		
-			

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1	contractor engaged on behalf of the shire council,
2	contacted South East Water concerning the amount of
3	pressurised water running through the stormwater system?
4	A. I'm not, but I know that - I remember in the records
5	that Fulton Hogan's mentioned, so
6	
7	Q. I see.
8	A. Sorry.
9	
10	Q. Do you accept that the results of electrical
11	conductivity testing were a crucial aspect of South East
12	Water's conclusions up to the point of 30 December that
13	there was no relevant leak from its infrastructure?
14	A. I think it's the - when I read the records and speak
15	to our people, I think it's those three different parts.
16	So it's the EC testing; it's the sounding, which we, you
17	know, often use to find it; and then it's the different
18	conversations that - you'll see in the records that a
19	number of time the residents mentioned the springs or that,
20	you know, in some cases they talk about it's just been
21	going for a short while or it's being going for years. And
22	so I think a combination of all of those.
23	
24	Q. Do you have an idea of the range that the audible leak
25	detection works in?
26	A. No, I don't.
27	
28	Q. Do you have an understanding of whether or not there
29	are any limits to the range that that type of testing works
30	in?
31	A. There would be specialists that would, but, no,
32	I don't, sorry.
33	ruont, sony.
34	Q. Okay. And you haven't enquired before giving evidence
35	today whether or not a leak on Bayview Road, for example,
36	could be picked up by audible detection in Waller Place?
37	A. I haven't enquired into that. I enquired looking to
38	understand where we'd gone with the acoustic detection and
39	if we had gone over the freeway before we found it.
39 40	n we had gone over the neeway before we found it.
	O So are you activitied that the accurate look detection
41	Q. So are you satisfied that the acoustic leak detection
42	that was conducted was sufficient?
43	A. It was standard practice but didn't find this leak
44	until the person went over the freeway.
45	O De veu eccent that it was sufficient?
46	Q. Do you accept that it was sufficient?
47	A. I'm sorry, do you mean sufficient to find the leak?

1	
2	Q. Do you think that the acoustic leak detection testing
3	that was done in November and December in relation to the
4	events in McCrae was sufficient?
5	A. It was our practice at the time, but it's not
6	sufficient - it wasn't sufficient to find the leak.
7	
8	Q. All right. You've said a number of times now that it
9	was "consistent with our practice at the time"?
	•
10	A. Yes.
11	
12	Q. Have you formed any views about whether your practices
13	at the time were adequate?
14	A. They were adequate within the sense that we'd used
15	them previously to - and we do have, you know, leaks like
16	others, but they weren't in terms of this type of situation
17	where the leak itself is a distance from where any water is
18	surfacing and where there's - you know, it's hard to find.
19	It made me realise that there's a range of factors that
20	generally occur with leaks, like people detecting water
21	near the surface, et cetera.
22	
23	Q. Has your organisation made any amendments to its
24	policies concerning electrical conductivity testing as a
25	consequence of the learnings from the McCrae event?
26	A. We're doing a full review in terms of all of that and
27	the alarm - all of the different components, so the alarms,
28	the acoustic testing, the EC testing and what happens if we
29	go out to a site multiple times.
30	• • • • • • • • • • • • • • • • • • •
31	Q. Is that part of the same work that's being done by the
32	general manager that you mentioned before?
33	A. No, that's actually separate.
34	
35	Q. All right. And who's responsible for that work?
36	A. That's Tim Lloyd.
37	,
38	Q. All right. And what's his title?
39	A. He's the general manager of service delivery.
40	
41	Q. And that work includes consideration of the protocols
41	· · · · · · · · · · · · · · · · · · ·
	for electrical conductivity testing, does it?
43	A. Leak detection more broadly including that, yes.
44	
45	Q. All right. Could I have on the screen, please,
46	SEW.0001.0001.0076. I think that's a very long document,
47	but if I could have page 0140. Yes, thank you, that's it.

4				
1		n, have you seen this image before?		
2		A. I can't remember. I have gone through all the		
3	documents, or tried to, of the leak detection reports.			
4				
5	Q. Th	nis is a photograph that was supplied by South East		
6	Water as	part of a bundle of documents in answer to a		
7	notice to	produce?		
8	A. M	hmm.		
9				
10	Q. Ai	nd it is associated with one batch of the task		
11	summari			
12		es. Thank you.		
13	7			
14	Q. Ai	nd, as I understand it, what it is showing here is a		
		· · · · · · · · · · · · · · · · · · ·		
15	•	of water taken by an SEW staff member or contractor		
16	•	urposes of electrical conductivity testing. Do		
17	you acce	•		
18	A. l'n	n not sure, sorry.		
19				
20	Q. 0	kay. Is there any other reason why a South East		
21	Water sta	aff member or contractor would take a sample of		
22	water?			
23	A. Io	don't know.		
24				
25	Q. Yo	ou're not aware of any?		
26		o, I'm not aware of any. Actually, I am aware of		
27		erms of they might be testing it at the site and		
28		es then we take samples to test off site.		
29	oomoum			
30	Q. Tł	nat's right. And so is the offsite testing more		
31		e than the onsite testing?		
32		es, it is. I mean, generally, yes.		
33	A. 10	es, it is. Threah, generally, yes.		
	\circ v	au dan't know, though whathar the analta testing is		
34		ou don't know, though, whether the onsite testing is		
35	•	ing more than electrical conductivity?		
36	A. Io	don't.		
37	• • •			
38		kay. And are you aware of whether or not the		
39		l conductivity of water can be affected by the		
40	circumst	ances in which the water's found?		
41	A. l'n	n not, although it's part of what we're looking to		
42	understa	nd, as part of our broader leak detection process.		
43				
44	Q. Ha	aving a look at the sample there		
45		es.		
46				
47	Q	would it be surprising to you if that sample,		
-		······································		

4	having been tested, some beek as not being water from Couth
1	having been tested, came back as not being water from South
2	East Water?
3	A. No, sorry, I should have answered that in terms of
4	I think that's partly what we're looking to understand in
5	terms of how those results might be changed.
6	
7	Q. When did this work commence in reviewing your policies
8	and procedures?
9	A. We started our broader leak detection work in July
10	2024. That's not specific to this. That's sort of
11	broader, looking at what we could do to reduce leaks across
12	our network. And then there's specific work sort of based
13	on some of the McCrae findings. I'm not sure, but we could
14	come back to you on it.
15	
16	Q. And there's no particular deadline by which that
17	work's to be completed?
18	A. I'm not sure, sorry.
19	A. Think Sure, Sony.
20	Q. Why are you not sure?
21	A. Only because I think there's some information that we
22	probably don't have sort of along the lines of the
23	questions that you were going to in terms of how does the
23	electroconductivity change or not or when it could be a
24 25	useful measure or not in terms of if it interacts with
26	groundwater, et cetera. So I think - I imagine that we
27	might need to do it in phases because we may not have all
28	the information to be able to determine something like
29	this, how we would solve it next time.
30	
31	Q. You're the sole water supplier, domestic water
32	supplier, for the whole of the Mornington Peninsula?
33	A. That's correct. Some people have tanks.
34	
35	Q. Yes. And you accept that there are quite a number of
36	hilly regions in the Mornington Peninsula area?
37	A. Yes, I do
38	
39	Q. Are you aware that there are now six separate erosion
40	management overlays that can apply to areas within the
41	Mornington Peninsula?
42	A. Yes, I am.
43	
44	Q. And you're aware that the hilly area here where the
45	landslides occurred was not the subject of an erosion
46	management overlay?
47	A. Yes, sir.

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1	
2	Q. And so it necessarily follows that, even all of the
3	areas - even amongst all of the areas covered by an erosion
4	management overlay, that is not a complete description of
5	the hilly areas within the Mornington Peninsula?
6	A. Yes, I understand.
7	
8	Q. Are you concerned that your policies and procedures as
9	they currently exist might mean that a leak went undetected
10	for an extended period of times in one of those areas as it
11	did here?
12	A. I think that is exactly why we're reviewing it at this
13	stage and trying to treat leaks in McCrae and other areas
14	as fast as we can.
15	
16	Q. I want to be fair to you, Ms Olsen
17	A. Sure. Sorry.
18	
19	Q so you can respond to this however you wish.
20	A. Sure.
20	A. Oure.
21	Q. From the evidence that you have given today and the
23	evidence that you have provided to this commission in
24	writing, there is not the slightest evidence to suggest
25	that South East Water take any of this as being an urgent
26	matter; is that a fair description of your internal view?
27	A. No, it's not. So in terms of for the McCrae area -
28	and I'm sorry if I've given that impression - we now are
29	doing proactive leak detection every two weeks there. All
30	of the jobs there are priority 1, which is our highest job
31	to go to, and then more broadly we've tried to understand
32	all of our processes that could have included landslide as
33	a risk and that would be better improved because of it, and
34	that's why we're reviewing all of those processes.
	that's why we re reviewing all of those processes.
35 26	O John within the McCree area have been siven a priority
36	Q. Jobs within the McCrae area have been given a priority
37	1. What about jobs in other areas that are not dissimilar
38	geographically and geologically to the McCrae area?
39	A. I'm not sure.
40	
41	Q. Well, isn't that potentially a very large problem for
42	your organisation, Ms Olsen?
43	A. I think it's something that we can take on as we try.
44	Obviously there's different safety concerns across all of
45	our areas. Sometimes it might be hills, sometimes it might
46	be something else in terms of determining the leaks. But
47	I very much take your point.

7 Q. There are obviously competing safety priorities? 8 A. Sure. 9 9 10 Q. And I fully accept that hilly areas are one but not 11 the only one? 12 A. Yes. 13 9 14 Q. But it took two months, perhaps six weeks at best, for 15 this leak to be identified. And I accept that the cause of 16 the McCrae landslide is a matter that is under very serious 17 investigation by this board and that no conclusions have 18 yet been drawn. But, given the sheer volume of water 19 involved here and the propensity for water to induce 20 landslides, isn't this a very, very serious matter for your 21 organisation, not just in the McCrae area but more 22 generally? 23 A. Absolutely it is a serious matter and we have been 4coused on it too. 7 25 0 26 Q. One of the reasons that I said to you that the matter 27 doesn't appear to be given appropriate urgency and perhaps 28 treated with the concern that it ought be is that in your 29 witn	1 2 3 4 5 6	Q. Well, what I want to understand is the extent to which you as the leader of this organisation have actively turned your mind to these questions?A. Absolutely.
10 Q. And I fully accept that hilly areas are one but not 11 the only one? 12 A. Yes. 13 0. 14 Q. But it took two months, perhaps six weeks at best, for 15 this leak to be identified. And I accept that the cause of 16 the McCrae landslide is a matter that is under very serious 17 investigation by this board and that no conclusions have 18 yet been drawn. But, given the sheer volume of water 19 involved here and the propensity for water to induce 20 landslides, isn't this a very, very serious matter for your 21 organisation, not just in the McCrae area but more 22 generally? 23 A. Absolutely it is a serious matter and we have been 24 focused on it too. 25 Q. One of the reasons that I said to you that the matter 26 Q. One of the reasons that I said to you that the matter 27 doesn't appear to be given appropriate urgency and perhaps 28 treated with the concern that it ought be is that in your 29 witness statement you are quite definitive on a number of 30 points. In paragraph 70 of your witness statement, in	7 8	, i o ,i
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 doesn't appear to be given appropriate urgency and perhaps treated with the concern that it ought be is that in your witness statement you are quite definitive on a number of points. In paragraph 70 of your witness statement, in answer to the question - in answer to a question about the effects of any surface water on public infrastructure land or private property, you have answered, "SEW is not aware of any detrimental effects directly caused by the burst water main." Do you recall saying that in your written material? A. Yes, I do. Q. Is that still your evidence? A. No, well, partly in terms of the report that we received, the report you referred to as the SMEC report, we note that in that SMEC report it says that the upwelling in Charlesworth Street and Waller Place may be attributable to South East Water, and so, whilst we will continue to focus on investigating the landslide, we will also investigate that. As I mentioned, we have other bursts and leaks where 	23 24	A. Absolutely it is a serious matter and we have been
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 45 on investigating the landslide, we will also investigate 46 that. As I mentioned, we have other bursts and leaks where 	41 42 43	received, the report you referred to as the SMEC report, we note that in that SMEC report it says that the upwelling in Charlesworth Street and Waller Place may be attributable to
	45	on investigating the landslide, we will also investigate

1 2 3 4 5	doing that. I think up until that report we didn't even have that it may be, and it may be feasible, I recognise we still need to understand if it is, but that is a line of enquiry that we will keep following.
6 7 8 9 10 11 12 13 14 15	 Q. As you sit there now, are you aware of detrimental effects directly caused by the burst water main? A. That are definitely, no, I'm not. I mean, around the area - around the area in terms of the burst. We also then commissioned the report that you referred to because we thought it was clearly for everyone really important to understand if our assets could have contributed to the landslip, and that's why we commissioned that report to understand it.
16 17 18 19	Q. All right. Well, let me just make sure I understand your evidence.A. Sure.
20 21 22 23	Q. Perhaps if you could attempt at least to begin with a yes or no answerA. Sure.
24 25 26 27	Q and if you want to give more evidence after that you can.A. Absolutely.
28 29 30	Q. As you sit there now, are you aware of any detrimental effects directly caused by the burst water main on Bayview Road?
31 32 33	A. No, not directly. We will investigate based on that - given they said it may be feasible.
34 35 36	Q. Putting aside the direct effects of the landslideA. Sure.
37 38 39	Q as you sit there now, is it your evidence that you do not believe that the burst water main on Bayview Road even caused damage to council property?
40 41 42 43 44 45 46	A. That's the area that I meant in terms of the Charlesworth and Waller Place, that the expert report notes that that may be feasible, and so that's what we need to investigate, and, as I mentioned, where we have bursts and where, as we said before, are accountable, then we take accountability for it. So we will keep concentrating on the landslip, but we will also investigate that separately.
47	

1 2 3	Q. You mentioned the SMEC report a number of times?A. Yes.
4 5 6 7	 Q. Actually, before I come to that, could we just move to the first page of that document, please. Commissioner, I tender that document.
8 9 10	CHAIRPERSON: The document on the screen or the SMEC report?
11 12	MR COSTELLO: The document on the screen, please.
13 14 15	CHAIRPERSON: The task summary with document ID SEW.0001.0001.0076 is exhibit CA26.
16	EXHIBIT #CA26 TASK SUMMARY WITH DOCUMENT ID
17	SEW.0001.0001.0076
18 19 20 21	MR COSTELLO: And while I'm there, Madam Chair, might I also tender the task summary that I referred to earlier, which is SEW.0001.0001.0085.
22 23 24	CHAIRPERSON: Yes. That will be part of CA26.
24 25 26 27	EXHIBIT #CA26 (ADDED) TASK SUMMARY WITH DOCUMENT ID SEW.0001.0001.0085.
28 29 30	MR COSTELLO: And the final one to which I will refer that might be put in the same bundle is SEW.0001.0001.0088.
31 32	CHAIRPERSON: Yes, that will be part of the same bundle.
32 33 34 35	EXHIBIT #CA26 (ADDED) TASK SUMMARY WITH DOCUMENT ID SEW.0001.0001.0088.
36 37 38 39 40 41	MR COSTELLO: Thank you. Could I have on the screen, please, SEW.0001.0001.0142, and if I could have page 0082. Can you see the paragraph immediately above the heading "Observations" that commences with reference to figure 37? A. Yes.
42	Q. Could you just read that paragraph to yourself,
43 44	please? A. Sure. Yes. I've read it, Mr Costello.
45	
46 47	Q. This is the report prepared by SMEC?A. Yes.

1	
2	Q. On the instructions of your solicitors?
3	A. That's right.
4	
5	Q. And, having read that paragraph, is there any basis -
6	do you have any basis to conclude other than that it was
7	South East Water - a leak from South East Water's
8	infrastructure that caused the damage to Charlesworth
9	Street and Waller Place at least?
10	A. I take that, and apologise that I sort of read that it
11	may be feasible and we said that we would investigate it.
	, ,
12	So I recognise it says "reasonable to conclude".
13	
14	Q. Is the current state of affairs in respect of the
15	repair works at Charlesworth Street and Waller Place that
16	council effected those repairs and South East Water has not
17	been billed for them?
18	A. That would be my understanding, yes.
	A. That would be my understanding, yes.
19	
20	Q. It would be or it is?
21	A. I don't know.
22	
23	Q. You don't know?
24	A. No.
25	
26	Q. We'll come to the SMEC report in more detail in a
	•
27	moment but, just so I can understand it, this report was
28	commissioned after this board of inquiry was announced by
29	the government; is that correct?
30	A. I think it was 18 February, yes.
31	
32	Q. It was commissioned because this board of inquiry was
33	announced by the government?
34	A. It was - when we first looked up post the landslide
35	and looked at our assets and did the tests in the vicinity
36	of the landslide, we determined that our assets were
37	performing well and that we didn't have any leaks or other
38	causes to believe that they could impact the landslide.
39	But we had customers and others contact us to ask about the
40	Bayview Road leak and if that could have impacted the
41	landslide. And we also had other hypotheses around could
41	
	water either from the Bayview Road leak or other sources of
43	water have travelled down some of our assets and
44	contributed to the landslide. We wanted to know if we
45	could have contributed to the landslide and so that, if we
46	did, we could put that information in and look to address
47	it and provide that information.

.16/05/2025

1		
2	Q.	Was this report commissioned because the board of
3	inquir	y was called?
4	A	No.
5		
6	Q.	Why was this report commissioned by solicitors?
		• •
7	Α.	Partly because my understanding is that we needed a
8		sed report, and we needed a finalised report that we
9	could	take to insurers before we could release it. And my
10	unde	rstanding - I'm not sure if this is right or not - is
11	that th	hat's an important step to get the insurers to tick
12		efore it gets released it needs to be a final report
13		that, so that if South East Water had contributed
14		,
		here would be insurance for it. If we didn't get
15		ck-off from insurance we have funds, and so South
16		Water could pay, but our funds come from the overall
17	custo	mer base, and so that felt like an important step to
18	me.	
19		
20	Q.	Why does any of that relate to solicitors being
21	involv	
22	A.	My understanding was that it needed to be finalised
		-
23		o go to the insurers before it got released, and so
24	that w	vas an important step.
25		
26	Q.	Are you aware of who Mr Hugo Bolton is?
27	Α.	No, I'm not.
28		
29	Q.	He's the technical principal hydrologist at SMEC?
30	A.	Okay.
31	73.	onay.
	Q.	And he is the person who was instructed on hehalf of
32		And he is the person who was instructed on behalf of
33		East Water's solicitors to produce what is described
34		covering letter and in his report as a
35	multi-	disciplinary expert report?
36	Α.	Yes.
37		
38	Q.	And in the letter of instructions from Thomson Geer to
39		blton it says, "In order to advise SEW in preparation
40		e board of inquiry the State government has announced
40 41		
		ne incident, we are instructed to engage you to
42	•	de a quantitative report that assesses the impact
43		's infrastructure is likely to have had on groundwater,"
44	and s	o on?
45	Α.	Yes.
46		
47	Q.	Is that your understanding?
		, ,

1	A. That it's for the board of inquiry? Sorry.
2 3	Q. That the report was commissioned in order to advise
4	SEW in preparation for the board of inquiry?
4 5	A. My understanding is that we wanted to understand if we
5 6	had contributed to the landslip. We've had that discussion
0 7	internally as well, that if we have contributed in any way
8	that we will own it and acknowledge it, and, you know, I'm
9	sure that we were going to do this report. We kept hoping
10	it would be earlier, but it takes time. But I'm sure it's
11	in relation to the board of inquiry too.
12	• I called you hat are what has this report was
13	Q. I asked you before whether this report was
14	commissioned by reason of the board of inquiry being
15	called, and I'd understood your evidence to be no. Are you
16	correct or is Thomson Geer correct? Because the two
17	statements appear at least to me to be contradictory.
18	A. Sure. I understand what you're saying. I believe we
19	would have done this report to understand if we had
20	contributed anyway. We wanted to understand that.
21	I understand what you're saying, that this report - that
22	the instructions for this report were for the board of
23	inquiry.
24	
25	Q. And so is it the case that before this report was
26	commissioned on 18 February no report had been sought in
27	relation to what might be generally described as the
28	landslide?
29	A. We hadn't sought a report. Post the hypothesis that
30	we started hearing from customers and others, we started to
31	look into it ourselves. But we don't have - you know,
32	we've got people that know sewers and waters, but we don't
33	have people that have got geotechnical or hydrology
34	experience or expertise, and so we couldn't - don't know
35	the answers internally.
36	
37	Q. All right. Let's get into the Bayview Road burst
38	itself.
39	A. Sure.
40	
41	Q. Before that, I ought tender that report.
42	
43	CHAIRPERSON: Yes. The SMEC report dated 5 May 2025 is
44	exhibit CA27.
45	
46	EXHIBIT #CA27 SMEC REPORT DATED 5 MAY 2025.
47	

1 2 3 4 5	MR COSTELLO: Your evidence is that South East Water first became aware of the burst water main at approximately 1 pm on 30 December?A. That's right.
5 6 7 8	Q. Do you know who identified the burst water main?A. It was one of our team members, Garry.
9 10 11	Q. What's his role in the organisation?A. I believe he's part of our water maintenance team.
12 13 14 15 16 17	 Q. All right. You say in paragraph 42 of your witness statement that the discovering employee, who we now know to be Garry, attended Waller Place to assist a contractor in relation to a report of a possible leak? A. Yes.
18 19 20 21 22	 Q. It then says, "The discovering employee heard and then observed the movement of water in the council's stormwater system at Waller Place"? A. Yes.
23 24 25 26	Q. There's then a reference in 43 to the discovering employee reviewing water tank data?A. Yes.
27 28 29 30 31 32	 Q. What is the water tank data? A. So one of the things that Garry looks at is to try and understand if there's a difference between flow in December 23 and December 24 as a way of trying to ascertain if there is another sign of a leak.
33 34 35 36 37 38	 Q. It was the evidence of Mr Cooper to this inquiry that he told South East Water personnel on 24 December that they needed to check the other side of the freeway; are you aware of that? A. I am, yes.
39 40 41 42 43 44 45 46 47	 Q. Are you aware of whether there is any internal record that confirms that account? A. I don't know if it's a different - a question of dates, and I'm not saying that Mr Cooper is wrong, but there is a record that goes to 21 December which notes a conversation, I believe that's with Brett, and then we look on the other side of the freeway, but unfortunately don't find the leak at that stage.

1 2	Q. Did not find the leak at that stage?A. No, we did not.
3 4 5 6 7 8	 Q. Mr Bolch gave evidence about a class 12 150mm UPVC pipe that was marked on the map as installed on 1 January 1963. Did you hear that evidence? A. Yes, I did.
9 10 11 12	 Q. Is that accurate? A. I'm not sure about the first part, but certainly that it's PVC and it's 1963 in terms of the installation.
12 13 14 15 16	 Q. All right. In your company's submission to the board of inquiry A. Yes.
17 18 19 20	 Q something is said about the identification of the Bayview Road leak. I'll take you to it. A. Sure.
21 22 23 24	 Q. It's SEW.0001.0001.0111. I asked you at the start of your evidence whether or not you had approved this document, and your evidence was yes; is that correct? A. Yes, it was.
25 26 27 28 29	 Q. All right. If we could go to page 10 of the document, please. Do you see here under the heading "How the Bayview Road water main burst was identified"? A. Yes.
30 31 32 33 34 35 36	 Q. Before we get to the content, just so I can understand the internal processes and thinking of South East Water, why is this information set out in the form of a submission rather than in the form of a witness statement? A. We thought in terms of the witness statement it was answers to particular questions and that there might be been deviated.
37 38 39 40 41 42	broader information that would be useful.Q. Thank you. And are you aware of how this document was prepared?A. Yes, the team worked on it.
43 44 45 46 47	 Q. Who's the principal author of this document, or is it not fair to describe a single person as being the principal author? A. I was - so there was multiple people that worked on it.

1			
2	Q. Are all of those people employees of South East Water?		
3	A. Yes, they are.		
4			
5	Q. Okay. So you say that this - "the leak in this main		
6	was not readily detectible"; do you see that?		
7	A. Yes.		
8			
9	Q. And you then give some general commentary about		
10	circumstances in which leaks and bursts might be more		
11	difficult to detect?		
12	A. Yes.		
13	A. 163.		
13	Q. And then in the fourth paragraph you say, "The Bayview		
15	Road water main burst was not readily detectible owing to		
16	its location in bushland, distance approximately 150 metres		
17	from the area in Waller Place where water issues were		
18	initially reported, being on the other side of the freeway,		
19	and concurrent issues of surfacing groundwater." I just		
20	want to address each of those.		
21	A. Sure.		
22			
23	Q. The first is the location of the burst water main. If		
24	that could be put down, please, and we could see the		
25	photograph at the top. This is figure 3, which is said to		
26	be a photo of the site of the Bayview Road burst located in		
27	bushland?		
28	A. Yes.		
29			
30	Q. Can you see that?		
31	A. Yes, I can.		
32			
	O la that to be clear is that a photograph of poor		
33	Q. Is that - to be clear, is that a photograph of near		
34	the burst site or is that where the main is?		
35	A. I don't know.		
36			
37	Q. All right. But you do know that this is in the		
38	general vicinity of the water main?		
39	A. Yes, that's my understanding, yes.		
40			
41	Q. And you know that there's no identification above		
42	ground that identifies the site of the water main?		
43	A. Sorry, could you repeat that?		
44			
45	Q. Do you know that there was no identification -		
46	aboveground identification that identified the site of		
47	the water main?		

1 2	A. Do you mean like is there a fence or something that could have	
3		
4	Q. Is there any way of somebody immediately ascertaining	
5	that there was a water main beneath the land there?	
6	A. Our people know where our water mains are.	
7		
8	Q. Is there any way that your people can identify that a	
9	water main is above ground without reference - sorry, is	
10	below ground without reference to a map, for example?	
10	A. There's different posts at different times, yes, in	
	terms of that.	
12		
13	O Okey And do you know whathan there was a past here?	
14	Q. Okay. And do you know whether there was a post here?	
15	A. I actually don't know, no.	
16		
17	Q. You have not enquired about that matter?	
18	A. No, sorry.	
19		
20	Q. All right. Do you accept, though, that this water	
21	main was located in an area of fairly dense bushland?	
22	A. Yes.	
23		
24	Q. Scrub?	
25	A. Yes, I visited. That's how I would describe it. It's	
26	at the - like, you - it's at the edge of the scrub, but	
27	yes.	
28		
29	Q. And do you have internal policies and procedures about	
30	the maintenance of areas above mains?	
31	A. You mean in terms of vegetation clearing, all those	
32	type of things?	
33		
34	Q. Yes.	
35	A. I'm not sure.	
36		
37	Q. Are you aware whether or not South East Water has	
38	rights, for example, by way of an easement to access land	
39	where its mains are located?	
40	A. I'm not sure, but I expect so.	
40		
41	Q. Do you understand - do you know, rather, who the owner	
42 43	of the land was where this main was located?	
43 44	A. I'm not sure.	
45 46	O You know though that the contractors and amplauses	
46	Q. You know, though, that the contractors and employees	
47	that arrived on site were not able to gain immediate access	

1 2	to the water main? A. Yes.
3	
4	Q. And they weren't able to obtain that access by reason
5	of the bushland and scrub?
6	A. That's right, and the fence.
7	
8	Q. And the fence. But you don't know whether or not you
9	have internal policies about access to water mains, for
10	example?
10	A. No, sorry, I don't.
12	A. No, sorry, raont.
12	Q. I'll come back to that document in a moment, but
14	I want to show you another photograph which is at
14	SEW.0001.0001.0076, and it's at page 0191, which I think is
16	the last - might be the second last. This is the location
17	of the water main; are you aware of that?
18 19	A. It looks like it, yes.
	Q. Yes. Have you seen this photograph before?
20 21	Q. Yes. Have you seen this photograph before?A. I'm sure I probably have if it's in that file, yes.
22	A. Thi sule i probably have in its in that hie, yes.
22	Q. Okay. On 30 December at 1.58 pm someone from South
24	East Water, that may have been Garry, arrived on site to
25	find the burst 150mm UPVC main and reported that the valve
26	was very stiff, he used a heavy key wrench to turn, it was
27	very stiff and he didn't want to snap the top, may need to
28	extend the shutoff, there's a gas transmission area in the
29	area and it's about 30 metres away from the excavation.
30	Are you aware of that?
31	A. I've read that report, yes.
32	O Okov That moant that an 20 December the look
33	Q. Okay. That meant that on 30 December the leak
34	couldn't be repaired or stopped; is that your
35	understanding?
36	A. Yes. So they attempted to put a valve in and that
37	they were unsuccessful at that time.
38	O That's right And putting a value in was and mathed
39	Q. That's right. And putting a valve in was one method
40	of stopping the flow?
41	A. Stopping it faster, yes.
42	• And the statisticity of the
43	Q. And that didn't work?
44	A. No.
45	O So they had to some head the next day?
46	Q. So they had to come back the next day?
47	A. Yes.

1			
2	Q. And they had to dig out the main?		
3	A. Yes.		
4			
5	Q. Are you aware of the fact that they needed to remove		
6	vegetation to get access to the main?		
7	A. Yes, I am.		
8			
9	Q. And you're aware that the fence created a further		
10	difficulty?		
10	A. Yes, I am.		
12			
	And having ravioused the task summaries in relation to		
13	Q. And having reviewed the task summaries in relation to		
14	the callout to the water main, and knowing the significant		
15	difficulties that were involved in managing to get access		
16	to the main and then shut off the water, have you had any		
17	reflection on the practices, policies and procedures of		
18	South East Water in connection with access to mains?		
19	A. In terms of that procedure we have steps to contact		
20	other utilities if we need to or get permission from other		
21	entities. I believe we got permission from council so that		
22	we could remove those trees and keep going. But in terms		
23	of that - sorry, your question, have I had - have I thought		
24	about the sort of vegetation or clearing, no, I have not.		
25	5		
26	Q. Are you aware of whether there are other mains within		
27	your network that would be in not dissimilar locations to		
28	this in the sense of the terrain?		
29	A. Sorry, could you repeat the question?		
30			
31	Q. Is this - I'll put it in a different way.		
32 33	A. Yes, thank you.		
	Q. Is this so unusual as to be a one-off, the location of		
34			
35	this main?		
36	A. No, it wouldn't be.		
37			
38	Q. There would be other mains in your network that are in		
39	positions that are difficult to access?		
40	A. Mains that have vegetation around them or on them,		
41	yes.		
42			
43	Q. And the presence of vegetation around a main		
44	necessarily will cause a delay in accessing a main, won't		
45	it?		
46	A. There could be other reasons, but that would be one,		
47	yes.		

1 2	Q.	It's one of the reasons that might	be?	
3	A.	That's right, yes.	50.	
4	,			
5	Q.	A fence might be another reason?		
6	Α.	That's right.		
7		-		
8	Q.	It being in an isolated spot might	be another reason?	
9	Α.	That's correct.		
10				
11	Q.	Are there others?		
12	Α.	It might be on - that to access it	there's safety	
13		s or, you know, different things need to be closed		
14	down	or someone's built over different areas, et cetera	a.	
15	•			
16	Q.	All right. And are you aware of whether there a		
17		ctions, for example, in construction occurring ove	r	
18	mains			
19	A.	I don't know the details, but I understand that th	iere	
20 21	gener	ally is, yes		
21	Q.	If we could go back to the submission documer	ht	
22		•		
23	please, which is SEW.0001.0001.0111, and if we could go to page 11. You set out in 6.3 some information about how the			
24 25		was repaired?		
26	A.	Yes.		
20	73.	103.		
28	Q.	You say the repair was complex?		
29	A.	Yes.		
30				
31	Q.	It was complex for a variety of reasons, includir	ng the	
32	prese	nce of a gas main nearby?	-	
33	A.	That's right.		
34				
35	Q.	Is that a relatively common thing?		
36	А.	That there's other utilities? There can be, yes.		
37				
38	Q.	And does that necessitate obtaining permission	n from	
39		her utility before you dig?		
40	A	Generally, if there's another utility, then that's		
41	requir	red, yes.		
42	0	All visited Constructions in the cityte builds a cityte		
43	Q.	All right. Can you see in the sixth bullet point it		
44 45		"Deemed the site unsafe to complete job owing the stress that risked causing collapse and causing the		
45 46	large trees that risked causing collapse and causing the			
46 47	A.	- "we closed the area with safety markings"? Yes, I can.		
<i>чі</i>	Π.	100, 10an.		

1	• An a view service of the off the state of the sector sector is		
2	Q. Are you aware of whether the state of those trees had		
3	been affected by the leak?		
4	A. No, I'm not.		
5			
6	Q. Okay. And then a few bullet points down, "approval		
7	was necessary from the council to remove fencing and		
8	trees"; do you see that?		
9	A. Yes.		
10			
11	Q. And once all of that was done there was then access to		
12	the main and there was the identification of a small split?		
13	A. Yes.		
14			
15	Q. Approximately 100mm long?		
16	A. That's right.		
17			
18	Q. And so that pipe, it says, was repaired. It was		
19	repaired by it being - a section of the pipe being		
20	replaced?		
21	A. That's right.		
22	-		
23	Q. And does the section of the pipe that was removed from		
24	that main still exist?		
25	A. I don't know.		
26			
27	Q. Where does the information about the size of the split		
28	in that bullet point come from?		
29	A. My understanding is that comes from the report.		
30			
31	Q. Which report?		
32	A. I believe either the task summary or the description		
33	from the employee.		
34			
35	Q. Thank you. The amount of water that leaked from the		
36	burst main is, as I understand it, a matter that South East		
37	Water is still considering?		
38	A. We've got, I suppose, a point in time and, yes, the		
39	last one that I saw was 8 May.		
40			
41	Q. All right. We'll come to 8 May.		
42	A. Sure.		
43			
44	Q. But did you hear the evidence of Mr John Bolch earlier		
45	in the week?		
46	A. Not all of it, but some parts, yes.		
47			

1 2 3	Q. All right. In one part of it he gave evidence of a calculation that he had done where he thought that a 25mm opening of a pipe of that size could have leaked up to		
4	80 million litres of water over two months. Did you hear		
5	that evidence?		
6	A. I did hear that bit, yes.		
7			
8	Q. And have you had any enquiries made about Mr Bolch's		
9	method of calculation?		
10	A. Yes.		
11			
12	Q. All right. And what's your view about that		
13	calculation?		
14	A. I should say my view is based on conversations with		
15	people who have got a more detailed understanding than me,		
16	is that in terms of the split that's one part of		
17	information that goes to the leak, but it also sort of		
18	depends - pressure changes over time, and the size of that		
19	split is likely to have changed over time.		
20			
21	Q. That's right. So although there is reference to a		
22	split, what you describe in paragraph 55 of your witness		
23	statement as a small split		
24	A. Yes.		
25			
26	Q of 100mm long, that might not have been the size of		
27	the split for the entire time?		
28	A. That's right.		
29			
30	Q. And why do you describe a 100mm split as a small		
31	split?		
32	A. Because other times that there's a structural failure		
33	it might be larger.		
34			
35	Q. How do you know that?		
36	A. That's my understanding, in terms of people that know		
37	this area better than me, of how they describe it.		
38			
39	Q. You asked somebody whether or not a 100mm split was a		
40	small split or a large split?		
41	A. No, I didn't.		
42			
43	Q. You just gave that descriptor yourself, did you?		
44	A. I didn't write the word "small".		
45			
46	Q. Well, let's just be clear about something, Ms Olsen.		
47	A. Sorry.		

4			
1	O Very signed a with see statement only hours and		
2	Q. You signed a witness statement only hours ago		
3	A. Sure, no, absolutely, I take accountability for		
4	writing the word "small".		
5			
6	Q. So "small" is your description by reason of signing		
7	t, but you didn't choose that word?		
8	A. No. I take accountability for that word. I just		
9			
10	Q. All right. Who chose that word?		
11	A. Well, I - I'm not sure who actually wrote it, but		
12	take accountability for that word.		
13			
14	Q. Someone prepared this statement for you?		
15	A. That's right.		
16			
17	Q. And that word, that descriptor was used, and you		
18	adopted it?		
19	A. That's right.		
20			
21	Q. And, as you sit there now, can you say to the chair		
22	definitively that that's an accurate description of a		
23	100mm-long split?		
24	A. I suppose it's relative to how people think when		
25	there's a burst, how big they think the split will be.		
26	It's more trying to say it's not, you know, a huge, gaping		
27	nole. It's a - yes, this size.		
28	, , , , , , , , , , , , , , , , , , ,		
29	Q. Well, it's a 150mm diameter pipe, isn't it?		
30	A. Yes.		
31			
32	Q. So the size of the split's got to be viewed in the		
33	context of the pipe, doesn't it?		
34	A. I take your point.		
35			
36	Q. And my question to you is in terms of splits in pipes		
37	do you know that a 100mm split is in fact a small split		
38	relative to other splits that occur?		
39	A. Good point. No, I do not.		
40			
41	Q. Thank you. Now, at paragraph 64 of your witness		
41	statement		
42	A. Yes.		
43 44	ר. เ เ เ เ เ เ เ เ เ เ เ เ เ เ เ เ เ เ เ		
44 45	Q you state that, "South East Water estimates		
46 47	approximately 37 megalitres of water escaped from the burst water main between November until its isolation on		
47			

1	31 December 2024"?		
2	A. Yes.		
3			
4	Q. How was that calculated?		
5	A. So that was looking at the water balances. So we		
6	don't have telemetry that would tell us exactly what it is.		
0 7	•		
	So it's trying to look at the water in versus the water		
8	out, and then looking over a number of years to take out		
9	other seasonal factors, et cetera, and then a range is come		
10	up with. That's partly because we also don't and can't		
11	know the exact date that it started.		
12			
13	Q. You say in this witness statement that between		
14	November and its isolation on 31 December. When in		
15	November did you use as the date for the calculation?		
16	A. Yes, so there is different ranges. The sort of the		
17	first range that people look at is believed to be		
18	1 November, and I appreciate that there will be people that		
19	are more expert than I in explaining this, but what we sort		
20	of tried to do is to get it where it's like a zero, where		
21	it zeros out, and that's sort of the 1 November time, or		
22	you could say that - do another one and say that it's		
23	August.		
24			
25	Q. So in paragraph 64 of your witness statement, where it		
26	says, "SEW estimates approximately 37 megalitres of water		
20 27	escaped from the burst water main between November 2024 and		
28	its isolation on 31 December 2024," would that statement		
29	still be true if the number 1 was put in front of November?		
	•		
30	A. Sorry, could you repeat that?		
31	O Correct latima mut it an the aproan for your		
32	Q. Sorry, let me put it on the screen for you.		
33	A. Sure.		
34			
35	Q. SEW.0001.0001.0110, page 11, paragraph 64. Sorry, it		
36	might be - yes, there. Thank you.		
37	A. Yes, it is. So that current range still based on the		
38	work from 1 November is currently between 36 and 40. So,		
39	you know, approximately 37.		
40			
41	Q. Right. So that calculation there was done between		
42	1 November and 31 December, was it?		
43	A. That's estimating that time period, yes.		
44			
45	Q. Yes.		
46	A. Yes.		
47			

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1 2 3 4 5 6 7 8	 Q. And you said there has been more recent work done on this question? A. It's still ongoing, yes. Q. But the most recent work provides an estimate as at 8 May? A. That's the one that I've got, yes.
9 10 11 12 13 14	 Q. All right. And what was the conclusion, provisional though it is, reached on 8 May? A. That if it's between 1 November and 31 December the estimated range is between 36 and 40, and then if you take it back to August it's between - I can't remember the lower figure, and up to 45.
15 16 17 18 19 20	 Q. All right. And why didn't you say that when you amended your witness statement this morning? A. We looked at that and because it's approximately 37 and it's between 36 and 40 we thought that's similar.
21 22 23 24 25	 Q. All right. You've spoken about that calculation perhaps differing if one takes the date back to August? A. Yes. Q. Do you think that there is a prospect that this water
25 26 27 28 29	 Q. Do you think that there is a prospect that this water main was burst from August? A. I don't know. Q. Why are they taking it back to August?
30 31 32 33	A. They're trying to work out when definitively is it definitely zero.Q. So the data that SEW has available to it is indicative
34 35 36 37 38	of the fact that the burst may have occurred before 1 November; is that right? A. When they try to estimate when it started, yes. We don't exactly know when the burst started.
39 40 41 42	 Q. The data doesn't say definitively that the burst began on 1 November? A. No, it doesn't.
43 44 45 46 47	 Q. It doesn't say definitively that the burst began some time in November? A. No, it doesn't. Q. But it does say definitively that the burst did not

1	occur before August?			
2		A. Unfortunately we'll definitively never know. The best		
3	we're	we're going to be able to do is an estimate.		
4	•			
5	Q.	I think that's fair. Does the data at least suggest		
6	that th	e burst didn't occur before August?		
7	А.	A. That's right, yes.		
8				
9	Q.	All right. And so the possibility is that the burst		
10	may h	ave occurred as early as August and, in the manner		
11	that th	ese things will often operate, it may have started		
12	as a s	maller burst and grown over time; is that the advice		
13	you've	e been given?		
14	Α.	That's right. So, in terms of the graph, it sort of		
15	shows	s - again, it's an analysis and an estimate; it sort of		
16		up towards the end.		
17	0			
18	Q.	When you say "towards the end" what period do you		
19	mean			
20	A.	I mean towards the - when the burst was detected and		
21	cease			
22	000.00			
23	Q.	The 36 to 40 megalitres		
24	<u>с</u> . А.	Yes.		
25	/ \.	100.		
26	Q.	is that range that if the burst began in August it		
20		nore likely to be 40 megalitres, but if it started		
28		's likely to be 36?		
20	A.	No, sorry, there's sort of two ranges		
29 30	А.	No, sorry, mere's sorr of two ranges		
30	Q.	Right.		
		•		
32	A.	sort of depending on when you take the date from.		
33		And so the 36 to 40 is based on November, and then the -		
34		I believe then where you can see it most likely to		
35	start. And then they go broader and they go up to - out to			
36	•	August. Then it's - I can't remember the bottom number,		
37	but we	e could provide it, and it goes up to 45.		
38	•			
39	Q.	45. And did you say that work is continuing		
40	А.	Yes.		
41	•			
42	Q.	in quantifying the amount of water?		
43	А.	Attempting to, yes.		
44	_			
45	Q.	Are you aware of bursts in the South East Water system		
46	where	where more than 36 megalitres of water have been lost?		
47	Α.	A. We asked that question and, I am aware of another		

1	burst that has been the case.
2	
3	Q. When did that occur?
4	A. I don't have the exact date but we could come back to
5	you.
6	,
7	Q. Did it occur during your time as managing director?
8	A. It did.
9	
10	Q. And whereabouts was that burst?
11	A. Caldermeade.
12	
13	Q. And how long did that burst operate until it was
14	repaired?
15	A. I unfortunately don't have that data, but we could
16	,
17	Q. Were there any adverse consequences caused to public
18	or private property as a consequence of that burst?
19	A. The water went into farmland. So not of my
20	understanding, no.
21	O ,
22	Q. All right. And how many megalitres are estimated to
23	have flown from that burst?
24	A. I believe that's 60 megalitres, from my recollection.
25	
26	Q. Some work was done on this question of the volume that
27	had escaped from the burst water main in February?
28	A. Yes, that's right.
29	
30	Q. Are you aware of that?
31	A. Yes. So the initial employees when they looked at it,
32	without doing the seasonal factors, thought it could be
33	60 megalitres.
34	
35	Q. That's right. They concluded that it might be
36	60 megalitres on the basis that it could be two megalitres
37	a day?
38	A. That's right.
39	
40	Q. Let me take you to that document. It's
41	SEW.0001.0001.0036. This is an email chain between various
42	people with South East Water addresses. Actually, don't
43	blow that up because we might go over the page, please.
44	Now, this email is from Gary Loudon?
45	A. Yes.
46	
47	Q. That's a different Gary to the Gary before?

1 2	Α.	No.
2 3	Q.	It's the same Gary?
4	Q. A.	It's Gary, yes.
5	73.	no oury, you.
6	Q.	This is the person that actually attended on site, is
7	it?	
8	A.	That's right.
9		
10	Q.	And he has done some initial analysis?
11	А.	That's right. The red arrow that you can see at the
12	bottor	n there, that's his looking at for the flow going up.
13		
14	Q.	And the flow going up from where? What's it a
15	meas	urement of?
16	Α.	I'm not sure.
17		
18	Q.	Can I move to page 6 of the document, please.
19		lly, if we could go one page before. That's the
20	•	graph there that's used in the submission?
21	Α.	M'hmm.
22	0	And Looked you if that was the location of the main
23	Q.	And I asked you if that was the location of the main,
24 25		think your evidence was you weren't sure if it was
25 26	•	ely there or near to there. And then if we go over ge there's another photograph, and there's a red
20 27		in the middle there. And do you know what that's
28	signify	•
29	A.	I don't, but
30	73.	
31	Q.	Can you see the text underneath it that says, "Once
32		pair was done by Service Stream"
33	Α.	Yes.
34		
35	Q.	"Dat and I were able to determine the approximate
36	time a	nd volume of the trend of the change step from the
37	outlet	of the tank at McCrae."
38	Α.	Yes.
39		
40	Q.	And then it says below, "Red line is baseline."
41	Α.	Yes.
42	~	
43	Q.	"Yellow is increase."
44	Α.	Yes.
45 46	<u> </u>	"I baliova it atortad oorly Navambar until the and of
46 47	Q.	"I believe it started early November until the end of
47	Decer	nber. So 60 days at the end it was a two megalitre

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1	burst, volume wise about 60 megalitres."
2	A. Yes.
3	
4	Q. If we go over the page you can see the graph that he
5	refers to, which is a little hard to read, although obvious
6	in its effect. The red line here is said to be baseline.
7	The yellow is said to be increase. Now, have you inspected
8	this graph in preparation for coming here today?
9	A. No, I have not.
10	
11	Q. Have you seen this graph before?
12	A. I have, yes.
13	
14	Q. But you haven't analysed it?
15	A. I haven't analysed it in terms of the analysis that
16	then was done internally. It looks to remove seasonal
17	factors and other things. But, as mentioned, one of the
18	things that tends to happen in our network over summer is
19	that water usage goes up. So in trying to estimate the
20	most likely volume that's what, amongst other things, that
21	our analysts have taken into account.
22	
23	Q. So does that mean that a potential error in this graph
24	is the consistent baseline when the baseline ought to move
25	to reflect seasonal changes?
26	A. That's right.
27	-
28	Q. And a consequence of moving the baseline up is that
29	the amount of water being used by consumers is increased,
30	which means that the total volume of the burst is
31	decreased?
32	A. That's right.
33	
34	Q. All right. And the seasonal factors that you've
35	spoken about are they just based on assumptions or are they
36	based on data?
37	A. So it looks at five years and then tries to
38	incorporate COVID, et cetera. Yes, so data from the other
39	years.
40	
41	Q. But can't you just look at the meters of the
42	properties in the relevant area to work out what the usage
43	was?
44	A. There's a range of factors that get taken into
45	account. I'm not the right expert, but certainly we could
46	provide that.
47	

1 2 3 4	Q. Presumably, Ms Olsen, you have interrogated your own staff about this?A. Sure.
5 6 7 8 9 10 11 12 13	 Q. And do you understand why the data that can be captured from domestic meters isn't a sufficient answer as to the amount of household usage? A. Partly because the tank network in that system, it flows two ways. So the tanks go both in and out, and that's partly due to the pressure in the McCrae area. So that needs to be taken into account rather than just a straight balance.
14 15 16 17 18 19	Q. The flow of the tanks won't affect the reading of the meters at domestic premises, will it?A. No, so it doesn't affect the readings at domestic premises. It's in terms of that water balance and how it's done.
20 21 22 23 24 25 26	 Q. So, as I understand it, you need at least two pieces of data. But I might be making it overly simple, so you correct me where I'm wrong. One thing you want to ascertain is how much water was being used by your customers in the relevant area? A. Sure.
27 28 29	Q. And the source of truth for that is the water meter?A. That's right.
30 31 32 33 34	Q. The other piece of data you want to know is how much flowed out of the pipe that was broken. The baseline here is said to be baseline usage, the red line?A. Sure.
35 36 37 38 39	 Q. Your evidence, as I understand it, is that that is insufficiently accurate because it doesn't take into account the fact that usage changes seasonally? A. That's right.
40 41 42 43 44 45 46 47	 Q. And my point is simply that in seeking to understand the amount of usage for any period from your customers that can be definitively ascertained by reading their meters; am I wrong about that much? A. I think in terms of that I'm not the expert. I just know that we asked our key data person to look at it so that he could take into account all the factors to try and get the most accurate estimate we could.

1	• Ma Olean I want to be plain with you about this?
2	Q. Ms Olsen, I want to be plain with you about this?
3	A. Sure.
4	_
5	Q. I'm not calling you here today because you're an
6	expert. I'm calling you because we asked questions of
7	South East Water and you were the witness that was put up.
8	A. I absolutely understand.
9	
10	Q. And this is a matter of very serious concern
11	A. I completely understand.
12	
13	Q to the community and presumably to your
14	organisation as well.
15	A. Yes.
16	A. 165.
	And I find it establishing that you have not
17	Q. And I find it astonishing that you have not
18	interrogated this data in a way that means you understand
19	the basic integers in the assessment.
20	A. I'm sorry, and I'm trying to explain what gets taken
21	into account, that it's not as simple as looking at the
22	yellow line and the red line to determine it; but to
23	determine, which I understand everyone wants to do, the
24	most accurate amount that we need to take into - seasonal
25	factors and also the fact that there are different tanks
26	operating in different ways in that network.
27	
28	Q. What's the relevance of the tank data to this graph?
29	A. Because the tanks go - have water that flows in and
30	out at different times. It 's not just a one-way tank.
31	, ,
32	Q. Water flows out of the tank to where?
33	A. To other tanks.
34	
35	Q. And how does that trigger a reading that's relevant to
36	this graph?
30 37	A. Mr Costello, I'm sorry, I wish I could help you, but
	I think I am at the limit of what I understand of this.
38	
39	So, I'm sorry.
40	
41	Q. Is there an internal South East Water document that
42	gives more up to date calculations as at 8 May?
43	A. Yes, it's the one I saw on 8 May.
44	
45	Q. All right. Could I ask that that document be produced
46	to the inquiry?
47	A. Absolutely. I'm sorry.

1	
2	Q. Who is the person that if I wish to question somebody
3	further from South East Water about these matters that has
4	the necessary skill set and information to be able to
5	answer my questions?
6	A. Jonathan Crook.
7	
8	Q. And what's his title?
9	A. He's the group manager of data analytics or a similar
10	title.
11	
12	Q. Did you say Brook?
13	A. Sorry, Crook.
14	
15	Q. Crook. Has Mr Crook informed you when he's likely to
16	reach a final conclusion as to the amount of water that
17	leaked from the Bayview Road main?
18	A. I think we'll never definitively know. So I think
19	this is our best estimate currently.
20	
21	Q. Is further work being done or has the work now
22	concluded on the basis that you've reached the closest
23	determination that you can possibly reach?
24	A. I'm not sure.
25	
26	Q. You don't know if Mr Crook and his team are doing
27	further work on this question or not?
28	A. I'm not sure at the moment, no.
20	
29 30	Q. And so, based on your relatively little understanding
31	of this data and of the work done by Mr Crook, as you sit
32	there now you can't tell the commissioner that you are
33	personally satisfied that the answer as to the amount of
34	water that leaked from the pipe on Bayview Road is 36 to 40
35	megalitres or the 60 megalitres that was initially
36	estimated by Mr Loudon?
37	A. We will never know what the exact amount is, but
38	I feel like that the work that Jonathan has done is the
39	best data tools that we've got to estimate it.
40	
41	Q. Is this a fair way of describing it: you don't know
42	whether or not the work that's been done by Mr Crook and
43	his team produces an accurate result? You don't know that
44	yourself?
45	A. I understand that that's what they're looking for, but
46	I don't have the skills to be able to say if it's the right
47	process to do it.

1	
2	Q. You have confidence in Mr Crook and his team?
3	A. Yes, I do.
4	
5	Q. And so he telling you that the answer is something
6	between 36 and 40 megalitres gives you some degree of
7	assurance?
8	A. Yes.
9	
10	Q. But you yourself cannot be sure that that's the right
11	answer?
12	A. That's correct.
12	
13	Q. It's outside your expertise?
14	A. That's correct.
	A. That's correct.
16	And have you called Mr Creak or have you caught to
17	Q. And have you asked Mr Crook or have you sought to
18	engage anybody from outside your organisation to verify the
19	results that Mr Crook's arrived at?
20	A. I don't believe that we have engaged anyone to verify
21	it.
22	
23	Q. Is it surprising to you that, taking the lowest
24	possible estimate that South East Water has given, 36
25	megalitres of water can leave your system in a two-month
26	period without detection?
27	
28	MS SIEMENSMA: Madam Chair, I think the estimate in
29	Ms Olsen's witness statement is an estimate of
30	approximately 37, not 36.
31	· · · · · · · · · · · · · · · · · · ·
32	CHAIRPERSON: Thanks, Ms Siemensma.
33	
34	MR COSTELLO: Yes, thank you. I gave the lower estimate
35	of Mr Crook; that is, in fairness to South East Water, the
36	lowest possible estimate, Mr Crook's 8 May estimate not
37	provided to this inquiry until from the mouth of Ms Olsen,
38	was 36 to 40 megalitres, is that correct?
30 39	
39 40	A. Sorry, could you repeat the question?
	0 26 to 10 magnitrop in Mr Crock's approximent?
41	Q. 36 to 40 megalitres is Mr Crook's assessment?
42	A. That's my understanding, from November, yes.
43	• And in forman to you the table of the laws of
44	Q. And, in fairness to you, I'm taking the lowest
45	possible estimate, which is 36 megalitres.
46	A. Sure.
47	

1 2 3 4	 Q. Is it surprising to you that 36 megalitres of water can escape from a water main and not be detected for at least two months? A. Yes.
5	<i>/</i> . 105.
	O la that accontable?
6	Q. Is that acceptable?
7	A. We don't want any water to escape, and it's certainly
8	one of our biggest bursts. So, no, it's not okay.
9	• • • • • • • • • • • • • • • • • • •
10	Q. And it's all the less acceptable that it's occurred in
11	a region that - or at least close to an area that's
12	susceptible to landslides, isn't it?
13	A. I take that point, yes.
14	
15	Q. You accept that a burst in this type of area can have
16	potentially catastrophic consequences?
17	A. I know that a burst in different areas, including this
18	one, can absolutely have, yes, catastrophic consequences.
19	
20	Q. Are you aware that South East Water communicated with
21	residents shortly after the landslides about the amount of
22	water that had been reported by local residents in the
23	area? Is that something that you're aware of, that there
24	was a communication to residents?
25	A. I'm aware of different communications to residents,
26	yes.
27	
28	Q. And you're aware that a statement was published by
29	South East Water on or around 17 January
30	A. Yes, I am.
31	
32	Q indicating that samples had been taken?
33	A. Yes.
34	
35	Q. And those samples were sent to a laboratory for
36	analysis?
37	A. Yes, I am.
38	
39	Q. And do you know where those water samples were taken
40	from, yourself?
41	A. No, I do not, but I know that there's a table that
42	contains that.
43	
44	Q. That statement was put on South East Water's website;
45	is that correct?
46	A. Yes, it was.
47	

1 2 3 4 5 6 7	 Q. Has that statement been removed from South East Water's website since it was put up? A. I think we update the statements. But I'm sure we'd have a copy, if it was helpful. Q. Are you aware that the statement was taken down? A. No, I'm not.
8 9 10 11 12 13 14 15	 Q. But you're aware of the fact that it may have perhaps been updated? A. I'm aware of website updates, yes. Q. All right. Who authorised the making of the statement on 17 January 2025? A. I did.
16 17 18 19 20 21 22	Q. And why did you decide to communicate with residents at that point in time?A. Yes, I wanted to let residents know what we had been doing, what we found, and that we would keep going or continue to investigate.
23 24 25 26	Q. You and Mr Tim Lloyd attended the meeting at DromanaHall on 22 January?A. Yes, we did.
27 28 29 30 31 32	 Q. Do you recall Mr Lloyd telling residents that South East Water had reviewed its water network and saying words to the effect that the network was performing well and above average? A. I don't recall the exact words, but I certainly recall it along those lines, yes.
33 34 35 36 37 38 39 40	 Q. Do you recall that those words were made in respect of leakage rates? A. I don't recall that, but I certainly know at that time what we were - or I understand Mr Lloyd was referring to was the assets that we believed could impact the landslide of McCrae. I don't know if Mr Lloyd knew of this burst at that time.
41 42 43 44 45 46 47	 Q. Did you know of the burst at this time? A. No, I didn't. Q. When did you first become aware of the burst? A. 30 January.

Q. And how did you become aware of it? 1 Mr Lloyd contacted me about it. 2 A. 3 And so on 17 January when you authorised the statement 4 Q. to be made to the residents you weren't aware that there 5 had been a leak? 6 7 Α. No, not this leak, no, or any others. 8 But you didn't ask for that statement to be removed 9 Q. from the website after you became aware of the leak? 10 Α. No. 11 12 Q. Were you concerned that a statement had been made to 13 the residents on 17 January as to the likelihood of the 14 15 water being - having emerged from a South East Water asset 16 in circumstances where you didn't know that there had been 17 a burst at the time you made the statement? Yes, I think when I found out about the burst then we Α. 18 19 had some further conversations around it to understand 20 maybe exactly where you're going of if this burst could 21 have impacted the landslide. It was a significant amount of water, but also 450 metres away and, you know, that's 22 23 partly why we started to look into it. Even though it was 24 450 metres away and people believed that it couldn't have 25 impacted the landslip, we needed to know. I checked in with another general manager who's had more longer 26 27 experience in water than me just to say, "We've had a very large burst. It's 450 metres away. Do you think it could 28 have affected it?" He also did not. But we clearly needed 29 to understand if it had. And we don't internally have the 30 31 right expertise in terms of geotechnical or hydrology to determine that. 32 33 34 Q. Is it fair to say that a very significant factor in 35 the making of the statement to residents on 17 January was the results of electrical conductivity testing? 36 37 We'd done a portfolio of testing to try and find out. Α. To your point, electroconductivity testing is one. But, 38 39 just like we do in a normal leak, we also then listen to 40 our assets. So, you know, even if it looks like mains 41 water, we then listen to see if it is. We had also done 42 night flow analysis, which is the best way to determine 43 often or one way to determine a leak because we sort of 44 look between - at night to see if the overall tank moves. And then we had done some work in terms of sewer assets as 45 46 well. 47

1 2 3 4 5	 Q. And what did all that work reveal to you? A. That indicated - and, again, I should say we're looking at the area within the sort of where we believed could impact the landslip - that the network was performing well.
6 7 8	Q. None of those tests indicated the fact that there had been a burst at Bayview Road?
9 10 11 12	 No, it didn't. That - I was going to say, partly because we were looking at that time, do you know what I mean, in that area.
13 14 15	 Q. In paragraph 58 of your witness statement you say that SEW conducted a portfolio of tests following the landslide. A. Yes.
16 17 18 19	Q. Are they the tests you've just referred to now?A. Yes, sorry.
20 21 22	Q. Thank you. And so are the results of those portfolio of tests held by South East Water? A. Yes.
23 24 25 26	MR COSTELLO: Thank you. I tender that document, please, Madam Chair.
27 28 29	CHAIRPERSON: Can the operator please move the document back one page? And forward, sorry. Is this part of another document?
30 31 32 33 34	MR COSTELLO: No, this is a separate email chain separately produced. If the operator could go to the first page, please.
34 35 36 37 38	CHAIRPERSON: Thank you. Email chain from Charles Swain at South East Water to Declan McCreesh dated 3 February 2025, and that's exhibit CA28.
39 40 41	EXHIBIT #CA28 EMAIL CHAIN FROM CHARLES SWAIN AT SOUTH EAST WATER TO DECLAN MCCREESH DATED 3 FEBRUARY 2025
42 43 44	MR COSTELLO: One of the forms of testing that you referred to then in the portfolio of testing was acoustic leak detection?
45 46 47	A. Yes.Q. And you accept, don't you, that the acoustic leak

detection completely failed to identify the burst at Bayview Road? A. I do.
Q. Another was nighttime data analysis?A. Yes.
 Q. It appears from the submission that that analysis was done between January and April 2025; is that your understanding? A. In terms of the statement in January or
A. Interns of the statement in January of
Q. Sorry, I'll put it again.A. Sorry.
Q. It appears to me that the nighttime data analysis was conducted from January 2025; is that your understanding?A. Yes. Do you mean that we weren't doing it before?
Q. It was conducted after the main had been repaired?A. That's right.
Q. All right. And so is it likely that the nighttime data analysis could shed any light on this question?A. Of the Bayview Road leak?
 Q. Yes. A. So some of that nighttime analysis, I believe and understand, is part of that tank flow to try and ascertain the size of the leak.
Q. That is you looked to what occurred in the period, say, January to April and compared it to what had been going on in the earlier period when the burst was operative?
A. Oh, right, no, sorry.
Q. Is that what you mean?
A. No, sorry, I haven't been clear.
O Okov Vou evaleia it te me
Q. Okay. You explain it to me.A. Yes, sure. So, in terms of identifying how large the
leak is, part of that is those tank flows, and it's those
same tank flows that we look at at night to try and
identify if we've got a leak on that, you know, particular
day.

.16/05/2025 (7)

1	Q. But, insofar as Bayview Road was concerned, you didn't
2	have a leak because it had been repaired at the time?
3	A. In January; that's right, yes.
4	
5	Q. You also referenced, I think, sewer dye testing; did
6	you say that?
7	A. That's right. I don't know - I can't remember if that
8	was done then or it was done in January; I'm not sure.
9	,, , , , , , , , , , , , , , , , ,
10	Q. What was the intention of the sewer dye testing?
11	A. It's to test - to follow the trenches or put it into
12	the sewer, there's two different types, to see if the sewer
13	is leaking.
14	
15	Q. A sewer dye testing is done within the sewer pipes?
16	A. There can be both.
	A. There can be boun.
17	O Both magning what?
18	Q. Both meaning what?
19	A. So you can test both - and, again, not my area of
20	expertise but at a high level, just because I think it
21	might be useful, you could test both within the sewer and
22	also outside. I'm not sure if it's the dye testing that
23	does both. So I'll have to get an expert
24	
25	Q. Do you know whether the dye testing can test the
26	trenches?
27	A. I'm not sure if it's dye testing. I know that the
28	trenches can be tested and that some were excavated and
29	tested in January.
30	
31	Q. Could I have on the screen, please, the submission
32	document SEW.0001.0001.0111, and could we go to page 7,
33	please.
34	
35	CHAIRPERSON: Mr Costello, it's five past one.
36	
37	MR COSTELLO: I apologise.
38	
39	CHAIRPERSON: Perhaps finish this document.
40	
41	MR COSTELLO: You'll see at 5.2.4 sewer dye testing?
42	A. I can.
43	
44	Q. And it speaks to pouring coloured dye into the sewer
45	network?
46	A. Yes.
47	

1 2 3 4	Q. And it says in the second last sentence, "The injected dye remained within the sewer pipes."A. Yes.
5 6 7	Q. Do you see that?A. Yes, I can.
8 9 10	Q. That was 22 January 2025?A. Yes.
11 12 13 14 15	 Q. After the burst had been repaired. And then if we go over the page to 5.2.4 - sorry, 5.2.5, this deals with sewer trenches. A. Yes.
16 17 18 19 20 21 22 23 24 25 26 27 28	Q. "Excavated down two and a half metres to expose the pipe in Charlesworth Street. Placed dye in the trench around the outside of the pipe. Monitored any build-up of water in the trench, of which there was very little. Three days later we backfilled the excavation and subsequently seen no evidence of the dye surfacing. This suggests the water that continued to surface at the intersection of Coburn Road and Charlesworth Street is not surfacing from the sewer trench." And do you think that the conditions in the trench as at 24 January 2025 were likely similar to the conditions that existed before the burst was repaired? A. I'm sorry, I don't know.
29 30 31 32	Q. All right. So have you taken any particular comfort from the sewer dye tests in terms of understanding whether or not the likelihood that water from the burst main has travelled?
33 34 35 36 37 38	A. I think that's why we asked the expert report - experts to look at it. I think we're conscious that we had done our tests, but one of the hypotheses that we had heard was that it had travelled down there. So that's why we asked.
39 40	MR COSTELLO: All right. Is that a convenient time?
40 41 42 43	CHAIRPERSON: Yes. We'll take a break for lunch, Ms Olsen. A. Okay. Thank you.
44 45	CHAIRPERSON: And resume at 2.15.
46 47	LUNCHEON ADJOURNMENT

1 2	UPON RESUMING AT 2.15 PM:
3 4 5 6 7 8 9 10 11	MR COSTELLO: Thank you, Chair. Ms Olsen, I just want to finish off on this testing before we get to the SMEC report. We were talking about the different types of testing that are set out in the submission that South East Water filed, which is SEW.0001.0001.0111, and if we could go to the page before, please, page 7, and you'll see the nighttime data analysis at 5.2.3. While I think of it, Chair, I've referred to this document a number of times and
12 13	I have not yet tendered it.
14 15	CHAIRPERSON: You haven't yet?
16 17 18 19	MR COSTELLO: No. But I will. We had an exchange about nighttime data analysis and tank data in this area? A. Yes.
20 21 22 23 24	Q. You say in the second paragraph - sorry, it is said at the second paragraph of your organisation's submission that, "Our analysis of water tank data has not detected any major leaks or bursts in the period of January to April 2025"; see that?
25 26	A. Yes.
27 28 29 30 31 32	 Q. Are you aware of whether nighttime data analysis for the relevant tanks was conducted for the period before January 2025 while the burst was in operation? A. I'm not, but it would have - the burst would have shown on the tanks.
33 34 35 36	Q. Right. Just so that I'm clear, what is the inquiry to take from the statement that the water tank data has not detected any major leaks or bursts in the period January to April 2025?
37 38 39 40 41	A. In terms of that we were looking at the landslide area, and so to say that there's no leaks in that area between January - no large leaks that showed up in terms of our water tank data, any major leaks in that period.
42 43 44 45 46 47	 Q. And are you aware of whether that analysis was done for the period including November and December of 2024? A. I'm not aware if regular nighttime analysis was underway at that time, but certainly in terms of that tank data that's the data that's sort of used to estimate the burst.

4						
1 2	Q.	All right.	l'II tako v	ou to - might	I tender that.	
3	Q.	Air fight.	The take y	ou to - might		
4	СНАВ	RPERSON:	Voe luetr	emind me N	Ir Costello, what	c
4 5		ocument, what				3
6	tins ut			n:		
7	MR C	OSTELLO:	This is the s	submission o	f South East Wat	or
8		OUTLEED.		5051113510110		
9	CHAI	RPERSON:	The submis	sion ves S	South East Water	
10		ission dated -				
11		perator?				
12						
13	MR C	OSTELLO:	It's dated Ar	oril 2025 on t	the front page.	
14					1 5	
15	CHAI	RPERSON:	Thank you.	April 2025,	and that is exhib	it
16	CA29		·	•		
17						
18	EXHI	BIT #CA29 SI	UBMISSION	OF SOUTH	EAST WATER D	DATED APRIL
19	2025.					
20						
21		OSTELLO:	•	• •	say that has two	
22		•	I would seek	to have thos	e included as	
23	part o	f the exhibit.				
24	_					
25	CHAI	RPERSON:	Thank you.	They'll be a	dded; thank you.	
26						
27		•	,) ANNEXUR	ES TO SOUTH E	EAST WATER
28	DATE	D APRIL 202	25.			
29			T I		the second second	
30		OSTELLO:		•		
31					lust have a look a	il
32 33	A.	ocument and I'm not sure.		ve seen it be		
33 34	А.	Thinot sure.				
35	Q.	You're not si	ure if you've s	seen this hef	ore?	
36	Q. A.	I'm not sure,	-			
37	73.	Think Sure,	110.			
38	Q.	Do vou knov	v Greta Pullei	n?		
39	<u>А</u> .	Yes, I do.				
40		,				
41	Q.	And what's N	As Pullen's ro	ole?		
42	A.				on-revenue wate	r,
43	which					
44						
45	Q.	What does the	hat mean?			
46	Α.	It's water tha	at isn't charge	ed for. So it i	ncludes	
47	leaks.	That's the la	arge part of it.	. But it also		

1	includes - some of the water that we don't charge for is for fire services or it
2	might be incorrect metering.
3	
4	Q. I see.
5	A. But it's sort of the broader area that looks to try
6	and make sure that we've got better performance in terms of
7	leak and use of water.
8	
9	Q. I see. If we could move to - just to be fair to you,
10	Ms Olsen, since you can't remember seeing this document
11	before, I might just ask that we go to the final page of
12	it, which is page 14, and I'll just ask the operator to
13	slowly scroll through each page just so you can have a
14	glance and it may remind you if you've seen it before. But
15	if I'm going to ask you about anything in particular I'll
16	draw your attention to the particular part of the document.
17	A. Sure.
18	
19	Q. Can you see there somebody by the name of Carl Gent is
20	emailing Declan McCreesh about night flows between 2 to
21	4 am each day?
22	A. Yes.
23	
24	Q. In - I think that says in litres a second. Is that
25	what you would describe as nighttime data analysis?
	, , , , , , , , , , , , , , , , , , , ,
26	A. Yes, a form of, yes.
27	
28	Q. All right. And then if we go over the page, please,
29	to 11, can you see in the email at the bottom there from
30	Mr McCreesh that he says, "Night flows are consistently low
31	and as expected for the Waller Place distribution zone and
32	seasonal usage patterns"?
33	A. Yes, I can.
34	
35	Q. And do you accept that the Waller Place distribution
36	zone includes the area of McCrae with which we're
37	concerned?
38	A. Yes, that's my understanding.
39	A. Tes, that sinty understanding.
	• Vac All right And as it encours that what's being
40	Q. Yes. All right. And so it appears that what's being
41	done here is some nighttime data analysis in respect of the
42	relevant area; do you accept that?
43	A. Yes, I do.
44	
45	Q. All right. If we could go over the page, please. And
46	then if we could go one more. Can you see there that
47	there's a number of SEW people involved in this email

1	chain, but this is now a Mr McClurg to Mr Hook, "Can you
2	please look at extending night flow analysis back to July
3	22. Let me know how you go with Greta re leakage data for
4	the network"; do you see that?
5	A. Yes.
	A. 165.
6	Q. So is it possible to pull data and do night flow
7	
8	analysis for earlier periods?
9	A. I believe so, yes.
10	
11	Q. Okay. If we could go over the page, please. At the
12	top of the page there, this is from Mr Hook to Mr McClurg,
13	answering questions in red; you see that? And then can you
14	see underneath the graph there in red, "Can you also give
15	me an indication of what the typical night flow is so we
16	have some comparison? Do we have an estimate for lost,
17	non-revenue, unaccounted for, leakage in that zone and how
18	it compares to other areas? This would be a very useful
19	fact if we can say with confidence something like, "The
20	data tells us the leakage in that area is XX per cent lower
21	than we would typically expect across our area. You get
22	the objective here?" Are you aware of the work that was
23	being undertaken here by Mr Hook, Mr McClurg, Mr Gent and
24	Ms Pullen?
25	A. No.
26	
27	Q. You've not been involved in this particular work?
28	A. No.
29	
30	Q. All right. Having seen what you've seen so far, do
31	you understand why this work is being done?
32	A. I think so, yes.
33	7
34	Q. How would you describe the reason - what would you
35	describe is the reason this work was being done?
36	A. To understand the night flows over a period of time.
30 37	A. To understand the hight hows over a period of time.
38	Q. I see. And the night flows in the Waller Place area?
	5
39	A. That's right.
40	All right And are you sware of whether on
41	Q. All right. And are you aware of whether an
42	understanding was come to of the night flows of the Waller
43	Place area for 2024?
44	A. No, I'm not, but I - no, I'm not.
45	
46	Q. Did you ask for night flow data for the Waller Place
47	area for 2024 to be included in the submission?

1	A. No, I did not, and that's partly - yes, I didn't.
2 3 4 5 6 7 8 9 10 11 12 13	 Q. Was there any discussion about whether night flow data for 2024 ought be included in the submission? A. No, and it's partly around - we knew that we had a large leak, the Bayview Road leak, but, as I mentioned before, internally there was an understanding that it didn't contribute to the landslide. We knew we needed to check that, and that's why we got the expert opinion around that, the SMEC report, which is obviously preliminary but also indicates that it's not feasible for that water to have impacted the landslip.
14 15 16 17 18 19 20 21 22	 Q. Okay. Can we move forward, please, to page 4 of that document. Do you see here, the bottom of the page, this is Ms Pullen to Mr McClurg and others, and she says, "Hi all, we pulled the data from the meters in the area and compared to the inflow of the zone, but this calculation was indicating losses of 33 per cent, which seems too high and abnormal"? A. Yes.
23 24 25 26 27 28 29 30 31 32	 Q. And then there's a reference above, "The zone we're looking at is the Waller Place PR zone only." So it may be that Ms Pullen's email there of 256 might have related to more than just the Waller Place zone. And then if we go over the page to page 3, at the bottom of the page Ms Pullen says, "Hi Declan, we looked at the zone only. However, the schematic below shows that is it's not interconnected to another zone." A. Yes.
32 33 34 35 36 37	Q. "Due to the abnormal result we would like you to confirm this." Do you understand what is meant by the concept of an interconnection to another zone?A. Broadly, yes.
38 39 40 41	Q. And how would you describe it?A. If it flows between one area and another there's a connection.
42 43 44 45 46 47	 Q. I see. And then if that could be shrunk down. Can you see at the top of the page the very first line says, "I can confirm that PRV WB149 only supplies a single hydraulic zone with approximately 100 customers"? A. Yes.

1 2 3	Q. Are you aware of what PRV WB149 is?A. No, I'm not.
4 5 6 7 8	Q. Are you able to make an educated guess based on your understanding of SEW's network?A. I believe the first three would be a pressure reduction valve, but I'm not sure.
9 10 11 12 13 14 15	 Q. Thank you. And so there's further work being done to try and come to an estimate. If that could just be taken off. I might just ask you, Ms Pullen, just to read the - Ms Olsen, rather, to read the balance of that email at the top of the page A. Sure.
16 17 18 19 20	 Q just in fairness to you, so you can see what the extent of the communications was and, if you want to make any comment, having read it, feel free to do so. A. Do you want me to read it aloud or
21 22 23	Q. No, no, no, just read it to yourself, thank you. Have you read that?A. Sorry, I'm finished, yes, sorry.
24 25 26 27	Q. Thank you. So you understand the work that's being done here in a general sense?A. I believe I do.
28 29 30 31	Q. There's a desire to try and understand the extent of the night flows?A. Yes.
32 33 34 35	Q. And the extent of the leak rate?A. Yes.
36 37 38 39 40	Q. Is that fair? If we go over the page, please. This email begins on the preceding page, but the only information on the preceding page, it just says, "Hi Nico." It's an email from Ms Pullen to Nico MacWilliams and others, including Mr McCreesh, and there's some discussion
41 42 43 44 45	there about difficulties with comparing with mechanical meters. And can you see the second last paragraph, "@morrishelen, if the team advises, could you look at the other three quarters before the one we looked at to have a total of 12 months if possible and provide a breakdown of
46 47	bill estimation"; see that? A. Yes, I can.

1	
1 2	Q. And then if we go over the page do you see at the top
2 3	there there's an email from Ms Pullen to Mr McCreesh,
	•
4	Jonathan has looked at the data and reconciled four
5	quarters of the data shown below as water loss as a
6	percentage of total system input for the McCrae Waller
7	Place zone"; can you see that?
8	A. Yes, I can.
9	
10	Q. Do you see that it's broken down in quarters?
11	A. Yes.
12	
13	Q. Do you know if the date range there, that's the start
14	date? Is that how you would understand it?
15	A. I don't know.
16	
17	Q. The date range indicating a start date for each
18	quarter or indicating the end date?
19	A. I don't know, sorry.
20	
21	Q. Can you see that there's quarter 1, 2, 3 and 4, each
22	with a date?
23	A. Yes.
24	
25	Q. 1 January, 1 April, 1 July and then 1 October?
26	A. Yes.
27	
28	Q. And can you see the days, 91, 91, 92, 58?
29	A. Yes.
30	A. 103.
31	Q. Is it immediately apparent to you why the fourth
32	quarter would have only 58 days?
33	A. No.
33 34	R. INC.
34 35	Q. All right. Can you see the water loss as a percentage
35 36	Q. All right. Can you see the water loss as a percentage is the fourth column?
37	A. Yes.
38	
39	Q. 29 per cent for quarter 1. That compares I think to
40	your evidence that an average is - the average is about
41	10 per cent across the whole of the network?
42	A. Yes.
43	
44	Q. 5 per cent for quarter 2, 18 per cent for quarter 3
45	and then for what appears to be a partial quarter 4,
46	28 per cent?
47	A. Yes.

1	
2	Q. Now, although 10 per cent is the average across the
3	network, presumably these things fluctuate. But would you
4	agree that at least quarter 1 and quarter 4 there, 29 and
5	28 per cent are abnormally high?
6	A. I'm not sure about "abnormally", but it's certainly
7	higher than 10 per cent.
8	
9	Q. Plainly higher than 10 per cent, but
10	A. Yes.
11	
12	Q. I mean, it's nearly three orders of magnitude higher
13	than 10 per cent. Is a 30 - is a 30 per cent - sorry,
14	I withdrew that. Is a 29 per cent water loss a high
15	percentage of loss?
16	A. If it's based on the same definition of water loss
17	that I am thinking of, then yes.
18	
19	Q. Do you recall that there was a reference earlier in
20	the email chain to rates being abnormally high and the need
21	for further analysis?
22	A. Yes.
23	/ .
24	Q. But you can't say whether 29 per cent is abnormally
25	high?
26	A. I'd like some further analysis to understand if this
20	was the final figure reached. It doesn't appear to equate
28	with the understanding that I had that it, you know,
20	performed well.
29 30	penomed well.
30 31	Q. And now that you have been through that email, albeit
32	, ,
	at a reasonably fast clip, can you recall if you've seen
33	this email before?
34	A. I can't remember if I have, no.
35	O llove year data similar to the data have for the
36	Q. Have you seen data similar to the data here for the
37	McCrae Waller Place zone before?
38	A. No, I don't believe that I have. No. I mean,
39	I imagine I would have, but I can't remember.
40	
41	Q. In your capacity as managing director
42	A. Yes.
43	
44	Q do you receive a regular range of reports from your
45	direct reports?
46	A. Yes, I do.
47	

1	Q. Do any of those reports include information as to
2	water loss rates?
3	A. Not regular ones, no.
4	
5	Q. Okay.
6	A. Oh, sorry.
8 7	
8	Q. Did you want to amend your answer?
9	A. Yes. So we receive - we look at our overall rates of
10	performance at least every year across a whole range of
11	factors, and I believe that's every six months as well.
12	
13	Q. I see. Do you receive data on an annual basis as to
14	water loss for each of the zones?
15	A. No, I do not.
16	
17	Q. That's too granular for your level.
18	A. Correct.
19	
20	Q. And who is the senior executive with the most direct
21	responsibility for water loss as an issue if there is such
22	a person?
23	A. Yes, there's sort of two different parts of that.
24	Sometimes water loss is to do with our planning or areas
25	that we might need to renew, and sometimes it's to do with
26	the operations of the network. And so they're the two
27	general managers that I mentioned before: Charlie
28	Littlefair, who does capital planning, and Tim Lloyd, who
29	looks after our service delivery.
30	• • • • • • • • • • • • • •
31	Q. And are the performance appraisals of either of those
32	people tethered in any way to percentage of water loss
33	across the network?
34	A. So we have all of our corporate plan KPIs which
35	includes performance like use of recycled water, bursts,
36	bursts per 100 kilometres et cetera, and different ones of
37	those are included in those two general managers'
38	performance.
39	MD COSTELLO: Thenk you I tender that desument
40	MR COSTELLO: Thank you. I tender that document.
41 42	CHAIRPERSON: The email chain from Greta Pullen to Declan
42 43	
43 44	McCreesh dated 22 January 2025 is exhibit CA30.
44 45	EXHIBIT #CA30 EMAIL CHAIN FROM GRETA PULLEN TO DECLAN
46	MCCREESH DATED 22 JANUARY 2025
40	

1	MR COSTELLO: Could I have on the screen, please,
2	SEW.0001.0001.0142. I want to ask you some questions in
3	connection with the SMEC report.
4	A. Sure.
5	
6	Q. Now, Ms Olsen, I appreciate this isn't your document.
7	It's been prepared by others for your organisation. You've
8	read this document?
9	A. I have, but I'm certainly not an expert in this.
10	
11	Q. I understand. Were you involved in setting the scope
12	of the works for this document?
13	A. No. We knew what we wanted to test because we had
14	heard those hypotheses that I mentioned before, so
15	particularly around our Bayview Road leak and also the
16	trenches and could the trenches be driving or carrying our
17	water or other water, and could they have been a
18	contributing factor to the landslide.
19	
20	Q. All right. Do you understand this report to be based
21	principally, if not exclusively, on data that had been
22	produced by others, including South East Water?
23	A. Sorry, could you repeat that?
24	
25	Q. Do you understand this report to be based on data
26	produced principally by others, including South East Water?
27	A. Do you mean, like - yes, so they relied on some of the
28	data.
29	
30	Q. This was primarily a desktop study?
31	A. Oh, right, sorry; yes, I understand that. I know that
32	there were site visits as well.
33	
34	Q. That's right. So it was a desktop study. If we could
35	go to page 7, which is 0015. It was a desktop study of
36	data, information and analysis that was provided to SMEC by
37	South East Water?
38	A. Yes, and using some other data, is my understanding.
39	
40	Q. Yes. Also readily available publicly accessible
41	information that SMEC obtained?
42	A. Yes.
43	
44	Q. And you'll see this is the first bullet point,
45	"Desktop study of", and the third area is "academic
46	papers". Now, there was a site visit with photographic
47	survey and opportunistic walkover activities. And so this

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1 2 3 4 5	wasn't a report where SMEC did testing of their own; is that as you understand it?A. I'm not sure. Yes, I'm not sure.Q. Based on what you see there and your prior reading of the second did executed in period.
6 7 8 9 10 11	the report, do you understand that SMEC did any testing or investigation at the site other than the site visit with photographic survey and opportunistic walkover activities? A. I don't know, but I can certainly understand that's what that document says.
12 13 14 15 16	Q. Thank you. If we could go over the page, please, to 0018. Do you see here at 4.4 they set out their methodology of analysis?A. Yes.
17 18 19 20 21 22	 Q. And do you see in the second last paragraph, "SMEC emphasises that the analyses are based on a dataset which may not be complete and is considered smaller than what standard practice would indicate to be robust." A. Yes.
23 24 25	Q. Do you see that?A. Yes.
26 27 28 29 30 31 32 33 34	Q. And then you can see that "SMEC has not had direct access to the subject site" is one of the things that they point to. And then over the page, "has not had access to any site specific geotechnical factual data or information, and has not been able to scope, direct or supervise sampling of groundwater, drainage or other sources of water within the subject site, or the area of the subject site." A. Yes.
35 36 37 38 39 40 41 42 43 44 45 46 47	 Q. So, just taking now those caveats that SMEC have placed on the report and the fact that it is a desktop analysis based on the work of others, do you accept that this is a highly conditional report? A. It's definitely a preliminary assessment; that's absolutely my understanding. And we said we'd keep going. Q. And for that reason neither you nor South East Water have drawn any definitive conclusions from this document? A. We've noted the conclusions and said that we'd keep going, subject to the board, because it's a preliminary assessment.

1 2	Q. Can v	Okay. If we could go over the page, please, to 0021. ou see at the bottom of the page there there's a table
3		says, "The following requests for information from
4		have been requested by SMEC to inform this report"?
5	A.	Yes.
6	Λ.	165.
0 7	Q.	And it seeks photos of the water leak at Waller Place
		•
8		16 and/or 17 December 2024, and it notes that it's
9	•	ovided?
10	A.	Yes.
11	•	
12	Q.	Do you know why that's not been provided?
13	A.	No, I don't
14		
15	Q.	Do you know whether those photographs are available?
16	A.	No, but - well, the photographs are generally in our
17	Monta	ige reports.
18		
19	Q.	I see. Can you see that the items requested at 4 and
20	5 are s	said to be not available?
21	A.	Yes.
22		
23	Q.	And is that the situation so far as you understand it?
24	A.	I'm not sure.
24 25	А.	Thinksule.
	Q.	Who was it within your organization that had principal
26		Who was it within your organisation that had principal
27	•	nsibility for this report?
28	A.	Do you mean working with SMEC to provide the
29	inform	ation?
30	~	
31	Q.	Yes.
32	А.	Julian Tully.
33		
34	Q.	Thank you. And what's Mr Tully's role?
35	Α.	He's one of our technical directors. So we have a
36	range	of technical directors in particular engineering
37	profes	sions.
38		
39	Q.	So he's an engineer, is he?
40	A.	Yes, he is.
41		
42	Q.	If we could move over to page 0023, please. See
43		s also been a range of information requested from
44		arties?
45	А.	Yes.
46	0	None of the tinformation had been reactived by OMEO of
47	Q.	None of that information had been received by SMEC at

1	the time that they produced this report; do you see that?
2	A. Yes.
3	
4	Q. And are you aware of whether this information is being
5	sought?
6	A. I know that we sought stormwater information from
7	council; that we received that information; that it wasn't
8	in a form that we could use that's not - that we were
9	looking for. That's not intentional, just more what we
10	were looking for.
11	
12	Q. All right.
13	A. I'm not sure about the others.
14	
15	Q. Thank you. If we could go to 0090, please. Do you
16	see the final sentence there? Sorry, I'll take you to the
17	paragraph before that where it speaks of "further
18	investigation of the condition extent of stormwater
19	drainage"
20	A. Yes.
21	
22	Q "embedded material and sewerage embedment material
23	down View Point Road."
24	A. Yes.
25	A. 163.
26	Q. That's what's recommended. It's also recommended
20 27	that, "The invert levels, gradient, condition and jointing
28	details of the stormwater drainage network from number 12
20	Prospect Hill Road to the turning circle is verified". And
30	
30 31	it's then stated that, "It's the expectation that further
	intrusive investigations will be carried out and the result
32	of those investigations may impact on this assessment and
33	may alter the likelihood of the mechanisms occurring."
34	A. Yes.
35	O In this contaut the machanisms acquiring are the
36	Q. In this context the mechanisms occurring are the
37	relevant theories that this report seeks to test?
38	A. Yes.
39	
40	Q. And so that's another indication that this is a highly
41	provisional and conditional report; do you accept that?
42	A. I certainly accept it's preliminary, yes.
43	
44	Q. Thank you. This report tests three potential
45	hypotheses as to what may be the cause of the landslide.
46	It's perhaps most easy to identify what those are from the
47	executive summary at 0009. Can you see the first three

1 2 3 4 5 6 7 8	bullet points there, "Mechanisms proposed to understand how SEW assets could have impacted on the subject site" were "that a leak occurred within the SEW assets in the vicinity of the subject site (that is within 100 metres of the subject site." Now, just pausing there that's not the Bayview Road burst, is it? A. No, that one's not.
9 10 11 12 13	 Q. "That groundwater or mains water from a leak flowed along SEW asset trenches." That could include but not be limited to the Bayview Road burst? A. That's correct.
14 15 16 17 18	 Q. Thank you. "That groundwater levels within the subject site increased due to water from SEW asset leaks, and not private water usage"; do you see that? A. Yes.
19 20 21 22 23	Q. And so they are the mechanisms that SEW is investigating in a preliminary way. And in part 8 of the report those three potential causes are assessed. If we go to 0079 we see the conclusion at 8.1.5. And it's concluded that, "It is considered not feasible that known
24 25 26 27 28	and repaired leaks within SEW assets have impacted to the landslides of 5 January and 14 January 2025"; do you see that? A. Yes.
20 29 30 31 32 33 34 35	 Q. The language is a little difficult, but do you understand what's being conveyed by the phrase "SEW assets having impacted to the landslides" that it's actually speaking to whether SEW assets have had an effect that may have caused the landslides; is that what you would understand that to mean? A. Or contributed to.
36 37 38 39 40 41 42 43	 Q. Thank you, or contributed to. There's then some mention of laboratory tests, which I'll come back to. Do you see there that it says, "It's noted that the water taken on 6 January at subject site had an EC level that was very high in comparison with other tests on water sampled in the locality of the site"? A. Yes.
44 45 46 47	Q. There's then a reference to slope failure within the same escarpment in November 2022. And do you see there it says, "A day before the leak a mains burst was identified

1	and repaired on the day of the slope failure"?
2	A. Yes.
3	
4	Q. So this is a burst water main within the vicinity of
5	the slope failure of the 2022 landslides.
6	A. Yes.
7	
8	Q. Were you aware of that before you read this report?
9	A. I was aware of the 2022 burst when we started to
10	collate information around the 2022 landslide, but not
11	before that.
12	
13	Q. Are you aware of whether South East Water had ever
14	informed the council that there had been a burst water main
15	in the vicinity of the subject site immediately before the
16	2022 landslide?
17	A. I don't know.
18	
19	Q. Are you aware that there's been a causal investigation
20	into the 2022 landslide conducted by a geotechnical
21	engineer on behalf of the council?
22	A. Yes.
23	
24	Q. And are you aware that that geotechnical engineer
25	considered various hypotheses as potential causes including
26	a leaking pipe on the property at 10-12 View Point Road?
27	A. Yes.
28	
29	Q. And are you aware of whether or not he was made -
30	whether he was informed there had in fact been a burst from
31	a South East Water main the day before?
32	A. I don't know.
33	
34	Q. You'll see there that he goes on to say, "On the day
35	before over 80 millimetres of rainfall was recorded." You
36	understand he's talking here about 2022, not 2025?
37	A. I understand, yes.
38	
39	Q. "The leak led to several areas of surface damage,
40	including pavement distress and sinkholes within the
41	adjacent private property."
42	A. Yes.
43	
44	Q. And then there is a conclusion by SMEC, or the
45	relevant officer, that, "The evidence of 15 November 2022
46	suggests that defects are most likely to occur within the
47	proximity of the burst. It is considered as not feasible

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1 2 3 4	that water can flow down buried service trenches and leave the trench without resulting in defects being observed close to, within five metres, of the burst." Do you see that?
5	A. Yes, I can.
7	Q. So had SMEC been asked to investigate whether or not
8	South East Water's infrastructure had contributed to the
9	2022 landslide?
10	A. No, not to my knowledge.
11	O This is conclusions that they have drawn because
12	Q. This is conclusions that they have drawn because
13 14	they've become aware of the fact of a burst within the same
14	escarpment a day before an earlier landslide; is that as you understand it?
15	A. That's right, and then consider it not feasible.
10	A. That's light, and then consider it not leasible.
18	Q. Yes. And was that the first that you became aware of
19	the fact that there had been a burst within the same
20	escarpment before the 2022 landslides?
21	A. Yes, in terms of collation of this information; yes.
22	
23	Q. Could we move to 0083, please. You see there under
24	8.2.5, "It is feasible and moderately likely that the water
25	observed at Charlesworth Street and Waller Place may be
26	associated with the leak at Bayview Road."
27	A. Yes.
28	
29	Q. And so SMEC concludes in this preliminary way that
30	it's at least feasible and moderately likely that water
31	travelled from the Bayview Road leak at least to
32	Charlesworth Street and Waller Place?
33	A. Yes.
34	
35	Q. And, in your own mind, are you able to think how far
36	that is from the burst site?
37	A. Yes, I sort of have that map in my mind.
38	
39	Q. Yes. It involves the water travelling underneath or
40	over the top of the freeway?
41	A. Yes.
42	
43	Q. Yes. And you're aware that Charlesworth Street and
44	Waller Close are reasonably proximate at least to View
45	Point Road, which is the identified source of
46	the landslide; are you aware of that?
47	A. I think they're different distances, and I suppose

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1	that's why we asked them to look at to say could it be
2	feasible for it to travel to the landslide site.
3	
4	Q. But at least in the preliminary assessment of SMEC
5	it's at least feasible and moderately likely that water
6	travelled at least to Charlesworth Street and Waller Place?
0 7	A. I agree. That's why we need to do that investigation
8	in parallel to the landslip site.
9	
10	Q. And do you understand the mechanism by which the water
11	would have travelled from the burst site to Charlesworth
12	Street and Waller Place?
13	A. No.
14	/. IVO.
15	Q. Do you accept, though, that if water travelled from
16	the burst site to at least Charlesworth Street and Waller
17	Place it meant that not all of the water from the burst
18	travelled down the nearby stormwater grate? That must be
19	the case, mustn't it?
20	A. Yes, unless there was a - it came from the stormwater
21	at that place. But I understand what you're saying.
22	
23	Q. Yes, that's fair. An alternative path might be that
24	if the water entered the stormwater grate and then somehow
25	exited from the stormwater system to Charlesworth Street
26	and Waller Place.
27	A. I'm not saying that's what happened.
28	
29	Q. No, but as a matter of theoretical possibility.
30	A. Sure.
31	
32	Q. All right. Could we move then, please, to 0086,
33	please. This is dealing with what they describe as the
34	water table theory. Can you see under 8.3.5, "There is not
35	enough evidence to confirm or dismiss the mechanism."
36	A. Yes.
37	
38	Q. But it's assessed on a preliminary basis as being
39	highly unlikely.
40	A. Yes.
41	
42	Q. "It is considered more likely that sources other than
43	a leak in the mains would occur close enough to the subject
44	site to impact on the stability of the escarpment"; do you
45	see that?
46	A. Yes.
47	

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1 2 3 4 5 6 7 8 9	 Q. Now, is it clear to you, based on the evidence available to you in your position as managing director of South East Water and the evidence that's been heard in the course of this board of inquiry so far, that the area the subject of the landslides was at least quite wet to an unusual degree? A. I've heard the different reports from residents and also as part of these hearings, too, in terms of the different wetness they describe; yes.
10 11	And you know that around the general McCros area there
12	Q. And you know that around the general McCrae area there had been a variety of complaints made as to the effects of
12	excess water not just near the intersection of View Point
14	Road but in Waller Place, in Charlesworth Street and indeed
15	in other streets; you're aware of that?
16	A. Yes.
17	
18	Q. And so as far as you are aware as you sit there now
19	are you aware of any other potential source of significant
20	water other than South East Water's own network?
21	A. I wouldn't say it's significant. We are aware that
22	there's or understand there's groundwater in that area, and
23	a number of residents have referenced it at different times
24	as well, and also private property leaks at different
25	stages in that area as well, too, which we can provide more
26	information on.
27	
28	Q. You have information on those topics, do you?
29	A. Yes, we do.
30	
31	Q. In your witness statement, which I'll bring up, it's
32 33	SEW.0001.0001.0110, if we could have page 11, please, 0011. This is the part of your witness statement that's concerned
33 34	with the possible paths of water?
35	A. Yes.
36	<i>A</i> . 103.
37	Q. And you understand this to be a critical issue for
38	investigation by this board?
39	A. Yes.
40	
41	Q. And you can see there at 67 you say, "SEW considers
42	that a significant portion of the drinking water released
43	from the burst water main travelled above ground to a
44	stormwater pit approximately 30 metres away from the burst
45	site"?
46	A. Yes.
47	

1 2 3 4	Q. And that's what I was referring to before as the stormwater grate?A. Yes.
4 5 6	Q. And is that still SEW's position as you sit there today?
7	A. Based on our observations at the time, and then the
8	SMEC report starts to look at that as well in terms of what
9	proportion may or may not, noting that we'll never know.
10	
11	Q. Do you accept that if in the order of - accepting your
12	lower range estimates - 36 to 40 megalitres of water
13	escaped from the burst main
14	A. Mmm.
15	
16	Q that even if the overwhelming proportion of that
17	water travelled down and into the stormwater system by the
18	nearby stormwater pit, that the sheer volume of water left
19	over would still be sufficiently significant as to be able
20	to cause disturbances in the McCrae area?
21	A. That's why we asked the SMEC report to look into it in
22	terms of understanding what it might mean and how it might
23	impact either directly or by travelling through other ways,
24	including our assets, to get there.
25	
26	Q. Now, the stormwater grate sits at the surface - at
27	surface level; is that correct?
28	A. Do you mean in terms of the top of the grate?
29	
30	Q. Yes.
31	A. The one near the burst site?
32	
33	Q. Yes.
34	A. Again, I'm not, you know, an engineer but I have
35	walked to see it and, yes, it does.
36	O Vau physically increated it yoursalf?
37	Q. You physically inspected it yourself?
38	A. Yes, I walked to see it.
39 40	O Less And you'd describe it as being at ground
40 41	Q. I see. And you'd describe it as being at ground level?
42 43	A. Well, there's a grate that sits at the top.
43 44	Q. It might be slightly depressed.
44 45	A. I just mean it's on a slope, but it's like
45 46	π . I just mean its on a slope, but its like
40 47	Q. Yes, of course. I'm not asserting the ground is
17	

1	perfectly flat, but it's at ground level?
2	A. Yes.
3	
4	Q. And you understand from all of your experience at
5	South East Water that stormwater infrastructure is only
6	designed to capture water at ground level; it doesn't catch
7	subterranean water?
8	A. Yes, I understand that.
9	
10	Q. It's important for a stormwater system to be effective
11	that it's a closed system?
12 13	A. Yes.
13 14	Q. And so do you recall how far down into the ground this
14	water main was that was repaired?
16	A. Our water main?
17	
18	Q. Yes.
19	A. No, I'm not sure, but that will be in our records.
20	
21	Q. It's in your statement, I can tell you.
22	A. Yes. Okay. Thank you.
23	
24	Q. It's no criticism of you that you don't remember it.
25	But it's said in paragraph 50 of your statement to be
26 27	 1.7 metres below the surface. A. Thank you.
27	A. Thank you.
20	Q. Could I have on the screen, please,
30	SEW.0001.0001.0076. Could we please go to 0092. Have you
31	seen this picture before?
32	A. Yes, I believe I have.
33	
34	Q. And it might be a little difficult to tell but does it
35	look to you as though that hole is full of water?
36	A. It does look that way, yes.
37	
38	Q. It does?
39 40	A. Yes. Full of something, maybe.
40 41	Q. Yes. You know, don't you, that this is the site of
41	the burst main, there or thereabouts?
43	A. Yes, that's my understanding.
44	
45	Q. If we could go to the next page, please. So that's a
46	more close-up shot, I think, of the area, and that again
47	looks to be full of water, doesn't it?

1 2	Α.	That looks like there's water present there, yes.
3	Q.	Yes. Now, on the one hand we've got the stormwater
4	pit sitti	ng at ground level, we've got the main - I think
5		en said to be about 30 metres away - 1.7 metres
6		ground. And you know, don't you, that beneath the
7		its the sewerage system?
8	Α.	Yes.
9	Q.	In its own trench?
10 11		Yes.
12	А.	163.
13	Q.	And you know that sewerage systems are built on a
14		int downward slope because they rely upon gravity?
15	A.	Yes, that's right.
16		
17	Q.	Whereas your water's pressurised or can be
18	pressu	irised?
19	А.	That's right.
20	•	
21		And that means that water escaping from the burst pipe
22		It fall into the trench that surrounds the pipe; is
23		ht, as you would understand it?
24 25	A. Somot	It depends on the nature of a burst or a leak. imes obviously depending on the leak it goes up.
26	Somer	intes obviously depending on the leak it goes up.
27	Q.	If it's highly pressurised and the leak is at the top
28		t go straight up?
29	A.	That's right, yes.
30		
31	Q.	And do you know where the break in the pipe was?
32	Α.	I don't.
33		
34	Q.	Okay.
35	А.	But it's underground.
36	0	Quite
37	Q. A.	Quite.
38 39	А.	Yes.
40	Q.	So the likelihood here is that the water exited the
41		and the pipe is within a trench?
42	A.	The pipe's definitely within a trench, yes.
43		
44	Q.	And so the water will at some point at least,
45	accept	ing it's got a hard roof, it will then follow gravity
46	and wi	Il sit in the trench?
47	A.	I'm sorry, it's not my expertise, but it's exactly the

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1 2	line of questioning in terms of asking SMEC if it could have gone down the trenches, either our sewer or water
3	ones.
4 5	0 Ma Olaan, yayiya gatiana ya an ma baasyaa yayiya gati
5	Q. Ms Olsen, you've got one up on me because you've got
6	an undergraduate degree in chemical engineering. But
7	I would have thought this was pretty basic physics. The
8	water will find the lowest point, won't it?
9	A. Generally, unless - or the easiest way to flow, which
10	sometimes is the lowest point or it might be something
11 12	that, you know, moves it towards somewhere else.
12	Q. But, in any event, for water to get up the 1.7 metres
13	necessary before it can then travel along the path to get
14	to the ground there needs to be a significant volume of
15 16	water that fills the trench to the level of 1.7 metres,
16	doesn't there?
17	A. Again, it's not my expertise but we often have bursts
10 19	or leaks that go above ground and have water that comes out
19 20	at the top
20	
22	Q. But there's no suggestion that that's what was going
22	on here. You needed to dig this trench out to find the
23	break.
25	A. All of our water mains are generally underground and
26	most of them we will dig out to repair the leak. So the
20	water
28	
29	Q. But this wasn't a geyser. Nobody said, "I think
30	you've got a burst pipe over there because there's a geyser
31	shooting out of the ground." There was water bubbling out
32	of the ground as it was found; do you accept that?
33	A. That's right, yes.
34	A. Hatolight, you
35	Q. And do you accept the likelihood is that if there's
36	water bubbling out of the ground that that water has risen
37	to surface level by reason of the trench becoming full?
38	A. It's - I don't know that.
39	
40	Q. I'll put it to you in a different way.
41	A. Sure.
42	
43	Q. This is obviously speculation.
44	A. Sure.
45	
46	Q. This is an investigation into a possible theory.
47	A. Absolutely.

1	
	O Dut do you account that at least as a matter of
2	Q. But do you accept that at least as a matter of
3	possibility it would have been necessary for the trench to
4	fill before the water got to the ground level?
5	A. I don't know. But we did as part of that report look
6	to understand if it could have been our assets that
7	transported it or it could have been adding to groundwater.
8	
9	Q. I'm just trying to understand how it is that the water
10	gets into the pit because, as I understand it, a
11	significant part of SEW's theory is the water gets to
12	ground level and travels into the stormwater system.
13	A. Which is
14	
15	MS SIEMENSMA: Objection, Madam Chair. There's a couple
16	of problems with this questioning. There's references to
17	trenches. It's not clear to me whether we're talking about
18	sewerage trenches, water trenches. The other issue is
19	Ms Olsen seems to be asked questions about the SMEC theory
20	and hypothesis and whether it's workable. And, as she says
21	repeatedly, she is not the expert. She may have a
22	qualification, but she's never practised in that area. And
23	this theory is being tested against her. She has no
24	expertise.
25	
26	CHAIRPERSON: Mr Costello?
20	CHAINI EROON. IN COSTEND:
28	MR COSTELLO: I thought I had made the trench point quite
20	plain because I've only spoken so far about mains water
30	trenches, and I made that very clear in my questioning and
30	I said I will speak to the sewer trenches which sit below
	•
32	it. I asked you a question that was, "Are the sewer
33	trenches below?" But for now I've been speaking about
34	water filling in the mains water trench. As
35	
36	CHAIRPERSON: I think Ms Olsen - sorry.
37	
38	MR COSTELLO: Pardon me, I was going to address the second
39	part of the objection.
40	
41	CHAIRPERSON: Do that, Mr Costello.
42	
43	MR COSTELLO: I have made it quite plain that this witness
44	is not being called as an expert. But the notion that the
45	managing director of South East Water is unable to address
46	theories in the expert report that has been commissioned by
47	that organisation in circumstances where that organisation

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(7)

L OLSEN (Mr Costello)

1	has an ongoing investigation into the subject matter of		
2			
	the report and of this board of inquiry, and this is the		
3	sole witness that has been put forward by South East Water,		
4	is utterly unsustainable.		
5			
6	CHAIRPERSON: Ms Siemensma, I'm		
7			
	MC CIEMENICMAN If I might reply. These are questions hast		
8	MS SIEMENSMA: If I might reply. These are questions best		
9	asked of the author of the SMEC report.		
10			
11	CHAIRPERSON: And they will be, but I'm going to allow		
12	Mr Costello to ask the question.		
13			
	MD COCTELLO: Lucent to be clear to your Mc Olean, and of		
14	MR COSTELLO: I want to be clear to you, Ms Olsen, one of		
15	the reasons I'm asking you these questions is I have a very		
16	real concern about the extent to which this investigation		
17	is being seriously conducted by your organisation, and		
18	seeking to understand your level of understanding of this		
19	report is important for this inquiry understanding the		
20	extent to which South East Water is conducting its own		
21	serious investigation. Am I right to think that you've		
22	given this report serious consideration?		
23	A. Yes. And I also want to be clear we do take this very		
24	seriously. It is why when there was internal beliefs that		
25	this couldn't have impacted, you know, on the landslide		
26	area we absolutely commissioned the report to do it. So		
27	I'm sorry that's how it's come across. It's absolutely		
28	very serious. I just know that I don't have the		
29	qualifications in terms of how geotechnical or how water		
30	travels to be able to answer some of your questions.		
31	, , , , , , , , , , , , , , , , , , ,		
32	Q. I understand that. You've got no better		
33	qualifications than any non-expert. But what you do have		
34	is a position of very serious responsibility.		
35	A. Absolutely.		
36			
37	Q. And you have an obligation to make sure that those		
38	advising you are looking into all theories?		
39	A. Absolutely.		
	A. ADSOIULEIY.		
40			
41	Q. And let me put it frankly to you, Ms Olsen. You		
42	cannot discharge that function properly unless you have a		
43	very significant understanding of these matters, including		
44	alternative theories that have been put by others?		
45	A. Absolutely.		
46			
47	Q. And I want to explore the extent to which you		

1	under	stand those theories
2	Α.	Yes.
3		
4	Q.	and have given them consideration.
5	Α.	Sure.
6		
7	Q.	I do not expect you to give an expert opinion about
8	anythi	
9	A.	Thank you.
10		,
11	Q.	Can I have on screen, please, RES.0011.0001.0016, and
12	if we c	could go to the second page, please. Commissioner,
13		exhibit CA18. Ms Olsen, have you seen this
14		nent before?
15	A.	Yes, I believe I have.
16		
17	Q.	This was a document produced by somebody else but
18		e been shown it, have you?
19	A.	It looks similar to one of our documents, so I might
20		nfused. But I certainly know the areas.
21		
22	Q.	Thank you. You know that the yellow circle at the
23		n right-hand side is the burst site?
24	A.	Yes.
25	73.	100.
26	Q.	And then you know there's the freeway?
27	<u>а</u> .	Yes.
28	/	
29	Q.	And do you also know that the red lines are sewer
30	trench	•
31	A.	Yes, I understand that.
32	<i>,</i>	
33	Q.	The blue lines are mains water trenches?
34	A.	Yes.
35	<i>,</i>	
36	Q.	And do you know that sometimes the mains water line
37		rectly above the sewer trench?
38	A.	Yes. Not always, but yes.
39	/	
40	Q.	Not always but sometimes, yes. And do you understand
41		hat looked like the geysers or the sign for Wet &
42		are where significant amounts of water were detected,
43		ained about, or works were conducted to repair roads?
44	A.	I understand that, yes.
45	<i>,</i>	
46	Q.	And do you understand that part of this theory that's
47		investigated - and it only is a theory - is that what
	Serry	

1	may have occurred is that at the site of the burst the		
2	mains water trench filled. It's possible that the mains		
3	water trench, having so much water in it, that some of that		
4	water - who knows the volume - may have travelled even		
5	further down into a sewer trench. And sewer trenches are,		
6	as we've said before, on a constant downward slope.		
7	A. Gradient.		
8			
9	Q. The water, having found a constant downward slope in		
10	the sewer trench, can then travel unrestrained. And so,		
11	depending on the volume of water, you may have a		
12	circumstance where water is travelling from the burst into		
13	the main, down into the sewer. So you now have a sewer		
14	with water travelling		
15	A. Yes.		
16			
17	Q a main with water travelling, but becoming		
18	sufficiently pressurised that the water comes to the		
19	surface, and potentially large volumes of it then sloughing		
20	off and going straight into the stormwater grate nearby.		
21	But on this thesis the water needs to get to the surface		
22	first, and it may be that in order to get to the surface it		
23	means there is a very significant volume of water at a		
24	subterranean level to have pressurised the water to get to		
25	the point where it then travels.		
26	A. Yes.		
27			
28	Q. And on this thesis the water is then in either the		
29	sewer main or the water main and capable of travelling.		
30	And you can see the path of the lines there across the		
31	freeway, travelling essentially along the path of the sewer		
32	mains?		
33	A. Yes.		
34			
35	Q. And various spots in what you might just generally		
36	call the McCrae area becoming sodden or roads becoming		
37	damaged. Do you understand this to be one of the theories		
38	that's been put forward as the cause of the McCrae		
39	landslide?		
40	A. Yes, and that's the same one that we were looking for		
41	the SMEC report to investigate in terms of the trenches,		
42	both our sewer trenches and also the water mains trenches.		
43			
44	Q. And just to be clear in terms of the types of volumes		
45	that might be necessary to actually travel into the site,		
46	now, 36 megalitres of water is an unimaginably large amount		
47	of water, and plainly if anywhere near that amount of water		

1	travelle	ed into the site then whole homes would have been	
2	washed away. So nobody is asserting that an enormous		
3	quantit	y of the 36 million litres, if that's in fact what	
4	it was,	needed to travel to the site. But did you see any	
5	of the e	evidence of Mr Dane Pope, the council's	
6	Α.	Some, but not all.	
7			
8	Q.	Mr Pope, in connection with the 2022 landslide,	
9	equate	d over the 2022 landslide area, which is an area	
10	adjace	nt to but not the same area as the 2025 landslide,	
11	equate	d to 17 - sorry, 14,000 litres - well, no, I'll do	
12	the les	ser amount, 7,000 litres of water entering that area	
13	being e	equivalent to 90 mm of rain, which he describes as a	
14	one in	a 100-year rain event, and 14,000 litres of water	
15	•	equivalent to 180 mms of rain. Now, it depends on	
16		tribution of the area, so this is highly inexact.	
17		conclusion in respect of the 2022 landslide was	
18		e primary mechanism that gave rise to the 2022	
19	landsli	de was the historic rains	
20	А.	Yes.	
21			
22		that had so sodden and saturated the soils as to	
23		the conditions for a landslide.	
24	А.	Yes.	
25			
26		And so when one considers that 90 mm of rain was	
27		ent to be, on Mr Pope's analysis at least, the	
28	•	y cause of the 2022 landslides you can see how for	
29		ard of inquiry it becomes very relevant to understand	
30		uge volumes of water left this burst site and	
31		ed into it but if any volumes of water left this	
32		ite; do you understand that?	
33		I understand. I think it's the same thing that we	
34		to understand; like, could our assets have	
35	contrib	uted.	
36	0	M	
37		Yes.	
38	А.	Holistically.	
39	<u> </u>	And eside from this hunst water main on Devision Dead	
40		And aside from this burst water main on Bayview Road	
41 42		ve been describing it	
42	A.	Yes.	
43	0	are you aware of any other hurst water mains in the	
44 45		are you aware of any other burst water mains in the	
45 46		nt period that might have possibly contributed water e McCrae landslide area?	
40 47		Just so I understand, do you mean sort of in November	
71	Π.		

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1 2	and December?
2 3	Q. I mean in the period before the 5 and then 14 January
4	landslides, yes. So, for present purposes, confine
5	yourself to November and December.
6	A. Not that I am aware of. But the report did look at
7	our burst history leading up into that time from I believe
8	26 November.
9	
10	Q. And what did it conclude?
11	A. This is the SMEC report.
12	
13	Q. Sorry, but what did it conclude in respect of other
14	possible bursts?
15 16	A. That those hypotheses that were shown before in terms of could a burst closer or a leak closer to the site or
17	could one, you know, further away like this have
18	contributed.
19	contributed.
20	Q. Could I go to SEW.0001.0001.0076. Go to 0159, please.
21	I apologise this is in portrait format when landscape -
22	thank you very much. I didn't know that was possible.
23	Have you seen this map before?
24	A. Yes, I have.
25	
26	Q. All right. Could you explain to the chair what this
27	map is, please?
28	A. Yes. It's a map of the McCrae area with the landslide
29	site on the sort of top left at 10 View Point Drive, and
30	then the yellow highlight is the areas surveyed by leak
31	detection, and then there's some notes on it as well.
32 33	Q. All right. And here there are little red palm tree
33 34	type diagrams. Do you know what they are?
35	A. I don't know what they are, but - no, I don't know
36	what they are.
37	
38	Q. All right. Can you see that on the right hand - well,
39	let's start from the border. Can you see from the bottom
40	right-hand border there's a highlighted notation that says
41	"leak on main 100mm PVC"?
42	A. Yes, I can.
43	
44	Q. And then if you move to the left there's the burst
45	150mm PVC water main?
46 47	A. Yes.
-+/	

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1 2 3	Q. And you understand that to be the Bayview Road burst?A. Yes, I do.
4	Q. And then can you see, if one travels up, "Water coming
5	to surface in nature strip"?
6	A. M'hmm.
7	
8	Q. And then you travel up again, "Water coming to surface
9	from potholes"?
10	A. Yes.
11	
12	Q. And then across, "Water coming to surface from
13	potholes in the road"?
14	A. Yes.
15	
16	Q. And then further up, "Customer number" - not sure -
17	"reports increase in flow from GW basement pumps,
18	discharges to the drain."
19	A. So that's 5 Prospect Hill Road where we know that
20	there was a customer leak.
21	
22	Q. Thank you. And then can you see number 6, "Water
23	coming to surface in nature strip"?
24	A. Yes.
25	
26	Q. And you know that - well, I'll finish it. Drains
27	continuously flowing around Prospect Hill?
28	A. Yes.
29	
30	Q. And then you can see there landslide at the rear of
31	the property of 10 View Point?
32	A. Yes.
33	O Do you know who propored this map?
34 25	 Q. Do you know who prepared this map? A. No. I don't.
35 36	A. No, I don't.
30 37	Q. Okay. But it was prepared by South East Water? Was
37 38	it prepared by South East Water?
38 39	A. My understanding would be South East Water or maybe it
39 40	was one of our industry partners; but I don't know.
40 41	was one of our industry partners, but ruon t know.
42	Q. I see. It was prepared at a minimum for South East
43	Water?
43 44	A. Yes, sorry.
45	7.1. 100, 00Hy.
46	Q. And the areas of road, if you like, what look to be
47	road, that are highlighted are the areas that were surveyed

1	for leak detection?
2	A. Yes, that's right.
3	
4	Q. All right. And do you know when the acoustic leak
5	detection that is indicated here was performed?
6	A. Not for this particular map, but we have a range of
7	the maps of where leak detection is done on different
8	dates. But I don't know this particular one.
9	
10	Q. But I think that you agreed with me earlier that leak
11	detection wasn't helpful in the particular circumstance of
12	this burst; it never identified any?
13	A. Yes, the way that we did it. It wasn't until we did
14	those steps and then our employee also could hear the
15	stormwater drain and then followed it up past the freeway.
16	
17	Q. And that might in part be a function of just the sheer
18	distance between the burst and where the water was
19	surfacing?
20	A. I think there was a number of factors, that being one
21	of them. Also, as I sort of mentioned before, normally
22	when water's pooling it's in an area that people see. And
23	so that means it gets detected earlier.
24	
25	Q. Could we please have Ms Olsen's statement back on the
26	screen, SEW.0001.0001.0110, and if we could go to page 11.
27	Can you see at 67 you say, "SEW considers that a
28	significant proportion of the drinking water released from
29	the burst water main travelled above ground to the
30	stormwater pit."
31	A. Yes.
32	• And becades the such as so that we had before do you
33	Q. And based on the exchange that we had before do you
34	accept that, even if that is so, very serious investigation
35	is required to ascertain what happened with that portion of
36	the drinking water released from the burst water main that
37	did not travel down the stormwater pit?
38	A. Yes, and hence our investigation.
39	And then at 69 years any "Record on the information
40	Q. And then at 68 you say, "Based on the information
41 42	currently available, SEW considers that drinking water that
	entered the ground and moved downslope, that drinking water
43 44	would likely flow into and then follow the trenches of
	existing services" A. Yes.
45 46	A. Yes.
46 47	• "bacquee they are intentionally constructed on
47	Q "because they are intentionally constructed on

1 2 3 4 5	varying downhill grades." A. That's right. Stormwater and sewer. As you mentioned, not necessarily water, but definitely stormwater and sewer.
6 7	Q. I see. And have you considered whether if water travels along either a stormwater main or a mains water
8	main and arrives at, in effect, a hard stop, an
9	intersection, what would then occur with the water?
10	A. I would say that in terms of my knowledge I don't have
11	that expertise, but I know that that is something that the
12	report considered.
13	
14	Q. There's a chance that in those circumstances the water
15	may be forced to ground, for example?
16	A. I think that it's sort of noted that it will generally
17	flow down, unless there's an obstruction.
18	
19	Q. The significant proportion that you talked about in
20	paragraph 67, you don't have any idea as things currently
21	stand of what that proportion is?
22	A. No. That's another thing that the expert report
23	considers. And I think we didn't measure it. I'm not sure
24	that we will be able to know.
25	
26	Q. But, for example, if the bottom of your estimate,
27	current estimate, of 36 million litres is correct, if even
28	10 per cent of it didn't travel down the drain we're still
29	talking about 3.6 million litres?
30	A. Unfortunately, I just don't know what proportion.
31	l don't know.
32	
33	Q. Anything other than a proportion - an extremely high
34	proportion in the 90s is going to mean that there are
35	millions of litres of water that still need to be accounted
36	for; do you accept that?
37	A. I think, yes, that's why we asked if our assets could
38	have contributed.
39	
40	Q. And you're aware of the fact that after the landslide
41	water continued to flow in the landslide area, including -
42	sorry, the landslides, including after the first landslide
43	through and then under the Morans' house?
44	A. I've heard different reports in terms of that, but
45	I certainly heard the evidence given; yes.
46	
47	Q. Did you see any of the vision yesterday after the

1 2	second 2025 landslide of water leaving the cliff immediately after the landslide had occurred?
3	A. Yes, I saw some of that, too.
4 5	Q. All right. I asked you earlier about your statement
6	that SEW is not aware of any detrimental effects directly
7	caused by the burst water main.
8	A. Yes.
9	
10	Q. Do you recall that?
11	A. I do.
12	
13	Q. You say that at paragraph 60 and 70 of your statement.
14	You also say at paragraph 49 that, "SEW is not aware of
15	pecuniary losses or expenses incurred by persons as a
16	result of the burst water main." Do you remember that?
17	A. Yes.
18	
19	Q. Now, would you qualify those statements in any way
20	now?
21	A. Yes, in the same way that we spoke about before,
22	subject to the work that we need to do investigating
23	Charlesworth and Waller, and we'll continue on with this
24	work in terms of could we have contributed to the
25	landslide, subject to the board's directions.
26	Que Vaulte aware that an 2 January South East Water
27	Q. You're aware that on 2 January South East Water
28 29	confirmed to the local council's contractors that it would take responsibility in respect of the damage at
29 30	
30 31	Charlesworth Street and Waller Place; are you aware of that?
32	A. No, I'm not.
33	Α. Νο, ΠΠΠΟΙ.
34	Q. All right. To be fair, I'll show it to you. It may
35	be that you may wish to correct the statement that's been
36	made by another. Could I have MSC.9000.0001.0017. This
37	might be a matter of which you're just not aware, Ms Olsen.
38	A. Sure.
39	
40	Q. And if I could have page 0032. This is not an SEW
41	document and you may not be familiar with it. Do you see
42	here this is an email from Jenna Kirk at Fulton Hogan. Do
43	you know that Fulton Hogan are a contractor engaged by the
44	Mornington shire council?
45	A. Ive heard as part of these proceedings.
46	
47	Q. All right. You weren't previously aware of that?

1 2	Α.	No.		
2 3 4	Q. Charl	This is concerning ongoing water issues at esworth, Waller and now Coburn Avenue. Can you see it		
5 6	says ' A.	"under the management of South East Water"? Yes.		
7 8 9	Q. East \	And it says, "Fulton Hogan have liaised with South Water supervisor over the last few weeks to advocate		
10 11	on ge	tting prompt action out here, given the impact to both e property and MPS assets."		
12 13	A.	Yes.		
14 15 16		Then it says, "SEW have identified a burst water main hut water off on 31 December. However, there is still flowing "		
17 18	A.	flowing." Yes.		
19 20		"South East Water have confirmed, given the amount of flowing now for nearly six weeks, it's not an MPS		
21 22 23	storm A.	water concern." Yes		
23 24 25	Q. Shireʻ	Do you understand MPS to mean Mornington Peninsula		
26 27	A.	Yes, I do.		
28 29		"Recent update as at 2 January 25 is that another leak tion team are heading down to further investigate. An		
30 31 32	custo	update is also being provided as we speak to the SEW customer team to be sure to advise residents that the issue is under the management of SEW." Do you see that?		
33 34	A.	I can.		
35 36	Q. correc			
37 38 39	A. Q.	I'm not, no. All right. But in any event at the time that you made		
40 41	your v	witness statement you weren't aware of the matters re set out in		
42 43	A.	No.		
44 45		Sorry, to be clear, when I say "made your witness nent", I don't mean when you signed it this morning,		
46 47		n when it was originally provided you weren't aware of matters?		

1	A. No. I mean, yes, the burst water main, but not that
2	it was our responsibility.
3	
4	MR COSTELLO: Is that a convenient time?
5	
6	CHAIRPERSON: We'll have a 15-minute break now, Ms Olsen.
0 7	A. Okay. Thank you.
8	
9	SHORT ADJOURNMENT
10	
11	MR COSTELLO: Ms Olsen, I just want to ask you a few final
12	questions and then I suspect others may have some questions
12	for you.
14	A. Sure.
15	• We were talking before about the Weller Diago zone, do
16	Q. We were talking before about the Waller Place zone; do
17	you recall that?
18	A. Yes.
19	
20	Q. And I directed you to the email where consideration
21	was being given to the nighttime testing, including of
22	the tank that services that zone?
23	A. Yes.
24	
25	Q. Are you aware of whether the site of the burst main in
26	question here is in that zone?
27	A. I'm not sure about that particular email in relation,
28	no, sorry.
29	
30	Q. Don't worry about the email. I was only just doing
31	that to jog your memory about the phrase "Waller Place
32	zone".
33	A. All right.
34	
35	Q. You're aware at least from what's gone on today that
36	your organisation has a zone that's referred to at least
37	sometimes as the Waller Place zone?
38	A. Yes.
39	
40	Q. And do you know whether or not the burst main that we
41	have been discussing is in that zone?
42	A. I actually do not.
43	······································
44	Q. Is that something one would need to understand in
45	order to do the appropriate testing?
46	A. It's not something that I understand, but it's
47	absolutely something that our teams understand closer to

1	that to do the right testing; yes.
2 3 4 5 6 7	Q. If one wished to understand the water usage within the relevant zone one would need to understand the metes and bounds of the zone?A. Absolutely, yes.
8 9 10 11	Q. And if this water main was outside of that zone that might be relevant to, for example, nighttime testing?A. Yes, that's right.
12 13 14 15 16 17	 Q. Or is nighttime testing only ever relevant to tanks? A. In terms of nighttime testing, generally we do that on tanks. But it's related in the sense that, if there's a leak somewhere in the network, then the tank goes down faster than you would expect, if that makes sense.
18 19 20 21 22	 Q. All right. I asked you some questions earlier about the location of this particular main and the difficulties in getting to it. A. Yes.
23 24 25 26	Q. Do you know if South East Water has the right or ability to maintain the ground above water mains?A. I'm not sure.
27 28 29 30 31	Q. Okay. Do you know if South East Water has any agreements or understandings in place with local councils as to that matter?A. I'm not sure.
32 33 34 35 36 37	 Q. Do you accept that the area around the burst main here was not maintained in a way that allowed for repairs to be undertaken expeditiously? A. I accept that there's obviously vegetation around it that meant we needed to get approval for tree removal et cetera, yes, and the fence.
38 39 40 41 42 43 44 45 46 47	 Q. Whether it's the responsibility of council, South East Water or some other entity, do you accept that the area around the burst main was not maintained in a way that allowed for repairs to be undertaken expeditiously? A. No, not expeditiously in the sense that, you know, we do have 27,000 kilometres of pipeline and, maybe to give a sense of that, that is equivalent to the coastline around Australia. It's a lot of pipeline. And some of our pipelines are - makes it harder to get to. That might be

1	trees	or other reasons. But we do it all the time in terms
2	of beir	ng able to access those mains in a way once we've
3	locate	d a burst to be able to repair them.
4		
5	Q.	So you are not concerned about the state of
6	mainte	enance of the land above where this water main was;
7		just a part of the ordinary operation of your
8		isation, is that right?
9	A.	I think the fact that there are trees around where a
10		
10	water	main is is something that does happen; yes.
	\circ	Thenk you - Do you accept that as at today Couth Fast
12	Q.	Thank you. Do you accept that as at today South East
13		cannot definitively say whether water from its
14		rk did travel to the land at 6 and 10-12 View Point
15		before 5 January?
16	А.	I accept that, yes.
17		
18	Q.	Are you satisfied that appropriately comprehensive
19	invest	igations are being made to determine whether water
20	did tra	ivel to that location?
21	Α.	We took the investigation that we spoke about earlier.
22	lt's cle	ear that it's a preliminary investigation that we
23	need t	to keep going.
24		
25	Q.	Is SMEC continuing to investigate that matter?
26	А.	I believe at this stage we're just pausing, subject to
27	if there	e's further direction. But we will keep going on
28		he other matter. I don't know how that works in
29	•	of that but, yes.
30		
31	Q.	I don't understand your evidence.
32	<u>а</u> . А.	Sorry.
33	73.	Cony.
33 34	Q.	So let me try and ask you some additional questions to
34 35		it clear.
	A.	Sure.
36	А.	Sule.
37	~	As this we stand as at the day OMEO have delivered a
38	Q.	As things stand as at today SMEC have delivered a
39	•	inary report?
40	Α.	Yes, that's right.
41		
42	Q.	And we've been through that report.
43	A.	Yes.
44		
45	Q.	Does SMEC have current instructions to continue their
46	work?	
47	Α.	No.

1 2 3 4 5 6 7 8	the fa A. that w	And were you suggesting that the reason SMEC don't investigations to continue that work is because of ct the board of inquiry is now operating? No, that's our accountability. It's our intention re would keep going, unless there was a different way proposed.
9 10 11	Q. A.	Do you mean proposed by this board? Yes, proposed by this board.
12 13 14 15	Q. you re A.	The SMEC report's dated 5 May. Is that the date that eceived it? That's right.
16 17 18	Q. A.	All right. And have you met with SMEC since then? No, I have not.
19 20 21 22	Q. respo A.	Who is it within your organisation that has nsibility for the engagement with SMEC? Yes, it's Julian Tully.
23 24 25	Q. A.	And is Mr Tully a direct report of yours? No, he's not.
26 27 28 29	•	To who does Mr Tully report? He's a technical director, and our technical directors to different people. I believe he reports to ie Littlefair.
30 31 32 33	Q. A.	Sorry? Charlie Littlefair.
34 35 36	Q. A.	Is he a direct report of yours? Yes, he is.
37 38 39	Q. SEW this po	So is it the case that no decision has been made by as to whether SMEC ought be engaged for further work at pint?
40 41 42	A. Q.	We've discussed that it's our intent to keep going. But you haven't instructed them to keep going?
43 44 45	A.	No, and that might be my misunderstanding in terms of works post this board.
45 46 47	Q. as to f	All right. Have you been given any indication by SMEC the timing by which they could complete a report that

1 2	was more definitive? A. No.
3 4 5 6 7	Q. Have you asked SMEC whether they're able to provide you with that timing?A. No.
8 9 10 11 12	 Q. All right. Is this a matter that you have - no, I withdraw that. Have members of the board of South East Water been provided with a copy of the SMEC report? A. No, but they've been informed of it.
13 14 15 16 17	Q. Is there any particular standing board committee that would have responsibility for this matter?A. The overall board's been updated on this matter as we've gone.
18 19 20	Q. Is there a risk management committee?A. Yes, we do.
21 22 23	Q. Is the risk management committee a subcommittee of the board?A. It is.
24 25 26	Q. And is the risk management committee briefed on these matters?
27 28	 A. So the whole board has been briefed on this matter. Observe Andria terms of continued are article to the
29 30 31 32	Q. Okay. And in terms of continued reporting to the board the reporting is to the whole of the board, is it?A. Yes, that's right.
33 34 35 36 37 38	 Q. All right. I've asked you this question a number of times now but I'm not entirely clear as to your evidence so I'll just ask you a final time. In respect of the locating of the burst at Bayview Road A. Yes.
39 40	Q do you accept that South East Water was too slow to locate the burst?
41 42 43 44	 A. I wish we were faster. I accept that it's a lot of water. I accept that we would have liked to have found it earlier. And so I accept it took too long for us to find it. But we did our standard practices at the time.
45 46 47	Q. Does that mean the answer to my question is yes?A. I think it does. I just wanted to acknowledge - just,

1 2	yes.
2 3	Q. Are you reluctant to answer "yes" to that question
4	because you're worried about legal liability?
5	A. No, I'm not. It's just more I want to acknowledge
6	that our team tried in terms of trying to find that leak,
7	and they were following their practices at the time. And
8	I just want to acknowledge we didn't find it. You know, it
9	took a large number of weeks to find it.
10	
11	Q. And do you intend to put in place changes to the
12	systems and processes of your organisation to try and avoid
13	the risk of another leak of this magnitude lasting for as
14	long as this leak lasted?
15	A. Absolutely, and that's already under way.
16	
17	Q. And when do you expect to be in a position to have
18	made those changes?
19	A. I think it will have to be in phases, as we discussed.
20	So there's some immediate changes that we can make and are
21	looking to make. I think there's some further work that we
22	will need to undertake in terms of electroconductivity and
23	groundwater and how that may or may not impact it to know
24	how those tests are used.
25	
26	Q. All right. Finally, Ms Olsen, can the chair be
27	assured of full transparency and cooperation by South East
28	Water as the board continues its work?
29	A. Yes.
30	
31	MS COSTELLO: No further questions, thank you, Madam
32	Chair.
33	
34	CHAIRPERSON: Thanks, Mr Costello. Are there any
35	questions?
36	
37	MR VINEY: Yes, Madam Chair.
38	
39	CHAIRPERSON: You're appearing for the shire?
40 41	MR VINEY: Yes. My name is Mr Viney. I'm appearing for
41 42	MR VINEY: Yes. My name is Mr Viney, I'm appearing for the shire, and I seek leave to ask a small number of
42 43	questions, which I have run past my friend Mr Costello,
43 44	who's raised no objections.
44 45	
46	CHAIRPERSON: You can ask the questions.
40	

1 2	<examined by="" mr="" th="" viney:<=""></examined>
2 3 4 5	MR VINEY: Hi, Ms Olsen. A. Hello.
6 7 8 9 10	 Q. My name is Cal Viney. I'm here today on behalf of the shire. Mr Costello showed you a Montage record this morning concerning the leak at 1 Charlesworth Street? A. Yes.
11 12 13 14	Q. And it was dated 28 November 2024; do you recall that record?A. Yes.
15 16 17 18 19 20 21 22 23	 Q. Yes. And do you agree that that record showed that on 28 November 2024, "Matthew, Mornington council, advised that they are on site and it is hazardous. Crew in transit. Matthew would like a call back regarding ETA so that he can set up traffic management." Do you agree that that's an accurate record? A. I can't remember word for word, but I agree that broadly that's what it said; yes.
23 24 25 26 27 28 29	 Q. Okay. So would you agree that that's a record of a representative of the shire contacting South East Water on 28 November 2024 about the state of the road at 1 Charlesworth Street? A. Yes.
30 31 32 33 34 35	 Q. Now, Mr Costello didn't show you a record of this, but are you aware - as I take it, your evidence was that you have reviewed a number of Montage records in preparation? A. I've tried, but I'm obviously not across all of them in detail. But, yes.
36 37 38 39 40 41 42 43 44 45 46 47	 Q. I see. Well, are you aware after having reviewed those records of whether around about 4 December 2024 a representative of the shire contacted South East Water about Charlesworth Street and Waller Place? A. I'm not. But our records in terms of those task summaries, many of them would hopefully list that. And I'm certainly aware of interactions during that time. I just can't remember if it's that date. But, yes. Q. All right. Moving forward a little bit, I just want to take you to the SMEC report. If the operator could bring that up. The PDF page that I'm after is page 101.

1	SME	C The Bates is SEW.0001.0002.0001_0101. I took that
2 3	your A.	evidence earlier was that you have read this report? Yes.
4 5	Q.	Yes. Just to situate you as to where we are
6	Q. A.	Sure.
7	7.	
8	Q.	we are in appendix A.
9	Α.	Yes.
10		
11	Q.	Which is effectively a timeline of various events.
12	А.	Yes.
13	_	
14	Q.	Would you be able to look at the very final entry
15	whic	
16	А.	Yes.
17	0	
18	Q.	And do you see there that the entry is, "Fulton Hogan
19		buth East Water. Advised amount of pressurised water
20		ing. They [FH] think it's not stormwater. They
21 22		ked all the stormwater assets on behalf of council and
22 23		tormwater issues found. Said that road [Charlesworth et perhaps] is getting bad and might have to close the
23 24		down due to water affecting condition of the road."
2 4 25	A.	Yes. I can't see the part over the
26	73.	
27	Q.	Yes, sorry.
28	A.	That's fine.
29		
30	Q.	The final part is over the page.
31	Α.	Sure.
32		
33	Q.	Now, was it your evidence earlier that SMEC were
34	_	ed with information from South East Water?
35	Α.	Yes.
36	0	
37	Q.	And am I right to assume that this timeline would be
38		ared based on records that South East Water have
39 40		ided to SMEC?
40 41	A.	I would presume so. I'm not sure anything else that's
41 42		ere. But, yes, certainly our Montage records are a
42 43	part	of this; absolutely.
43 44	Q.	Okay. So have you reviewed yourself a Montage record
45		identifies that Fulton Hogan contacted South East
46		er to the effect that's set out in this appendix?
47	A.	I do remember a record that says that, yes.
		, , ,
	.16/05/2025	5 (7) 673 L OLSEN (Mr Viney)
		The second second second second second

1	
2	Q. Yes. Okay. I might then move back to the Montage
2	record. It was put to you earlier today.
	A. Sure.
4 5	A. Sule.
5	
6	Q. It's SEW.0001.0001.0085_0013.
7	A. Yes.
8	
9	Q. Yes. And when you look at this document, it is on
10	page 13, you can see first of all that the task address is
11	2 Waller Place?
12	A. Yes.
13	
14	Q. And you can see then that the task story identifies a
15	number of dates. The first date is 1/12/2024?
16	A. Yes.
17	.
18	Q. I would like you to look down a little bit further
19	until you reach 20/12/2024. It's about in the middle of
20	the page. It's square brackets "checked"?
21	A. Yes.
22	
23	Q. If we read down five lines there's a paragraph or a
24	sentence that starts, "Steff passed me onto Jenna
25	(infrastructure department at council) and Jenna advised
26	spoke to supervisor at South East Water at 9.13 am this
27	morning (did not get his name) and was told we have been
28	out here several times. Jenna advised Fulton and Hogan
29	were out there this morning and said too much water to be
30	stormwater."
31	A. Yes.
32	
33	Q. You're aware, aren't you, from evidence today or
34	perhaps rather from propositions put to you by Mr Costello
35	that Fulton Hogan is the shire's roads and drainage
36	contractor?
37	A. Yes.
38	
39	Q. Yes. Do you agree that the two records that I've
40	shown you - so the first being the SMEC record and the
41	second being the South East Water's own Montage record -
42	demonstrate that I'll say representatives of the shire or
43	Fulton Hogan had advised South East Water of a pressurised
44	water issue around Charlesworth Street and Waller Place by
45	20 December?
46	A. I agree that they said that it wasn't stormwater, and
47	that both representatives were there trying to work out

1	what it was: stormwater, groundwater or mains water.
2	Q Vec Deveu eccent theugh that is the earlier
3 4	Q. Yes. Do you accept, though, that in the earlier record that I took you to there was a reference to
4 5	pressurised water? Do you accept that South East Water was
6	advised by Fulton Hogan on 20 December that the issue was
7	pressurised water running?
8	A. I can't see it here, but if that's what the record
9	says.
10	
11	Q. I'm quoting "advised amount of pressurised water
12	running".
13	A. Sure. If that's what the record says, then I accept
14 15	that.
15 16	Q. Okay. And do you agree that the two records that I've
10	shown you show that as at 20 December 2024 the shire's
18	representatives, being Fulton Hogan, had advised South East
19	Water that Fulton Hogan had checked all stormwater assets
20	on behalf of the council and that no stormwater issues were
21	found?
22	A. I can read here that, yes, that it says that it's not
23	stormwater.
24	O Stoving on computing to chather outlinit
25 26	Q. Staying on - sorry, I'll move to another exhibit. Operator, I'd like to go to MSC.9000.0001.0032. You were
20 27	taken to this email earlier today. It's Q4.1 EAA of
28	the exhibits of David Smith's second witness statement, if
29	that's assistive. Would you like me to read it again?
30	Perhaps while the email's coming up I'll just read you the
31	excerpt from it?
32	A. Sure.
33	
34	Q. It's an email you'll recall you saw a moment ago.
35	It's an email from Jenna Kirk of Fulton Hogan dated
36 27	2 January 2025, and the email states - it's to customer
37 38	support leadership group at the Mornington Peninsula Shire Council and it says, "Please be advised the ongoing water
38 39	issues at Charlesworth, Waller and now Coburn Avenue are
40	under the management of South East Water. Fulton Hogan
41	have liaised with South East Water supervisor over the last
42	few weeks to advocate on getting prompt action out here,
43	given the impact to both private property and MPS assets."
44	Do you recall that?
45	A. Yes.
46	
47	Q. Reading that earlier? Yes.

1	A.	Not word for word but I recall the email, yes.
2 3 4 5 6 7 8 9 10	prior t been ongoi	Yes. And would you agree that for some weeks - based e records that I've taken you to that for some weeks to the first week of January 2024 Fulton Hogan had in contact with South East Water concerning the ng water issues at Charlesworth Street, Waller Place coburn Avenue? Yes.
11 12 13 14 15 16	not wl	And would you agree that it's South East Water's nsibility to undertake testing to identify whether or hen there's a water leak whether or not that water is ating from a South East Water asset? Yes.
17 18 19	Q. A.	I'm just going to change tack for a moment. Sure.
20 21 22 23 24	McCra	Now, in your witness statement at paragraph 8 you fy that sewerage infrastructure or assets in the ae landslide area are controlled, operated and managed intained by South East Water; is that correct? That's correct.
25 26 27 28 29 30		And in your statement at 10 you say that water mains the McCrae landslide area are controlled, operated nanaged or maintained by South East Water? That's correct.
30 31 32 33 34 35		You gave evidence this morning that South East Water act various tests to identify the source of water, and arse one of those is electroconductivity testing? Yes.
36 37 38 39 40 41	contra	And you have also said obviously you've reviewed the ds that South East Water has concerning its actors' response to water issues at Charlesworth t, Waller Place and even Bayview Road; that's correct? Yes.
42 43 44	Q. A.	That's the Montage records? Yes, that's the Montage records.
45 46 47		Is it correct in some instances that those records that customer complaints about water in those areas ultimately referred to the shire on the basis that

1	water testing suggested the source of the water was not a
2	South East Water asset?
3	A. And that's what happens often in those circumstances,
4	that the shire - the Mornington Peninsula Shire or other
5	shires might refer something to us if they think it's our
6 7	assets, and then we might refer it to them if we think it's not ours.
8	not ours.
o 9	Q. Yes, okay. And one of the records that you were taken
9 10	to earlier today just as an example of this is the same
10	Montage record that I've referred to a number of times now.
12	It's, to assist, SEW.0001.0001.0085, and it's page 13 of
12	that document. So it will be _0013. Yes. And so you can
14	see there, just moving sort of towards the top of that
14	document
16	A. Yes.
17	A. 165.
18	Q the date 1/12/2024 there's a sentence that starts,
19	"I tested the water a few times"
20	A. Yes.
20	7. 105.
22	Q "& the readings is alot more then task 001 & the
23	reading is over 3700."
24	A. Yes.
25	
26	Q. "This is a council issue. I rang the call back number
27	& no answer." So is that a reflection of South East
28	Water's standard practice at that time when South East
29	Water have conducted - I take it that the reference to
30	3,700 is an EC reading; would you agree with that?
31	A. That would be my assumption, too; yes.
32	
33	Q. So was it South East Water's standard practice that
34	when an EC reading is outside the parameters of drinking
35	water, which you've given evidence earlier today of between
36	50 and 200, that it is sent back to the shire?
37	A. So depending. Sometimes we might go out there and do
38	an investigation and maybe it's a customer property
39	identified. If we believe that it could be another asset
40	like a stormwater impacted then we would let the council
41	know.
42	
43	Q. Yes. And would that be the case if you've been
44	advised by the council or the council's contractor that
45	they have identified that the water that they have observed
46	or tested is not from a stormwater asset?
47	A. Yes, this is - I haven't really seen a situation where
	•

1	it - normally what happens is there's a referral and then
2	it gets dealt with. So I haven't really seen a case like
2 3	this before where there's multiple referrals along the way.
4 5	But I can see that's what's happened here.
5	Q. Okay. And have you reviewed a Montage record at all
6 7	Q. Okay. And have you reviewed a Montage record at all that identifies after the leak was fixed at
8	Bayview Road A. Yes.
9	A. Yes.
10	• the same approach was taken, as there had been a
11	Q the same approach was taken; so there had been a
12	leak, and then a few days later South East Water
13	effectively referred water issues at Charlesworth Street
14	and Waller Place area back to council? Have you seen a
15	record that shows that?
16	A. Not - I'm not sure of one, but
17	
18	Q. Okay. Would it surprise you if there was one?
19	A. Just so I understand your question, if that post the
20	Bayview Road leak
21	
22	Q. Yes.
23	A we had referred it back? It wouldn't - yes, it
24	wouldn't have surprised me. I don't know of that record.
25	
26	Q. It wouldn't have surprised you, though? I misheard
27	you, sorry.
28	A. Sorry, I don't know of that record. I would hope that
29	that wouldn't be the case. I should say at that time we
30	didn't know if it was groundwater. There can be three
31	situations in terms of mains water, ground water or
32	stormwater.
33	
34	MS VINEY: Yes. That concludes my questions.
35	
36	CHAIRPERSON: Thanks, Mr Viney. Ms Evans, do you have any
37	questions?
38	
39	MS EVANS: No.
40	
41	MS SIEMENSMA: Madam Chair, there are a few topics, not
42	many, that I had flagged with Mr Costello yesterday, but
43	primarily just by way of re-examination.
44	
45	CHAIRPERSON: You can ask questions.
46	
47	<examined by="" ms="" siemensma:<="" td=""></examined>

1	
2	MS SIEMENSMA: Ms Olsen, you were asked some questions
3	about digital meters this morning?
4	A. Yes.
5	
6	Q. And the roll-out of those. And you touched on the
7	impact of identifying a leak with a digital meter. Can
8	I ask why it is the case that South East Water haven't
9	rolled out digital meters much earlier, you know, two years
10	ago, three years ago?
11	A. Every five years we seek permission for our prices to
12	fund investments from the Essential Services Commission.
13	We did a trial to prove the benefits of digital meters. We
14	received the funding then to roll those out across from
15	1 July 2023. Then we needed to go through a procurement
16	process to purchase those meters. And then we've started
17	to roll them out in earnest since.
18	
19	Q. And, as I understood your evidence earlier today, you
20	had spoken about identifying some leaks on private
20 21	property, and I made a note that you had made a reference
21	to I think it was 30,000 litres at one place.
	•
23	A. That's right.
24	\mathbf{O} . We that an isolated private property look or have you
25	Q. Was that an isolated private property leak or have you
26	found a number of them?
27	A. So there are 20 continuous flows that are greater than
28	1,000 litres a day. Since we've started rolling out on
29	28 April, that's the highest one that we have seen during that time.
30	that time.
31	• And are you able to tall by reference to the date
32	Q. And are you able to tell by reference to the data
33	collected by the digital meter or its functioning when or
34	for what period those leaks have been going for?
35	A. No. Once the meter goes on then we're able to track
36	the water usage every half hour, but it doesn't look
37	backward.
38	
39	Q. There's been some references today in evidence to
40	5 Prospect Hill Road.
41	A. Yes.
42	
43	Q. And there was some evidence given by Mr Bolch a few
44	days ago and he spoke of speaking to the owner of
45	5 Prospect Hill Road and the fact that there was a sump
46	pump pumping 5 Prospect Hill Road with an increasing volume
47	of water, he said, from early December 2024. Can I ask you

.16/05/2025

1	about that.	
2 3	A. Yes.	
	Q. Was that water private water or is it South Eas	t Motor
4	Q. Was that water private water or is it South Eas water?	i vvalel
5		a that
6	A. I can't answer that question. What I can say is	
7	there was a leak found at 5 Prospect Hill Road that w	
8	contacted the customer about, and that customer has	; let us
9	know in April that he was able to fix that leak.	
10		`
11	Q. And do you know when that leak commenced?	
12	A. No, we're not able to tell when that leak comm	
13	We just had the discussions about pumping out, as ye	Suive
14	mentioned.	
15		
16	Q. And, the fact that the customer has had that fix	
17	April of 2025, is it your understanding that that was w	ater
18	leaking from the owner's property?	
19	A. Yes. So that's on the customer side. Sometin	nes
20	they're hard to find where they are.	
21		
22	Q. Can I ask you about 10-12 View Point Road.	
23	A. Yes.	
24	.	
25	Q. Has Mr Borghesi's house switched to a digital	
26	A. I don't know as yet. We haven't switched thos	e where
27	we can't access safely.	
28		
29	Q. How does the water usage at 10-12 View Poin	
30	compare with water usage across your service area in	n McCrae
31	over the last five years?	
32	A. So our average usage across households is al	Sout 141
33	kilolitres a year, and that particular property over the	
34	last five years is about five times that average.	
35	.	
36	Q. And has that property received leak allowance	s or leak
37	concessions?	
38	A. Yes.	
39		
40	Q. And in what period?	
41	A. There's been three across a period of time.	
42		
43	Q. Do you have any knowledge as to what period	of time?
44	A. I don't have the dates, no.	
45		
46	Q. Okay. Mr Costello asked you about leaks in th	1e
47	vicinity of the landslide area.	

1 2	Α.	Yes.
2 3 4 5 6	Q. 28 No A.	And he asked you in particular about the period from ovember 2024. Yes.
7 8 9 10 11 12	A. on tha	Can I ask you was there also a leak at Mr Borghesi's bour's house at 9-11 View Point Road on 27 November? So there was a leak found on that customer's property at date, and then the customer rang us on 23 December us know that that had been fixed.
12 13 14 15	Q. A.	Was that a private property leak? That's a private property leak.
16 17 18 19 20		Mr Costello put to you that there were in the order of 10 complaints made by people in relation to water in eriod November 2024 through to January 2025. Yes.
20 21 22 23 24	Q. respo A.	The Montage records, do they record activities done in onse to those complaints? Yes, they do.
25 26 27 28 29 30 31	throug Ms O	Madam Chair, I wish to tender all of the Montage ds that were produced from the period 1 November gh to the end of January 2025 as part of perhaps CA26. Isen's been asked a great deal about different parts of d I think in fairness all of those ought to be red.
32 33 34 35	The N	RPERSON: I'll give them a separate exhibit number. Iontage records dated 1 November 2024 to the end of ary 2025 will be exhibit SEW2.
36 37 38		BIT #SEW2 MONTAGE RECORDS DATED 1 NOVEMBER 2024 TO THE OF JANUARY 2025
39 40 41 42		IEMENSMA: Thank you. You were asked about some nce given by Mr Brett Cooper Yes.
43 44 45 46 47		when he gave evidence saying he told South East r to check at the other side of the freeway; do you that evidence? Yes, I do.

1 2 3 4	 Q. And I won't take you to it but in one of the Montage records, the one ending in 0076, there's an entry on 27 December, "Will endeavour to have someone meet Jason on site on his request."
5	A. Yes.
6 7	Q. Can I ask who Jason is?
8	A. Jason is one of our employees who retired recently,
9	but it's Jason Marsh.
10	
11	Q. And there's no other entry that day. Do you know if
12	Jason attended?
13	A. Yes, we have confirmed with Jason. He's a very
14	diligent person and that he did attend on the 27th.
15	
16	Q. Okay. And is there any record of any activity he took
17	on the 27th, because there does seem to be nothing further
18	in the Montage records?
19	A. Yes, and that's on us in terms of the Montage record.
20	He's got some photos from that day, yes.
21	
22	Q. Okay. And, if necessary, you're happy to produce
23	those photographs?
24	A. Yes.
25	
26	Q. Okay. You were asked some questions about the pipe,
27	and in particular - and this is the Bayview Road pipe
28 29	A. Yes.
29 30	Q and about a description in your witness statement
31	as to a split being 100 millimetres long.
32	A. Yes.
33	
34	Q. What was the length of the relevant pipe?
35	A. I'm not sure of that particular section of pipe.
36	
37	Q. There's been in evidence some plans that show pipes of
38	many hundreds of metres in length. Do you know if it's one
39	of those, or is it a small one, or do you have no idea?
40	A. No, sorry, I don't know.
41	
42	Q. You were asked about a portfolio of tests; you used
43	that expression in your witness statement.
44	A. Yes.
45	
46	Q. When were those tests conducted?
47	A. So the tests that I was referring to there in the
_	

1 2 3 4 5 6 7 8	 vicinity of the landslide were conducted from sort of the 5th, so that first landslide on. We had a technician working with the council to do some of those tests, and then again after the 15th as well. There were some also that are - is done before that time as well. Q. And do I understand what you've just said then that the tests were taken from around the landslide area, not
9	from the Bayview Road area?
10	A. So we've got a list of the overall tests. Our focus
11	immediately after the landslide is on that landslip area
12	that we believed our assets could have impacted.
13	
14	Q. You were asked about the 2022 burst.
15	A. Yes.
16	
17	Q. Are you able to say what period of time that burst was
18	detected and over what period it was stopped?
19	A. Yes. So there was someone on site I believe within an
20	hour and a half of it being reported, and then it was five
21	hours that that water was running for before we did water
22	off. Sometimes the repair takes longer, but the water was
23	off after the five hours.
24	
25	Q. And in terms of volume of water do you have a sense of
26	how much water escaped?
27	A. I believe that that has been calculated internally.
28	There's a number I understand. I'm just not 100 per cent
29	accurate in terms of what that number is.
30	
31	Q. Okay. And by comparison perhaps with the Bayview Road
32	mains burst how did it compare to that?
33	A. It's much smaller in the sense that it was only five
34	hours between detection and between when the water was off.
35	But the team has looked at understanding - we know
36	detection of the leak happens before that. So the team has
30 37	looked holistically to understand what that volume could
	•
38	be.
39	
40	MS SIEMENSMA: I have no further questions.
41	
42	CHAIRPERSON: Thanks, Ms Siemensma. Do you have any
43	further questions, Mr Costello?
44	
45	MR COSTELLO: I do not, thank you, Madam Chair.
46	
47	CHAIRPERSON: Ms Olsen, I just have one question.

1	Α.	Sure.	
2 3	CHAIF	RPERSON:	Have you assembled within South East Water a
4			working group to work solely on McCrae
5		de related iss	
6			embled a team to work on McCrae issues and
7			on, I suppose, the related burst or
8		election issue	es. They're not 100 per cent all of
9 10	them c	on that.	
10	СНАІБ	RPERSON:	And how many people are on that team?
12	A.		hat burst - the McCrae one?
13	/ \.		
14	CHAIR	RPERSON:	Yes.
15	A.	I'd say there'	s more than 10 that are core members,
16	and the	•	dly there's others that provide
17	inform	ation or analy	rsis in.
18			
19		RPERSON:	And does the team have a name? Is it a
20	workin	ig group with	
21	A.	It's the McCra	ae strategy group.
22			
23		RPERSON:	5, 5, 1, 5
24			related issues?
25	A.	not full time,	but spend most of their time doing it,
26 27	yes.		
28	CHAIR	RPERSON:	Okay. Thank you.
29	-	Thank you.	Okay. Thank you.
30	,	, name your	
31	CHAIR	RPERSON:	They're the only questions I had. Thank you
32	for cor	ning along to	give evidence.
33	Α.	Thank you.	
34			
35		RPERSON:	I'll excuse you from - that completes your
36		nce today.	
37	A.	Sure.	
38			
39 40		RPERSON:	It may be that you're required back at a
40		quent hearing) DIOCK.
41 42	A.	Sure.	
42 43	CHAIR	RPERSON:	So you're excused today and you may leave
44		ness box.	ee yeare executed today and yearnay leave
45	A.	Okay. Than	k vou.
46	-		2
47	<the< td=""><td>WITNESS W</td><td>ITHDREW</td></the<>	WITNESS W	ITHDREW

1	
2	MR COSTELLO: No further witnesses today, Madam Chair.
3	
4	CHAIRPERSON: Thank you. We'll adjourn now, with further
5	hearing dates to be published.
6	
	AT 4.25 PM THE HEARING WAS ADJOURNED ACCORDINGLY
7	AT 4.25 PWITHE HEARING WAS ADJOURNED ACCORDINGLY
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