

**IN THE MATTER OF The Resource Management Act
1991**

**AND Of a notice of motion under section
149T(2) to decide proposed Plan
Change 7 to the Regional Plan:
Water for Otago (referred to the
Environment Court by the Minister
for the Environment under section
142(2)(b) of the Act)**

OTAGO REGIONAL COUNCIL

Applicant

Hearing Commenced: 17 May 2021 in Dunedin

Court: Environment Judge J E Borthwick
Commissioner Bunting
Commissioner Edmonds

Appearances: P Maw and M Mehlhopt for Otago Regional Council
D van Mierlo for Aotearoa New Zealand Fine Wine
Estates Limited Partnership
L Phillips for Beef + Lamb New Zealand Limited
P Williams for the Director-General of Conservation
K Reilly for Federated Farmers of New Zealand Inc.
H Atkins and L Ford for Horticulture New Zealand Limited
C R Perkins for Landpro
H Atkins and L Ford for Horticulture New Zealand Limited
K Reid for McArthur Ridge Vineyard Limited, Mount
Dunstan Estates Limited, Strath Clyde Water Limited
R Dixon for Minister for the Environment
M Baker-Galloway for Otago Fish & Game Council and
Central South Island Fish & Game Council

P Page and B Irving for Otago Water Resource Users Group

P Anderson of Royal Forest and Bird Protection Society of New Zealand Inc.

J Winchester and S Lennon for Te Rūnanga o Moeraki, Kati Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Otakou, Hokonui Rūnanga (Kai Tahu Ki Otago) and Waihopai Rūnaka, Te Rūnanga Oraka o Aparima, Te Rūnanga o Awarua (Ngai Tahu Ki Murihiku) and Te Rūnanga o Ngai Tahu (collectively Nga Rūnanga)

P Page and B Irving for Clutha District Council, Waitaki District Council, Queenstown Lakes District Council, Dunedin City Council and Central Otago District Council (the Territorial Authorities)

J Welsh for Trustpower Limited

H Rennie for WISE Response Society Inc

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COURT RESUMES ON MONDAY 17 MAY 2021 AT 9.33 AM**THE COURT: JUDGE BORTHWICK**

Good Morning, we'll just take a quick call through see who's here, so Mr Maw, you're here, Ms Mehlhopt you're here, Mr Page, Mr Welsh, Ms Baker-Galloway
5 and there may well be other parties, farming parties who are representing themselves, so Good Morning to you all, this is the continuation of the hearing on Otago's Plan Change 7 and I see that we've got our first lot of witnesses in the stand, but I am going to do some housekeeping before we get to you. So by way of housekeeping, as parties will know, Court undertook a site visit on
10 Friday which all went to plan and I think we visited all of these sites that we were asked to visit on the schedule with the exception of I think a site at the Lowburn which was just taking a view from the river, but as all of us are familiar with the Lowburn, it wasn't found to be necessary to do that, so thank you for that opportunity and yes thank you for the opportunity and we, at my request,
15 got to see a lot of infrastructure, I was interested in the infrastructure and the conveyancing systems for water. So that was Friday.

Also on Friday, and this will be of some moment actually to you Mr Page, but also on Friday we were discussing the question of dams and what to do with
20 them and here we're actually talking about the big public dams not on-farm dams and Mr Maw was nibbling if it wasn't landed, so that's a change and that's a possible change in position and I had said to Mr Maw, you really need to talk to Mr Page about getting some facts in and did you have a chance to do that or did you do some more thinking over the weekend, and I know that's a huge
25 thing to ask because we are working very, very long hours at the moment.

THE COURT: JUDGE BORTHWICK IS ADVISED THERE IS AN AUDIO ISSUE

30 We'll let you think about dams, we'll take a quick adjournment just get that audio back online again because we need a record, think about dams, other thing I want you to think about and come back to me on, is Court is interested to know whether there's been any update in water quality analysis, so state of

environment, water quality trends. As you know we were presented raw data from Dr Snelder and are interested to see where that goes. It may be of some moment to presentation of some places, so give us five and we'll be back when we get that audio running again.

5 **COURT ADJOURNS: 9.36 AM**

COURT RESUMES: 9.42 AM

THE COURT: JUDGE BORTHWICK

We mentioned a couple of things that we would like in. If it's actually available, Dr Snelder has now analysed the raw data for water quality or is there any
10 reporting on water quality for this year which can, perhaps breathes more light into what if anything's actually happening in relation to water quality. That seems to be part of the whole picture thinking and it's certainly missing from the operative plan, it doesn't actually seem to be dealing with the land use side of the water management equation.

15

MR MAW:

So I'll need to take some instructions on that question. Now I haven't become aware of further work that has been undertaken albeit there will be further work going on in the background, so I'll come back to you on that as soon as I'm
20 able.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. And even if it's not Dr Snelder, the author is there, do we have any trend analysis for water quality? So we're very much interested in that for the reason that you're going to overshoot integrated management of water
25 resources if you don't have the water quality side in?

A. Yes.

Q. So we're asking you about that and then the dam question?

A. Yes, so in terms of the dam question we've been in communication with Mr Page and highlighted the dams on which the Court and the Council
30 would be interested in understanding the suite of permits that apply to

each of them, so a list of dams was sent through to Mr Page. Over the weekend there has been a supplementary brief filed by Mr Curran that deals with the Falls Dam and within that brief there is some information about the suite of consents relating to that particular dam, that evidence deals with some other things as well but –

5

Q. Yes, yes.

A. – there is at least a list of the four permits that apply to the Falls Dam and that's helpful in that situation. My suspicion is that the situation is different and varied in relation to each of the structures but until we have the actual, factual evidence setting out what permits apply to each of those structures, it's, I can't for the Council, advance the thinking in terms of what the underlying issue is and what the fix might be in terms of the integrity of the structures themselves because it will depend on how they're consented.

10

Q. Yes, but on the issue of consented, that is something that the Council should be able to dial up a report for, for those public dams?

A. You would think that that might be the case, so we're -

Q. You would think this? So in fact it's not that straight forward?

A. It's not that straight forward.

20

Q. Okay, so just from memory we were looking at Loganburn, Poolburn, Manorburn, Falls Dam and was there anything else?

A. Fraser Dam?

Q. Oh Fraser that was right, yes.

A. And Loganburn may already be fully consented.

25

Q. Yes?

A. Mr Page probably know more about that than I, but, is there anything else? No, that was the list.

Q. Oh is it the Poolburn?

A. Poolburn.

30

Q. Poolburn, so we're looking at five dams. And so what are the – and one of the things that I wanted to talk with Mr Page about is the sort of questions that need to be asked and answered, so again, it's what are the issues, if there is to be some movement on the dam question, what are the issues? So we've got a fundamental issue of basic absence of

facts although Mr Curran now provides consents for the Falls Dam, so that's helpful, but what are the issues such that you might want to engage with this question differently? Had you had any thinking about that?

5 A. Yes insofar as, well the question in my mind at present is understanding what the underlying permit or permits might actually be that are at issue in terms of consent duration, the answer to which will hopefully come about by providing the suite of permits for each of the dams and until we actually have that information, it's difficult to then articulate with any further precision what the issue is. I guess at this point the issue is one
10 of how are the dams currently permitted and/or consented? Second question, which of those permits cause an issue in terms of, I'll put it long term dam integrity and then a third question is one of interconnectedness between the permits because I'm unclear in my mind as to whether the issue in terms of long term dam integrity can simply be solved by having
15 a longer term for just one of the subset of the permits and whether one can be separated out from the bundle of consents that operate with respect to the damming of the water.

Q. Yes and so that's the question of the integrated management again isn't it?

20 A. Yes it is.

Q. Is the answer to we need a dam re-permitted just to re-permit for a longer period of time the damming of water when you're going to be taking that water and if you don't take the water, then you're going to be having major issues with the environment. Of course you're taking the water, you're
25 damming and taking and using the water, so it's the integrated package I would've thought and so yes, and if that's the case, then quantity and quality come in and it's one of the reasons for actually asking for that latest – if we do have latest information on water quality, water quality trends, we want to know it before embarking on this exercise. So,
30 Mr Page obviously represents Falls Dams but who represents the other – do we have other people? Other, oh, counsel, or is it just unrepresented parties on Fraser, Manner, Loganburn and Poolburn?

A. I don't recall any of those parties being separately represented. I'm not sure if they're within Mr Page's stable.

MR PAGE:

I don't think Fraser is, Loganburn isn't a PC7 suite of permits because they expire in 2034, so you don't need to worry about Loganburn in this exercise.

5 Poolburn is part of the Ida Valley Scheme and Ida Valley's part of OWRUG.

THE COURT: JUDGE BORTHWICK TO MR PAGE

Q. So it's yours?

A. So we can deal with that and Ms McKeague who's yet to give her evidence is very familiar with the permitting arrangements in relation to Poolburn. I don't know about Fraser. I'll need to make inquiries about the situation with Fraser. Upper Manorburn is part of the Ida Valley Scheme, Lower Manorburn is part of the Galloway Scheme, but again those permits will be reasonably easy to get, well my understanding is they should be easy to get hold of.

15 0950

Q. So Upper Manorburn is the Ida Valley Scheme –

A. Yes.

Q. – which is OWRUG and Lower Manorburn Galloways which I thought was OWRUG as well or is it going separately?

20 A. Well Mr Kelly appeared and gave evidence for the Galloway Scheme but it was generally part of OWRUG in the sense that they're permit holders who take part in OWRUG's activities, so I can obtain records in relation to what the Lower Manorburn permit regime is.

Q. So generally we're struggling to get facts on the ground?

25 A. Yes.

Q. From which then we can identify the issues and then from which then we have a look at the evidence which supports a policy response or not?

A. Yes.

30 Q. So I know your Mr Curran now provides the suite of consents for Falls Dam but then his evidence is dealing with something I think entirely different, I'm not sure what but it's something different?

A. Yes.

Q. And my suggestion to Mr Maw was that if the region is prepared to look at this and it was the signal given on Friday, then there needs to be at least discussion with you as to what are the issues that arise because it's very hard to make policy on the foundation of there may be, and I think that was the Fraser Dam evidence, there may be health and safety issues, well there may or may not, I don't know how old the dam is, well actually I do, it's quite old. It's in that depression era, but I don't know what the state or integrity of the dam is, whether that's important, I don't know how that's actually managed in terms of New Zealand regulation or other legislation instrument. I don't know.

A. Yes.

Q. So I don't know what the response should be. So we're actually, we're getting a lot of evidence about what people think should happen, but we're not getting any foundational facts, we're actually still struggling for that here?

A. Yes. So you're going to hear from Mr Sheehan tomorrow and he is the engineer for most of the structures and so we'll be able to discuss what the Large Dam Society guidelines are in relation to them and what needs to be happening over the coming period for, as you say, these are mostly all pre-World War 2 structures and for the most part these are structures that don't have consents for the structures themselves, what we have is consents for the impoundment of water behind the structures, so that's what we refer to as the damming consents is the right to store the water. So I'm alive to your exchange about the interconnectedness of permits and that's something that we'll need to seek to untangle between us, but in the meantime what we can do is produce the suites of permits or we think we can produce the suites of permits for each and Mr Sheehan will be able to describe what the challenges are in terms of the management of those structures in the coming period.

30 **THE COURT: COMMISSIONER BUNTING TO MR PAGE**

Q. Except the Fraser (inaudible 09:53:36)?

A. Well I just don't know about Fraser Commissioner. It may be that Mr Sheehan's familiar with Fraser, I just simply haven't asked the question.

THE COURT: JUDGE BORTHWICK TO MR PAGE

5 Q. And I don't know that we're necessarily going to be assisted with more evidence on what the challenges are without an evidential basis and I cannot say that, I've been saying that now throughout this hearing, we want the facts upon which policy is then based and I really do want you to confer, I think it's you too, because – over the issues that arise in
10 relation to those structures and put it as questions for the Court to answer in its decision because if you start to ask the questions, then you start, in my experience, start to get at the nub of the problem. Yes, so and those questions I imagine are going to have a look at the integrated management of water resources as opposed to what hitherto has been I
15 think the water plan, the operative water plan approach which is just look at quantity and just ignore the other equation which is land use and quality and the relationships between the two, so I imagine that if you were wanting something out of policy response which is to go for a longer period of consents for dams, you'll be looking at both probably to the
20 extent that you can, if you can't, then you'll be telling us, look it's well beyond scope in 293, so you do need to confer. More evidence like we have it is not going to assist. We want to drill now into the facts and the policy responses from those facts all right?

A. Yes.

25 Q. Okay so in terms of talking to each other, when do you think you can do that?

A. Well that in itself isn't a difficulty. It's just a question of finding things around the edges that's all.

30 Q. Yeah, I know, as the hearing rolls on. Okay. Anyway you've got your own witness to talk to and to find out what he knows about the consenting regime. I mean I'll take it from you that you don't know what the consenting regime is. A bit surprising that you can't just dial it up and go

– this is it, but certainly your clients hopefully should know what is the stable of permits that those big gains are working to.

A. Yes, I can understand my friend's constraints about getting access to the records, that's an ongoing challenge.

5 Q. Oh okay, yep. Okay. All right, okay, so that's dams. And that's water quality. What else did I have on my list? Also from Friday we indicated that we will have questions of drafting if you like on the joint witness statement which particularly as it pertains to maybes; pertains to primary sector interests with what we see, so we'll have questions so I don't know
10 that it's an adequate response just to put those to Mr de Pelsemaeker and to Ms Dicey that you know, other primary sector planners, if not required to be there should have the opportunity to be there because I'm not going to go another round of consultation. We'll put the questions and either they're there or not there but they will be drafting questions so not
15 taking you necessarily in a different direction from what's actually been identified for the schedule and provisions relating to the schedule and that objective but looking at drafting around that. But I'll cover that off in today's minute and the only other thing, it's just a suggestion. So a lot of farmers did not have – last week did not have an adequate grasp on
20 where that schedule was going. No surprises there because it's going at a rapid pace and there's not much description by the witnesses as to what they're doing and why and you know, even us as a Bench are sitting here going I wonder what that means and so we have this suggestion, you know, planning hearings can be dry as bones as people debate the meaning of words without realising that it's people in the community that
25 you know, those words speak to so you can have, when the plan has come back, another dry run at the provisions or you can actually have both sides of the table to the extent that you need to because in fact, I think you more or less are largely in agreement on the schedules. You can actually have somebody present on what does this schedule mean
30 and so that you can bring people and communities with you. I think that's really important to bring people and communities with you because there have been some significant changes. A number of key elements which were missed last week and that is not a criticism because there's just

been barely any explanation and anyway it's my full-time job but it's not the farmers' full-time job to get their heads around this and understand what it means. So it doesn't look like your normal dry run, you know, your normal evidence in a planning hearing. What do you both think about that?

5

A. Well there is an enormous difference in levels of understanding amongst the farming community.

Q. Yes, sure.

10

A. Some are completely on top of it and some barely have got a grasp of what we are doing here at all and so if we are – if the goal is to fully inform the entire farming community about how the schedule works, I suspect we're not going to achieve that through this process and that's really for us to explain to our clients about where we're going. In terms of a conceptual understanding about what the schedule is for, it has moved during the course of this hearing and from my client's point of view, entirely positively.

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A. And that's a good thing and I think there's a general understanding that we are now trying to use the schedule to reflect actual historical water use so that people are not at risk of losing access to water through the operation of the schedule. I think we're kind of there about that's the purpose of the exercise and I'm not sure how much we're going to be able to achieve in terms of communicating the detail of that through the course of this process.

20

25

Q. But even a high level conceptual run is essential. Remember we still had witnesses in the farming community who were not on board with the – you know that the purpose of the schedule is to ensure that the allocation is brought forward. I can think of one person last week who thought that what would be required is that all border dykes while flooding would be required to change to spray irrigation. You're not going to achieve that in this plan change nor is it the intention of the plan change to go in that direction but it's not the case, as another witness thought, therefore, somewhat erratically, the region has thrown out its policy on efficient use of water. It's not that either and so you know, the conceptualisation of

30

5 this schedule has yet to be properly communicated to the community because while you know, the parties disagree on some fundamentals they don't disagree on the need at least to have a method and some plan somewhere which the region has to follow as opposed to the method with the little M back in the office and no-one's ever quite sure, you know, what the regional council staff are doing when it comes to assessing resource consents so the schedule does at least that, there's some common position. So conceptually I think there needs to be an explanation and gee, if your witnesses can't explain it, then it's probably not doing its work properly.

10 A. Yes and to some extent that might be simply a function of how much these issues have travelled over the course of the hearing. As you observed, this is our day jobs. Farmers are trying to catch up with all this sometime between eight and 11 o'clock at night and that's just a reality of where we are I suspect.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Okay, Mr Maw?

20 A. Reflecting back on last week and the understanding of some of the witnesses, in my mind at least, confirms the concerns that the farming community hadn't had probably the opportunity to keep up with the rate at which the schedule had changed given the underlying concerns that some of those witnesses held about the thought they might have less water over the next six-year period so insofar as there is a concern, it's a valid concern in terms of the communication. When I look at the various joint witness statements, one of the first questions put was what is the purpose of the schedule and there seems to have been consistent agreement between all of the witnesses about the three purposes of the schedule and whilst that is communicated early on in the joint witness statement my suspicion is that that's simply a document that hasn't been read with much – well the parties perhaps haven't had the time to read that in the manner that we perhaps have read so the question then becomes how do we better communicate at that higher conceptual level precisely what is it that the schedule is seeking to achieve? My view is

that that is a task that could be done as part of the presentation of the joint witness statements back to the Court so at least then there is that explanation setting out, well what is it seeking to achieve and that may then perhaps be a useful point in time at which the community can be invited to see or to watch or to reflect back on.

5

Q. Yes. To see and watch at least to have that opportunity, yes.

A. In terms of capturing that in writing ahead of that time, I'm not quite sure where we were at in terms of the proposal to bring the joint witness statements back.

10

Q. Yes. It's sitting with me with a minute to go and it's nice. As with anything, you fire out a number of minutes or do you try and fire out one minute because you know, over communication, it's not helpful either. It just bogs people. Bogs the inbox down I was told last week so I mean it's fair enough but, yeah, so we also have another joint – a witness conference running today which I think maybe there will be an output from today at least that was Commissioner Dunlop's hope and if there was an output from that at least the output should be we could have that running alongside that statement and there will be some directions sought in terms of folk coming back to present on that too, yes, so I have delayed whilst waiting to see what happens today to see what your responses are on dams, to see what you have to say about our water quality as well, if there's any update from Dr Snowden's evidence.

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A. Okay, well insofar as we can advance that I'd say the time to have that information and that summary given will be when the joint witness statements are presented.

25

Q. Yeah, no I agree. I don't know that it's necessarily helpful or required rather to have another brief of evidence about that schedule but may, or maybe you could have a PowerPoint about that schedule but if you can't communicate it easily in a way which is available to all people, you know, whether highly geared into water quality, water issues or not, that has got to be available to all members of the community then we're probably struggling so, yes.

30

A. It strikes me that insofar as that information is presented it may well be identifying or confirming the three purposes of the schedule and then

describing in relation to each of those purposes how the schedule then actually responds to that purpose so that may aid in the collective understanding of what is sought to be achieved.

5 Q. All right. And there's not a lot of difference – I might have this wrong. I've only had one read through of the JWS and certainly not the information that came over the weekend, but I don't think there's a lot of difference in terms of what the control activity rule and the RDA rule should be doing and I think that's really helpful to talk to that and then of course the parties then depart wanting, you know, different things and that's fine, that's a decision for the Court.

10 A. Yes and coming back to the method, my recollection is there's a strong degree of agreement in relation to the content of the schedule and at which stage it becomes you know, a task of explanation in terms of what's been jointly done. Does it actually answer the questions or –

15 Q. Or not.

A. – address the purposes which have been identified.

20 Q. Okay, thank you. So that's how I would see it also, a presentation at the beginning of the joint empanelling of witnesses and whether that's just done by Mr de Pelsemaecker or by your witness, I'm easy. I just need a good communicator. I don't think the differences in wording are critical to the presentation or conceptualisation of the plan change.

A. My suspicion is it might be Mr Wilson for the council might be best placed.

Q. Whoever your best communicator is.

A. Yes.

25 Q. That's actually the key thing too. You've got to have somebody whose language is available for everybody to understand, yes.

A. Understood.

MR PAGE TO THE COURT: JUDGE BORTHWICK

30 A. Just one thing. I lodged with the Court a couple of diagrams last week in relation to the Manuherikia.

Q. Schematics.

A. Yes.

Q. Yes, that was the other thing we were going to get back to you about.

A. Yes.

Q. Okay did you? You might have done.

A. Well I did and we were directed to figure out whether they could come in by consent or whether they needed a witness...

5 Q. Did you need someone to talk to them?

A. Yes. And so I think that there's two diagrams. One relatively simple and one rather less so. The rather less so is the – what's called the logic diagram for the Goldson model that Mr Roddy Henderson discussed in his evidence and I think it's my friend's view that they would prefer the Goldson diagram to be introduced to the Court with an explanation from somebody who knows how it works. Now I'm relaxed about that. It's just the question then is who understands how it works? From my client's point of view the existing witness that knows how it works is Mr Hickey. Mr Williams probably has the most encyclopaedic knowledge but he isn't a witness yet, so it's a question of whether we call Mr Williams or whether we call Mr Hickey, or whether we do neither of those things really.

10

15

1010

Q. What's the second one about? Manuherehia overview map, what's that?

A. Yes, so the overview map was to just to show where the tribs in relation to the take point locations exist. It's rather a simple diagram but just to help assist the understanding of the GoldSim Logic diagram, because the GoldSim one's organised much like the London underground map, it doesn't show where things actually are in reality, whereas the overview does.

20

25 Q. Oh I see. And neither have those three critical minimum flows in, what is it 512 at Falls Dam OFA, I've forgotten what OFA was and then 900 are voluntary –

A. Yes.

Q. – voluntary flow at the campsite, yes.

30 A. Well the 500 at Falls is a condition of the discharge consent from Falls Dam rather than a plan condition, whereas 812 at OFA is in Schedule 2A to the regional plan water.

Q. 812 at OFA is it?

A. Yes.

Q. Schedule 2 and then you've got that voluntary at the campground of 900 was it?

5 A. 900 is the voluntary Campground yes. So if you look at the GoldSim Logic diagram, and if we start at the top, you can see Falls Dam shown as a triangle with a black dot marking what is a flow output site which says, "Below Falls Dam", that's where 500 applies?

Q. Yes, no I'm show I'll be able to follow the narrative from there –

A. Yes.

10 Q. – but you're thinking, so anyway, so what hasn't been agreed is whether or not you need the witness to present to this –

A. Yes.

Q. – and who that witness should be.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Mr Maw, have you got any thoughts on that?

15 A. Having spent a little more time with the diagram, I'm content with it being admitted by consent in terms of the information it's conveying, it has a helpful key and insofar as it essentially is a wiring diagram for the catchment –

Q. It is.

20 A. – unless the Court requires further explanation, we're content to it being admitted.

Q. Okay.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

Q. Ms Baker-Galloway, have you got any thoughts about that?

25 A. No Ma'am. No nothing to contribute, I'm not really engaged in –

Q. Oh did you have any thoughts about anything I've said thus far, sorry, I should have come back to you, because it involves primary sector, therefore, it's taking you in, yes.

30 A. Yes, no we're not terribly engaged in this particular issue so I've got nothing to contribute.

Q. Okay, very good, all right.

THE COURT: JUDGE BORTHWICK TO MR WALSH

Q. Mr Walsh, I didn't think you'd be engaged?

A. (No audible answer 10:13:31).

Q. No, okay, thank you.

5 THE COURT: JUDGE BORTHWICK

All right, we'll look at that and make a decision whether to admit it by consent, so we'll probably look at it over lunch time but thank you very much, that is part of a whole picture, so, and very helpful to have that in. So we've left it schematics ask lunch time, and come back to you, dams, Council to talk about
10 permit identification, issue identification and then you'd need to talk about further evidence or not. Mr Maw, you're going to investigate water quality and trend reporting, whether there's an update to really the raw data presented by Dr Snelder and come back to us about that and then we'll come back to parties as to whether that should be admitted. My sense of it is, it's absolutely essential
15 for dams if you're looking at an exception to dams or something for dams, a policy response for dams but is part of that, again it's part of that whole picture which at the commencement of the hearing a bit fuzzy, you know, because it's just raw data being presented, so is there any change, probably we'd need to know that, but I'll hear from parties first. And then I think there is broad
20 agreement that there can be a presentation conceptually of the schedule and you'll just have to think about who your best speaker is, because your best expert is not necessarily your best communicator so we're looking for somebody with communication skills and I'll signal that primary sector should be all in for that JWS because the Court has questions on drafting.

25

MR MAW TO THE COURT: JUDGE BORTHWICK

Q. Just on that, are you envisaging that all of those witnesses would be called together for that exercise?

A. Jointly empanelled. Absolutely, yes.

30 Q. Very good.

THE COURT: JUDGE BORTHWICK

So if you can come back counsel when you've got something to do, can you come back to us 9 o'clock tomorrow how does that sound? Yes, very good.

5 THE COURT: JUDGE BORTHWICK TO MS SANGSTER

Q. So eventually we got there and we're now in your hands, Ms Sangster giving evidence, I see your husband is with you?

A. Yes.

10 Q. And I think I overheard when I was standing up this morning that you're driving the power point I think, is that right?

A. Well I was going to say I would like to do a power point and I thought because I've been listening to the audio and it's very awkward when people try to point things out, so I thought it would be helpful if he could stand up and point things out for you, if that's okay.

15 Q. So you're also pointing things out?

A. (No audible answer 10;16:34).

Q. Okay. Do we need to jointly swear in?

A. Swear us both in?

Q. Probably, yes.

20

HILLARY DAWN SANGSTER (SWORN)

DAVID SURIL SANGSTER (SWORN)

THE COURT: JUDGE BORTHWICK

- 5 Q. So what I can say Mrs Sangster is that we've actually read your statement of evidence and we don't need to re-read that but rather as everybody has had an opportunity to comment on the things which have arisen during the course of the hearing that you want to comment on or to emphasise the key points that you want the Court to understand, so
- 10 you're welcome to do both, but I don't need you to read the evidence because we've read the evidence. So we're in your hands as to how you'd like to proceed and also on your slides as well?

THE COURT: COMMISSIONER BUNTING

- 15 Q. Can I just ask a question? What you've just handed up is exactly the same as what we've been –
- A. Apart from paragraph 34.

THE COURT: COMMISSIONER BUNTING TO MRS SANGSTER:

- 20 Q. Which you've highlighted for us?
- A. Which I've highlighted for you.

THE COURT: JUDGE BORTHWICK TO WITNESS H SANGSTER:

- So we might actually get you to talk about paragraph 34 but before we get you to do anything, I think Mr Maw if you could assist the Court and Mr Maw, all he's going to do, he's going to get you to confirm your evidence, check to see
- 25 whether or not there's any corrections etc, so he's helping the Court out because you haven't got counsel with us.

MR MAW TO MS SANGSTER:

- 30 Q. Now Ms Sangster can you please confirm your full name for the record?
- A. Hillary Dawn Sangster.
- Q. And you are appearing today on behalf of GlenAyr Ltd?

A. Yes.

Q. And GlenAyr Ltd lodged a submission in relation to Plan Change 7?

A. Yes.

Q. And you have prepared a statement of evidence dated 1 February 2021?

5 A. Yes.

Q. Are there any corrections that you wish to make to that statement of evidence?

A. Paragraph 34 because I didn't have that information at the time of writing it.

10 Q. So the version of your statement of evidence circulated today has an additional paragraph inserted into it, as paragraph 34?

A. Yes.

Q. And then presumably the number sequencing simply then follows on with that inserted paragraph?

15 A. Yes.

Q. Could you confirm that the evidence that you have given and the evidence you are about to give is true and correct to the best of your knowledge and belief?

A. Yes.

20 Q. Now you have also circulated this morning, another document which is headed up, "Thoughts on Farmer Evidence and Court Questions", is that the summary statement of the key points from your evidence that you wish to make or is that –

A. No, no.

25 Q. – something different.

A. No.

WITNESS H SANGSTER TO THE COURT: JUDGE BORTHWICK

30 Q. So Your Honour I've been listening to some of the farmer evidence on audio and particularly to the questions that you've been asking the farmers and the Commissioners have been asking and I prepared some thoughts that I think would be helpful for you and if you have time I would like to read that to you or have it admitted for you to read later.

A. We have time so yes, we will hear you and if you have time; need more time to digest what's been said and ask you any questions just let us know.

5 MR MAW TO THE COURT: JUDGE BORTHWICK

I'll let you know.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Now I wonder whether we might just have – is it Mr Sangster?

A. **D Sangster:** Yes.

10 Q. If you could perhaps confirm your full name for the record?

A. **D Sangster:** David Suril Sangster.

Q. And do you confirm that any evidence that you give today will be true and correct to the best of your knowledge and belief?

A. **D Sangster:** I do, yes.

15 Q. Thank you. So we're in your hands Mrs Sangster and I understand you'll take the Court through the summary?

A. **H Sangster:** Yes.

Q. And you had a PowerPoint as well with you?

A. **H Sangster:** Yes.

20

WITNESS H SANGSTER TO THE COURT: JUDGE BORTHWICK

A. So Your Honour if it's okay, what I would like to do is present this as a case study. I've arranged my slides – it might be slightly different to the order you have because I think it fits with the words. I really want it to be a positive experience and for you to ask me questions throughout it if you would like to. I think it will be helpful for you and give you some good insight and I will deviate off my written stuff to talk a little about a few slides. I've also added a few slides that you haven't had previously which is about the Taieri scroll plain because I noticed that you asked questions about that the other day. I have prepared it like that. It will be difficult for me to change the way I present, I'm sorry.

25

30

Q. Oh, no, no, we're in your hands. As I said, we have read your first statement and yes, so it's your plan change, your region so you present.

A. Thank you very much, thank you.

WITNESS H SANGSTER READS STATEMENT WITH INTERPOLATIONS

(Māori content: 10:22:10).

5 Good morning Your Honour, Commissioners and everybody. I would like to present to you today a case study about our farm and our journey with irrigation because I think it will provide the Court with some good context and insight, so I intend this to be a positive presentation and hope it is helpful.

10 So my full name is Hillary Dawn Sangster. My husband, David and I, farm GlenAyr, 2870 hectare enterprise in the Maniototo. David and I have been farming together for over 30 years and we have three sons.

GlenAyr Limited is composed of a 1930 hectare property in the Stix Valley, a
15 600-hectare property near Patearoa and a 343-hectare run block in the White Snow Valley. GlenAyr has been in our family for four generations. David and I farm with my sister and brother-in-law Caroline and Drew Dundas who live on the Styx property.

20 I won't read all those qualifications but what I would like to talk to point 10 so I am a facilitator for that Agri Women's Development Trust Programmes of business planning and governance. And Your Honour under point 10 if you don't mind I want to digress for a minute and ask you if you have noticed all the farming women who have made submissions and have come to present to you
25 in Court: Emma Crutchley, Kelly Heckler, Barbara Hall, Renee Weir to name a few.

Q. Yes, we have noticed that, that the farming community has a very impressive and strong line of farming women.

30 **WITNESS H SANGSTER CONTINUES READING STATEMENT WITH INTERPOLATIONS**

Okay, so I want to tell you about why that is, so this has come about because of the Fed Meat Profit Partnership Programme which was a Primary Growth Partnership Programme that worked over seven years to increase productivity

and profitability in the red meat sector. One of the programmes Understanding Your Farming Business was developed and facilitated by the Agri-Women's Development Trust to equip women with the skills and confidence to fully participate in their farming business. We taught them that they could be a critical farming partner in the business particularly in the strategic and governance space. We taught them how to develop business plans and visions for their farm businesses and to take a long-term view when planning. We introduced them to the 4-P model and how to think holistically about what success looks like rather than the win-lose model of just profit. We encouraged them to set goals in these four areas.

Profit: we still need profitable farming businesses not just for the bank manager but because it enables choices.

15 People: Our family, our staff and our community.

Planet: Soils, water, biodiversity on our farms but also in our wider catchment.

20 Progress: A new concept but involves thinking about the business' ability to adapt to change which is very relevant at the moment.

And I want to thank them all very much for stepping up and engaging in this important conversation.

25 So GlenAyr was purchased in 1926 in the Styx Valley from the Aitken Family by my great grandfather. David and I farmed the 600-hectare property at Patearoa which my evidence relates to and it is a sheep and beef property with severe winters and hot summers. The property like many in the Maniototo is reliant on irrigation to ensure supplementary feed for the winter and summer feed to ensure economic viability.

WITNESS H SANGSTER SPEAKS TO SLIDES:

So that's the slide of our family. David, me, my three sons: Jordan, Peter and Robert. My sister Caroline and brother-in-law Drew Dundas. That's a slide at

the Styx showing the severe winter and the need for supplementary feed. This is the photos of the scroll plain so this photos taken at the top of the hill. So David's going to point out to you the southern end of the Styx Valley and the road over to Lake Onslow and then on the next slide looking down the valley towards the Maniototo Plain. This is a large flood so we define a large flood when we're at the house at the Styx is if it comes to the cattle shed, so that is a large flood in the Taieri River. And then what happens the water moves down, fills the lagoons and the oxfhos and you get this sort of thing which is absolutely spectacular as you probably saw if you flew over it the other day.

10

THE COURT: JUDGE BORTHWICK

We did. Yes.

WITNESS H SANGSTER CONTINUES SPEAKING TO SLIDES:

15 So this is the farm at Patearoa and David if you just point out the house and then we've got some border dyke irrigation in the front of the photo. Those hills at the far side are along the Puketoi and the Styx Valley in the southern corner. This is our run block property at the White Sow Valley, a dry land run block. We run Angora goats plus sheep and beef there and then this is a map of the farm and I'll get David to point out a few things on this. So the main road with Ranfurly. Ranfurly. Down there over the Taieri River and Patearoa in the other direction. You can see that the red line at the top of the map is the Taieri River. The Sowburn Creek which you heard about the other day from Gavin Herlihy which flows down through our property and out to the river. And then Shepherd's Creek which this presentation is mostly about and it's a drain and you can see how straight it is. It was put in we think in the 1950's. This drain we gauged for our application and on that particular day there was 100 litres at the top and 150 litres a second when it reached the Taieri River. We have two small irrigation dams.

25
30

So we are sheep farmers and for the farmers in the room those are weaning day hoggets with lambs at foot.

So irrigation development: the Patearoa property Glenfield was purchased in 2001. It had an irrigation rider out of a Shepherd's Creek drain dating back to 1982. David and I renewed this as an RMA right in 2003 and invested in a K-line spray system. No consultants were used to process the application and the cost was minimal and the consent was for 39 litres a second. The property had two small storage dams that David pointed out to you that we used for border dyke and flood irrigation.

In 2008 we invested in K-line irrigation for our 28-litre a second rider out of the Taieri River and the property also had 48 shares in the Maniototo East side Irrigation Scheme and that water was used for border dyke and flood irrigation.

In 2015 in conjunction with the neighbours we contributed capital to pipe the water and put in a 57-hectare centre pivot with BRI and at the same time we began putting in reticulated stock water and fencing waterways and developing our White Sow dryland run block.

So this is a photo of what we were irrigating with that scheme water. So you can see it wasn't great pasture quality. Lots of rushes and plenty of ditches. This was some of the border dyke so better but the thing with those consents are that we got 12 heads of water for 24 hours and then you didn't get the water back for 21 days so you had to take the water whether you needed it or not and even if it was raining we still had to take the water, so there was a lot of over watering, a lot of run off and not the best result.

1030

I'll just talk to you about the different irrigation we have on our property. So the blue area is the Maniototo Scheme Water and you can see that we've put in the pivot of 57 hectares and we also put in a small area of K-line. So it's over sized for the amount of water available so at times during our roster of 20 days we must turn that pivot off. Now how we manage that is we have VRI. So every time that pivot goes over the drain or across the rain lane or the end gun that's close to the Sowburn Creek we turn it off. The nozzles turn off when it goes over a water trough. Every paddock is GPS-ed so we can turn off individual paddocks from our phone if need be or off a laptop. We can put crop into certain

paddocks and get the crop established and then turn it off so it enables you to stretch your water and irrigate more area but very efficiently and of course, it forces you to be very strategic and think about how to do that and at the moment that dry gravelly area that we K-lined, so we used that, that light blue, we used that water on there in the spring but once the evapotranspiration rates are higher we focus the water on the pivot with the better soils but with the changes to winter regulation and grazing that area is invaluable for us. So we'll have crops under that pivot but we use that dry, gravelly area for a runoff. So it's a really useful part. And being able to think about your soil types and what you're trying to do really, thinking holistically about it is a really good thing I believe.

Is there any questions about that because it's quite important?

So then if we look at the yellow area. So this is the Taieri right that we have for 28 litres a second which just tides the minimum flow at the Waipiata. When the flow at Waipiata gets to 1200 CUMEX we start rationing and rostering our water.

THE COURT: JUDGE BORTHWICK

Q. At 1200 CUMEX?

A. At 1200 so the minimum flow is at a thousand. When it's at 1200 we start so there is four of us and Suzie McKeague manages that process for us and we all share the cost of her doing it.

WITNESS H SANGSTER CONTINUES SPEAKING TO SLIDES:

Some years, like this year for example, we were rationing but we were never turned completely off. Last year we might have been off for four weeks and off and on and the first thing I do every morning is I look at the ORC website and see where it is so you know, we are very conscious of being compliant with that minimum flow condition.

How we manage that? So that area is oversized as well. We use Lucerne which we can irrigate in the spring and then we don't put water on it. We put in crops into that area because we know that there's a possibility every year that we could lose water in there for weeks so we have to really think about our

system and what crops we can put in that we can – when the water gets short we can turn off.

5 The orange area is the Sowburn Water Users' Group. So we have a small right at the bottom of that and we're part of the Sowburn Group. We've got 17½ litres a second and we're the only one on that right with a residual flow of 70 litres a second. We use it for the shoulders of the season because there isn't enough water through the summer and our strategy with that is to put all that area in Lucerne and we've been doing this over a number of years and
10 we've just about got there. So in the future, we'll possibly irrigate that once or twice in the spring. That will be enough and we'll have our Lucerne there, but it's a useful right for getting crops established and for getting that Lucerne established.

15 And then we come to Shepherd's Creek. So when we bought the farm we had that red area was in border dyke. So David points out the top dam, the top and bottom, what we call the top and bottom borders and then the other dam did the area around the house. As well as that, the water came across that top paddock in orange and then it flowed down that paddock, down there and right
20 through all that green area and that was your irrigation and your stock water so they just let the water go. It filled up all the hollows and that was stock water and that was the situation we came to. So at that time we decided that wasn't really what we wanted to be doing and so we decided that we wanted to put in K-line irrigation and so we went to the bottom of the creek because we knew
25 that there was more water there and we put in that take point two and put in a K-line system which could irrigate potentially all that green area.

Now what happened in the summer was, the Maniototo Scheme Water is very reliable, the Taieri River was unreliable so we didn't have that, we had to
30 prioritise our Shepherds Creek water, so we wouldn't do any border dyke flow and we would use the water on our K-Line area and then as it got drier, we had a variable speed drive on the pump, so we would just start turning off lines and although I've got quite a large area shaded, we could get down to some days

you didn't have much water at all and we'd get down to just a few paddocks. So that was the situation we had.

5 That's a pivot under the Maniototo Irrigation Scheme Water and you can see the difference in the improvement in the pasture quality.

10 This here is a picture of Shepherds Creek Drain and that is looking upstream towards Crossans who are the other user and the photo on the right is looking downstream at a higher flow. That is Shepherds Creek Drain in the high rainfall in January the 2nd, and then that's what happens, water all over.

15 The Sowburn Creek also floods and the Taieri River floods. So we started thinking about the problem we were trying to solve. Changing expectations on irrigators and the need to improve water quality started us thinking about the issues for our property. Border dyke and flood irrigation methods were not going to be compliant with Plan Change 6A. We either had too much water with flooding or too little water with summer dry conditions and not enough water storage. Our Shepherds Creek Drain consent was due renewal in 2023, the Taieri was fully allocated and our right was unreliable with minimum flow conditions. There was changes to freshwater management from Government on the horizon and an increasing focus on water quality and spray irrigation and water storage were very expensive.

25 We decided that the sustainable long term solution for our property was to build a storage dam, a large storage dam and we had a suitable location. We would apply for a supplementary take to fill the dam by gravity when there was plenty of water and use this in the summer when the flows were under pressure. We would remove the lower point of take, that take point two where we put the spray in and that would ensure that there would be more water reaching the Taieri River and we thought that would please effected parties. We would convert all our existing K-Line flood and border dyke irrigation to the most efficient method which was a centre pivot with DRI. It was a good time to do it, commodity prices were high, interest rates were low and we thought we were

still fit and healthy enough to do this and (inaudible 10:38:00) project and we had enough equity to borrow a million dollars that would be required.

5 As part of the development we planned to continue with our reticulate stock water scheme, there'd be more subdivision and fencing of waterways, our consents would be compliant and secure if our children wanted to go farming, and we knew that we'd need a long consent time to justify the capital investment and secure the banking support and we were really keen to get the consent renewed and the dam and the pivot in place for the 2020/21 irrigation season.

10

I'll just go back to the history of Shepherds Creek. So in 2003 we renewed our rights as a RMA for 20 years and at the same time our upstream neighbour, James and Gavin Crossan renewed theirs and the Regional Council only gave them 10 years because they were not spray irrigating. This is important. As 15 farmers we were given a regulatory signal that to obtain longer consents, the water must be used efficiently and sprayed on and the Crossans were given 10 years to get their pivot and K-Lines installed.

We now have a water sharing agreement with the Crossans which was done 20 when they renewed their right. In 2013 it was renewed for 30 years and it cost them \$7,000 which they were very annoyed at, at the time.

So we started in May 2019. We engaged McKeague Consultancy to help us prepare our application. We visited the ORC that same month and confirmed 25 that what we were proposing was a good solution and by September we had our 60 page comprehensive application submitted which I've given you a copy of earlier.

There was no site from the ORC but a minor request for some information plus a fish survey which we did and we also prepared our dam application and 30 submitted this in November 2019. Our first meeting with effected parties, DOC, Okaha and Fish and Game was very unsatisfactory from our point of view. We were also alarmed to meet several other farming couples in the waiting room who'd been trying to get a decision out of the effected parties for several years.

There was no timelines or commitments about anything and a lack of clarity around next steps.

1040

5 Numerous emails and phone calls by myself and McKee Consultancy failed to get them to commit to a site visit or a meeting in person and the decision to go to a hearing was made when it became apparent that they were in no hurry to make a decision and on the other hand we had dam builders wanting to start work over the summer which we wanted so that we could fill the dam over the
10 winter period and be ready for the next irrigation season and if we didn't commit, they would go to another job.

In November 2019 we made the decision to go to a hearing as we considered it the best way to get the effected parties to engage and make some decisions
15 so that we could move forward with our proposed development. DOC attended a pre-hearing meeting and we successfully worked through their issues and they changed their submission to neutral. Their things were to align expiry with the Crossans Right in 2043 which we agreed with and some conditions on eels. Iwi and Fish & Game did not attend nor did they attend the hearing on the day
20 despite opposing the application.

Ahead of the hearing the 25th of February, the ORC issued a s 42 report recommending a 10 year consent for the primary take and a 34 year take for the new supplementary right and on the day of the hearing, March the 17th 2020
25 this recommendation was changed to six years for each permit and the reason given was that Plan Change 7 was to be notified the next day and ORC considered that our application should be assessed under it.

The addendum and orata that was presented at the hearing came as a
30 complete surprise to us. The ORC also had legal counsel for themselves present which we had no prior knowledge of. We were shocked with the change in recommendation of consent term as the original section 42 report gave us the confidence to let the dam builders start work as there was no evidence to the contrary.

THE COURT: JUDGE BORTHWICK

Q. Sorry, can you say that again? That last sentence?

A. "We were shocked" and then –

5 WITNESS H SANGSTER CONTINUES TO READ STATEMENT WITH INTERPOLATIONS

We were shocked with the change in recommendation of consent term as the original section 42 report gave us the confidence to let the dam builders start work. There was no evidence to the contrary. Our bank manager was sitting
10 in the hearing and it was a surprise to him as well. We had not ordered the pivot as we thought it prudent to wait for the permit to be issued but we were anxious about time delays as there was a 14 week wait period to get the pivot out of Europe and we knew it would make it hard to get it up and running during the spring when we were busy.

15

The Commissioner conducted a site visit the day after the hearing and there were multiple minutes and legal opinions from both sides on the weight that should be given to Plan Change 7 following the hearing. The hearing was conducted by an Independent Hearing Commissioner as all of the counsellors
20 were deemed conflicted. The Commissioner found in our favour and issued a 24 year consent for the primary take to align with the only other right upstream who we have the water sharing agreement with and he issued 34 years for the supplementary permit to align with the consent for the dam.

25 The consenting of the dam was reasonably straight forward, the total cost was \$10,870 and it was completed in five weeks. The consent for the renewal of the water permit was a different story. From the date of the application being lodged to the date of the decision being issued was 32 weeks and it had cost us \$52,870.

30

We waited another 17 weeks to receive the ORC processing cost invoice of \$48,220 which we objected to. We would like to suggest that these sort of costs are unreasonable, unnecessary and unaffordable for Otago water users.

The ORC appointed an Independent Commissioner to hear our objection to their invoice and the hearing was held on the 11th of December 2020. We objected because we had a legal opinion that we were not liable to pay the ORC legal costs. We also think there is room for some improvements to be made
5 regarding processing applications and invoicing and we have asked the Commissioner to write some recommendations for policies and procedures that will ensure that future water users have a better experience than we did and that ORC staff also have more clarity around their roles in processing applications. The decision was released on the 9th of February 2021 and our
10 ORC charges were reduced by \$17,000. Commissioner also provided the ORC with some recommendations for improvements.

When we started this process we knew it would be a million dollar project and in fact if you include costs such as fencing and water supply, it's in excess of a
15 million dollars. We would like to make the point that short term consents of six years cannot sustain the investment required to improve water storage, environmental flows and irrigation efficiency. Everyone recognises that this is the right thing to be doing. It does seem bizarre that the ORC wants to set up a regime through Plan Change 7 to maintain the status quo when all parties
20 agree that the status quo should be improved.

The whole process since we lodged the application in September 2019 has been one of the most difficult in our farming career and we have been through challenging periods before. We found it extremely frustrating that although we
25 designed a cohesive proposal with strong environmental outcomes, the affected parties in ORC would not support a long term consent. When we started we had no idea that it would take so long and be so expensive. The hearing was extremely stressful, exasperated by the fact that we knew it would be expensive, but the introduction of Plan Change 7 took it to a whole new level
30 and the legal opinions that flowed afterwards just added cost. While the dam was being built, we were anxiously waiting the Commissioner decision, David and I both started having sleep issues and he went to the doctor for sleeping pills. I felt incredibly guilty for putting the business under so much financial pressure and I remember the 24th of April when we got the decision, we were

in the sheep yards and Roz Day from McKeats sent an email congratulating us, there was no celebratory drinks, I just cried and cried.

We started off feeling so excited about our new dam and pivot and all the
5 benefits it would bring to the business and during the past 18 months we haven't had much enjoyment from it at all.

It will not be easy to present this case to you, but we do so in the hope that you
10 will consider this case study as part of your decision. We believe every case should be on its own merits, the applicants, such as ourselves who are prepared to prepare a comprehensive application that improves the status quo at considerable capital expense, should be rewarded with certainty of tenure to enable financing. Thank you.

15 **WITNESS H SANGSTER SPEAKS TO PHOTOS:**

And then just some photos. So that was the view from our house before we started. That's the view now and that's a drone footage of the dam.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. You've got two dams.

20 A. Three.

Q. Three dams, okay, so what we're looking at, well in each case, are they supplementing flow at times of restrictions or have they got other purposes?

A. **H Sangster:** So this dam is for irrigation. So maybe it will make it clearer.
25 So what happens now is the water flows into those two little dams and then under the house by gravity and round into the new dam. So they're for irrigation and stock water.

Q. Yes and so I was really interested in whether that supplements flows at irrigation – when there is restricted flow or is it to irrigate in fact when
30 there's no flow?

A. **H Sangster:** Both.

Q. Both, okay.

A. **H Sangster:** Well all of that.

- A. **D Sangster:** The way it works is it – and we measure it at this point here because we measure here, that’s where we meter it, but that’s, when the creek (inaudible 10:48:08) it’s going straight down, we can now irrigate more reliable and that’s the story, so that when those low flows are there, you’re not affecting it and with the supplement sometime- a lot, it now means we don’t have to take water because we’ve got that water stored.
- 5 A. **H Sangster:** Alternative.
- A. **D Sangster:** On the high flows too, so we take a lot of water on the high flows and it just evens it out. It’s got to be better for the environment.
- 10 Q. All right, next question about your dam consents, what sort of consent was that? Was that like a land use consent in a –
- A. **H Sangster:** So I’ve got three consents and I’ve got them if you want to see them, but I think it’s to store water, discharge water and take water is it?
- 15 A. **D Sangster:** No, it’s
- A. **H Sangster:** Three of them, do you want me to look?
- Q. So you’ve got no land use consents on that?
- A. **H Sangster:** No, well we weren’t changing land use.
- Q. Pardon?
- 20 A. **H Sangster:** We weren’t changing land use, no.
- Q. No? Right, yes, when you’re putting a structure on land, I just was interested to know whether that required consent and I think the answer is no?
- A. **H Sangster:** No.
- 25 Q. And what was the discharge? What – how does a discharge consent work in relation to the dam?
- A. **H Sangster:** So the water is metered out of the dam as well, yes.
- Q. So you’re storing water, you’re taking water from the dam?
- A. **H Sangster:** Yes.
- 30 Q. And what’s the discharge part, I didn’t get that, why do you need a discharge consent?
- A. **H Sangster:** Oh I’m just saying that maybe I don’t. To take a new surface water from a water storage reservoir, to dam surface water for the

purpose of storage and irrigation and to discharge water from a water storage reservoir for the purpose of dam safety.

Q. Dam safety, okay I've got you. And you've got those consents in relation to the big dam that we see at the top of the slide, or the centre of the slide next to the pivot area but those two smaller dams, do you have similar consents or different?

A. **H Sangster:** No.

1050

Q. No. So what sort of consents do you have if any in relation to the smaller dams?

A. **H Sangster:** No, nothing.

Q. None?

A. **H Sangster:** I think they're so small.

A. **D Sangster:** They were built probably 45 or 40 years ago so there's no consents or there was no consents when we went there and bought – when we purchased the place. It wasn't an issue.

Q. Yes, so no requirement to renew any storage or to seek storage or to seek taking use from smaller dams, they're just – okay, all right.

A. **H Sangster:** No, it's just part of the irrigation system.

Q. All right, is there anything else you want to say? I had thought you were going to be presenting on this because your thoughts.

A. **H Sangster:** Oh my thoughts, yeah.

Q. Yes.

A. **H Sangster:** So I'd like to talk to a little about the thoughts. Maybe just on the topics that you think are worthwhile. If you're not interested in the topic, that's fine.

Q. I'm in your hands. It's got to be relevant to PC7 I suppose is the key question.

A. **H Sangster:** Okay. Well I'll leave off Tiaki Maniototo. I just noticed the other day that you had two witnesses and I wasn't sure that you really had enough information or if you wanted more information I could talk to it otherwise if you're fine, that's fine.

Q. I don't think we need it. You're now dealing with the Taieri Scroll Plain. I don't think either witness actually identified that it was the Scroll Plain

which would have been a good place to actually start but we know it's the Scroll Plain and we understand the values associated with the Scroll Plain. We understand the initiatives also which is community-led initiatives around the water wetland management to do with that scroll plain. I know that you've got \$4.5 million from the fund which is available –

5

A. **H Sangster:** Yes.

Q. – via the Government to support those initiatives and I also know that there may be other community-driven initiatives in addition to the funds supported by government, so beyond that do I need to know anything?

10

A. **H Sangster:** No, that's fine.

Q. No.

A. **S Sangster:** I think you've got a good handle on it now.

Q. I mean I understand the signal.

15

A. **H Sangster:** Yeah.

Q. By farming, is that it's not just standing by waiting for other people to tell it how to fix problems if indeed there is a problem out of the Taieri Scroll Plain, I don't know that.

A. **H Sangster:** I think it's a great opportunity for us to do some really good work in the catchment.

20

Q. Yes, and that evidence was clearly given by the two witnesses, oh well, by one witness in fact, the female farmer.

A. **H Sangster:** Emma.

Q. And I've forgotten her name. She'll forgive me.

25

A. **H Sangster:** Emma Crutchley.

Q. There have been so many farmers but that evidence was clearly given by that particular witness.

WITNESS H SANGSTER CONTINUES READING TO STATEMENT WITH INTERPOLATIONS

30

So farm maps, so there's been a lot of questioning during the hearing on maps. I'd just like to say there's been a lot of technology development in this space and software for mapping has and will continue to improve.

Every farm business should have a farm map. It's a really important part of managing and governing your business and as well as that, we are all going to have software to record carbon emissions, etc.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

5 Q. So the questions there are coming from the Regional Council's lawyer, Mr Maw. He's asking those questions because it was put to us by a witness in OWRUG that it would be difficult for farmers to identify on their land where they're irrigating which was a little surprising because that would not be the sophisticated level of farming as I understand it to be in
10 2021 and that's the purpose of the cross-examination and you're confirming, yes, actually, farmers will know that and they have systems available to them to map it accurately.

A. Mhm. I think at the moment the issue really for farmers is that we're waiting to see which system the regulator is going to choose –

15 Q. Yes.

A. – and whether the Government's going to get involved and decide that this is a system that everyone will use or whether they're going to let there be competition in the market. So I think a lot of farmers, us included, are just waiting to see which is the system that we should buy into.

20 Q. But that's not to say that farmers won't have a pretty good handle on where they're irrigating – the maximum area where they're irrigating, albeit it that within season, those irrigation – where they irrigate will change and Mr Sangster, you've talked about this morning, but actually within a year or even between years depending on the model of farming,
25 the actual block of land might also change in and the Court's aware of that.

A. Yep.

WITNESS H SANGSTER CONTINUES TO READ STATEMENT WITH INTERPOLATIONS

30

And then under area irrigator which I talked a little bit to, because I am concerned about trying to restrict the area because I think there could be unintended consequences of doing that, like I think...

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. Now that's something I am interested in.

A. Yes.

5 Q. And you've identified one and the Regional Council, or the parties involved, are looking to plug that gap and that's the issue to do with stranded assets. What is a stranded asset? At the moment it's sitting with the irrigation mainline having been put into the ground and we understand the evidence was that when rolling out a large development on a property with one or more pivots you will put the main line in for all
10 pivots. You will put the mainline in for the horticultural enterprises also. That gets rolled out at the same time, not so other forms of irrigation like K-lines, but there's another issue or another area that we ought to be exploring, now is the time to be highlighting that to us so we're interested in that.

15 A. Yeah, so what I say is that I think having the area bigger means you know, that you can choose your paddocks at different times, you can think about your soil types, you can use crops, it can help prevent continual cropping on one particular paddock. If you have a choice of paddock it can help prevent pugging and soil term damage. I think being able to use water in
20 the spring to established crops particularly in our environment when it's so dry can be a really useful use of water and so being able to use that water when there's plenty can be really, really helpful to a farm system and really help its economic viability. Sometimes it actually does rain. Not very often, but you know, that happens and that really helps us. VRI
25 is a really good thing. I think farmers are going to get much more discerning about their water use and the other thing I would say that, just because I have a larger area doesn't mean I use more water. Look, I think the important thing is the total volume of water that I have, if I know the amount of water I've got for a month please leave me with some
30 choice about making the decision about which paddocks and where I apply that water. In the future, I think farmers are going to be much more discerning. They're going to be driven by technology and best practice but they're also going to be driven by the cost to irrigate and I would suggest that over regulation in this space would not be needed. Look, to

be quite frank, it is very cheap to flood, irrigate and water dyke. Once you put a pump in and VRI and all the technology that goes with it, you really think very hard about what you're doing with your water. Farmers are very responsive to regulatory and market signals particularly if given time and knowledge to make changes. Many farms in the Maniototo have a balance of farmland. They have some dryland, they have some irrigated land and they have some hill country. To have some irrigated land, a proportion of land irrigated is vital to their long-term sustainability and it's because of the harsh Maniototo environment and it's short growing seasons, we really need to be able to grow crops and make supplementary feed and we do that often off that irrigated area. It enables them to finish their stock in the summer. It reduces their reliability on the storm market and enables them to optimise the value they receive for their livestock and it's going to become increasingly important when we have to start measuring our carbon emissions because those farmers that can grow and finish their stock quicker will have lower emissions. So what I say in summary to that is I understand from listening to evidence that it's thought we need to claw water back and it would be better in my opinion to limit the volume of water per farm than limit or specify the area to be irrigated. An unintended consequence of not letting farmers irrigate a greater area if they are more efficient, will mean they will intensify the production on that area and increase the inputs which may cause more environmental problems. Technology solutions and good management will help farmers make their water go further and help with the pay back on infrastructure. Your Honour this is a very important point and I would ask you to try and not interfere with farm management choices and allow farmers flexibility as I believe they will make the best choices for their business and the environment. Do you want to ask anything?

Q. I am interested in paragraph 24, in particular the third sentence: "Unattended consequence". But we'll ask that question when we get – after we've heard from cross-examination.

A. Okay.

WITNESS H SANGSTER CONTINUES READING TO STATEMENT

Flow Sharing. So just a couple of points on that. I would caution you about trying to regulate flow sharing agreements. We're very practical. We work tog
 5 and will come up with a solution for ourselves that work. We need a framework or a bottom line, but they'll come up with better targeted solutions that suit their particular situation than the Court or ORC ever could. I've got that saying about the Maniototo look – and I think we've moved on from that, but farmers are very good at policing each other.

10

We flow-share in the Taieri River as I explained to you. We use Susan McKeague because there is four of us. For our flow-sharing agreement with Crossens we just do it ourselves. I would suggest that all ORC need to do is keep a copy of the flow-sharing agreement and have some sort of arbitration
 15 or mediation clause.

1100

The starting point for calculating irrigation: the Court seems concerned that people will game the system and try and grab a whole lot of water to maximize their starting point. For a start, there is not a lot of extra water to grab when
 20 you need it in the hot summer months. Just because it says on a piece of paper that you're allowed so much water doesn't equate to the water being available. We can only take the water when it's there and in the summer dry conditions in the Maniototo there is not often a lot there. Setting a starting point could be problematic in some cases, for example a young farmer who has just bought a
 25 property that has not been irrigated efficiently by a previous owner. Should he be penalized? One size may not fit all, and I think this is an example of grandparenting.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

Q. I would say that that's not necessarily an issue that the Court has raised
 30 but it is an issue that has been raised on, if you can call it, both sides of the primary sector debate and so the contribution that the Court has made is to say if that is an issue, how do you test the issue, if it is an issue, and the Court has made a suggestion about that and I'm not quite sure where

the experts got to it but there was a ready test which would be, I would have thought, acceptable to the farming community to get past the point that has been brought to us.

A. Thank you Your Honour.

5

WITNESS H SANGSTER CONTINUES READING STATEMENT

Water storage: we believe that water storage is an important part of the solution for all stakeholders. In an ideal world there would be more Loganburn dams and Falls Dams where people can share costs and benefits. Unfortunately, these large schemes seem to have become politically, environmentally and economically too difficult.

10

Farmers have started to invest in on farm storage because they recognize like we do that it is better to store water when there is plenty rather than try to use it directly from creeks and rivers when all stakeholders have different views on allocations and minimum flows. Modern irrigation techniques require a continuous flow which is easier to implement out of a storage dam. In the Maniototo there would be at least 20 large dams that have been constructed in the last 10 years.

15

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Water storage is part of the solution and I would not like to see it over-regulated or over-priced to process the necessary consents and there seems to have been a rapid escalation in requirements for a consent even since we constructed our dam. Stakeholders, in my opinion should be supportive of farmers who are prepared to invest in water storage because it makes the conversations around residual flows, minimum flows and water allocations much easier.

25

To the question of how big storage should be, the answer lies in risk mitigation and what the individual farm business can afford. In our case, we tried to balance the cost of the dam construction with a view on how many days' storage we could afford to hold. In some years it won't be enough, and, in some years, it will be more than enough.

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Farming businesses will use other risk strategies as well to manage periods of draught or reduced water availability such as I've talked about crops: Lucerne, different stock classes that can be traded; blocks of land in different locations; etc.

5

I wanted to give you some comments about review clauses because I thought you might be interested in that, as we have it in our consents. So we have reviewed clauses in our consent which we think is a pragmatic approach when issuing a long-term consent. To us it seemed more preferable to have some review rather than have to go through the whole exercise and cost of renewing a short-term consent. The ORC has issued water direction notices before in extreme situations and turned irrigators off and no doubt it will happen again.

10

I think that farmers can accept that over time there will be change and I reflect on the huge change in irrigation practices over the last 20 years and there is no doubt it will continue and with more science and technology, who knows what irrigation the Taieri Catchment will look like in 20 years' time and what impact will Te Mana o te Wai have.

15

I think it is important that it is seen to be equitable across all farmers, for example, we objected to our consent being tied to a minimum flow in the Taieri River when the other consent above us did not have the same condition. We accept that in the future if everyone had this condition, we should have it as well. This was one of the scenarios we asked the ORC when we visited them prior to renewing our consent and one of the reasons that we wanted storage so that we could maintain some of irrigation if consents were in the future linked to a minimum flow in the Taieri, or we got a notice of direction. Everyone has to expect to do their bit.

25

Changes to minimum flow conditions: I think farmers accept there will be minimum flow conditions in rivers in the future and that all stakeholders have different ideas about what these should be. We have a minimum flow in the Taieri already. Our Taieri River right adheres to this condition. We understand it. We start rationing and sharing the water when it approaches the minimum

30

flow and we use management techniques to mitigate. Some years we turned off; other years minor impacts.

5 Is it practical and sensible to have minimum flows for every little creek and tributaries with our wide range of unique characteristics? You've heard in evidence about creeks that dry out and flow underground for example. We need to do work in this area to understand the hydrology of our tributaries. I believe minimum flows should be set with a targeted collaborative catchment group approach rather than one size fits all.

10

Setting and changing a minimum flow if deemed necessary should take place slowly over time rather than abrupt changes. Sudden changes do not give farmers time to adapt and change their farming practices and invest in infrastructure and can lead to unintended consequences and finally:

15

The importance of irrigation: Agriculture is vitally important to the New Zealand economy, particularly at the moment with tourism crippled and in a climate like the Maniototo, irrigation is essential to the viability of our farming business and the survival of our local communities.

20

Land use will move to its most productive return over time. In Marlborough it is viticulture, Rangiora: lifestyle blocks; Bay of Plenty: Kiwi fruit. A worrying trend at the moment is the move towards forestry and carbon farming. Beef & Lamb New Zealand figures show a reduction of 800,000 in sheep numbers in 2020.

25

Government figures show that sheep and beef farmland will decrease by 20% over the next 15 years due to forestry establishment.

I am concerned that some people don't value our agricultural businesses and their contribution to the New Zealand economy. If we set the bar too high on consent renewals and/or do not give people time to adjust, rural mental health and stress will increase.

30

Will there be unintended consequences such as people selling their farms or part of their farms for forestry or carbon farming like we're seeing in other parts

of New Zealand? Could the Maniototo become one big Naseby Forest? What effect would this have on the vibrancy of our local Maniototo community?

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

5 Q. Now as to do with what are the – what to do with the consents that are in the system, that is for the Court to decide. So we'll just leave it at that, I think.

A. Yes. Okay. Thank you.

Q. So we are going to take morning tea and Mr Maw will ask you his questions, all right?

10 A. Thank you.

Q. Which means you're on your oath so you can't – you can talk to each other, but you can't chat to anybody else, all right?

A. Yes.

COURT ADJOURNS: 11.07 AM

COURT RESUMES: 11.20 AM

THE COURT: JUDGE BORTHWICK

5 Are we missing someone? Shall we just pop back to the café and see if they're there.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

Q. In the meantime, Ms Baker-Galloway did you have any questions?

A. No, no thank you Ma'am.

Q. All right we can't fill the gap that way.

10 **THE COURT: JUDGE BORTHWICK TO MR PAGE**

Q. Mr Page did you have any questions?

A. (No audible answer 11:21:37).

Q. Okay so we are just waiting for Mr Maw, that's fine.

THE COURT: JUDGE BORTHWICK TO MR MAW

15 Usually Court can't start without me, but on this occasion it can't start without you, so good to have you back no worries. All right so we're in your hands with any questions that you might have.

CROSS-EXAMINATION: MR MAW

20 Q. I'm interested in the thinking behind what is your paragraph 13 of the "Further Thoughts" document and this is the use of the lighter gravely soils as run-off paddocks utilising the winter crops. So can you just step me through your thinking around why those paddocks are useful?

A. **H Sangster:** The don't get pugged, so they, for example, if it's raining or wet conditions those paddocks do not get pugged as much as soils under the pivot.
25

Q. Is it fair to describe those paddocks as free draining given the composition of the soil and the gravel?

A. **H Sangster:** I suppose so.

A. **D Sangster:** I would say actually those paddocks are higher up on the terrace and, yes, I don't know you'd say they're free draining into any waterways or anything else, they're just drier ground full stop. They're just gravelly dry terraces.

5 Q. And I wonder whether we might come back to the map where you had showed the location of the paddock as I understood it, it was the photograph with the irrigation areas. Now my understanding it was that wedge of land in a light sort of aqua colour to the left of the pivot?

A. **H Sangster:** Yes, yes.

10 Q. So in short is that where the wintering of stock is occurring at least on this property?

A. **H Sangster:** Well it is this year because we've got a crop in the paddock next door to it.

A. **D Sangster:** It's right at the end. (Inaudible 11:24:57)

15 A. **H Sangster:** Yes. So some farmers, for example, would leave their stock on the paddock they're actually grazing. So sometimes we do that but if it's wet conditions and there's pugging we like to put them on a run-off paddock and that's an ideal paddock because it is drier and its next door to that paddock this year.

20

UNIDENTIFIED MALE SPEAKER:

That is actually a terrace right round (inaudible 11:25:23).

CROSS-EXAMINATION CONTINUES: MR MAW

25 Q. And when you think about the suite of permits that you hold for this particular farming system, are there any restrictions in terms of the locations where farming activities can take place?

A. **H Sangster:** No.

30 Q. And when you think about the water permit that was granted in 2020 I'm going to say, it's permit RM1932201 which is the taking use of surface water from Shepherds Creek, you're familiar with that permit?

A. (No audible answer 11:26:18).

Q. And was that one of the three you referred to for your dam or is that an additional permit?

- 5 A. **H Sangster:** No, no. So there's three consents for the dam and then there's the primary consent which you're talking about, I won out of the Shepherds Creek Drain and then we've got a supplementary take which is 02 for out of season water or it's actually tied to a flow, I think it's called the mean flow in the Taieri River so when the Taieri River is at 9.4 we can take water at a higher rate which often will occur in the winter time when the – so when the Taieri's at a higher flow we can fill that storage dam, that's a supplementary right.
- 10 Q. So I want to just focus on what you'd described as the primary right, so the 01 permit, does that permit have any conditions relating to the use which land can be put?
- A. **H Sangster:** No.
- Q. And does it have any conditions relating to the use of inputs in a farming system, the likes of fertiliser application?
- 15 A. **H Sangster:** No.
- Q. No restrictions on stocking rates?
- A. **H Sangster:** No.
- Q. Is there any requirement within that permit to monitor the effects on a water quality associated with the farming operation?
- 20 A. **H Sangster:** So there's no requirement in the permit.
- Q. When you're thinking about this issue of risks associated with expanding the irrigable area or in your evidence at paragraph 24 you noted that there could be an unintended consequence of such a restraint with farmers more intensively farming within a said irrigated area, when you think about the drivers for intensity of farm use systems, is it your experience that the availability of water is perhaps the single greatest driver in terms of the potential productivity of use of a land?
- 25 A. **H Sangster:** Can you explain the question again?
- Q. Yes. It was a bit long winded I'm afraid. So when I'm thinking about say an irrigated part of the farm, when you think about the intensity of the farming activity that can take place on that land, is the availability of water perhaps the most significant driver in terms of productivity?
- 30 A. **H Sangster:** It can be but it does depend on the season, yes. So some years, for example, this year we had a huge rainfall in January, we didn't

irrigate at all during January. So, too wet. So yes, so there's no doubt about it, irrigated land grows more grass.

- Q. So just thinking about this year when you had the January event, did you then – did that enable more productive or more intensive farming to occur
5 or was it the other way round in that situation?

THE COURT: JUDGE BORTHWICK

Q. Mr Sangster's shaking his head so we just need that response on the record.

- A. **D Sangster:** Our place was so wet that we had to wait for it to dry out so
10 couldn't grave a lot of land and there was so much water everywhere, we just had to take stock back to those drier areas of the farm and we couldn't, it was just so wet that it was, yes, it was water logged, it was, you know, you've seen photos of the river running through the middle of it, well it's running right through it, so we didn't have fencing or anything
15 else, so, for a while there you got nothing and even crops were too water logged, they don't grow, so they're stunted so it's, you know, yes, that would be my answer, don't know if that's quite the question, but that's what happened anyway. It couldn't grow more at that stage we had to wait for it to dry out.

20 **CROSS-EXAMINATION CONTINUES: MR MAW**

Q. So when you think about the potential for more intensive use of already irrigated land, what is it that you have in mind when you think about that risk?

- A. **H Sangster:** So, for example, if I had a restricted irrigated area, I would
25 be multiple cropping it, I would have more fertiliser on it, I would have more nitrogen on it, and I would be using a livestock that would - gave the greatest return at whatever particular time it was. I would be strip grazing it and I would be utilising every blade of grass. If I had a restricted area and that was the only area I had and it was in drought, I'd be making sure
30 that I got the most that I could out of that area.

Q. So when you think about farming systems, isn't that already the case where farmers are using their land as productively as they can in light of the availability of water that they have?

5 A. **H Sangster:** No, so if you think about our farm, for example, which I tried to explain to you, so there's lots of water in the shoulders of the season and that allows us to put in crops and do other things and it really helps make the whole system work and because we can do that, it gives us a lot of flexibility, we can have those crops which help us when flows are low, so we're not actually having to rely on just a small area because
10 we have that more water that we can use over a larger area through the shoulders.

A. **D Sangster:** You can have paddocks fall on I suppose too, you can leave areas that aren't grazed to get whatever to fall that we're going to direct drill, we can spray them out and leave them there six weeks and we know
15 that on the shoulders of the season we'll have water again and we'll irrigate it and put an autumn crop in I suppose or whatever but, yes, to get it back into production.

Q. So when you then think about the potential to expand an irrigable area, presumably you would need to add further infrastructure?

20 A. **H Sangster:** Are you talking about us or farmers in general?

Q. Oh just perhaps as a general proposition, exploring this constraint or the risks around the constraint on an irrigable area.

A. **D Sangster:** It would depend on the irrigation system, if you've got a hard hose guns or different things, you can, as long as you've got a
25 mainline or water a source.

A. **H Sangster:** So I think the point I was trying to make is that I mean economics dictate it but in our example, I mean it was better to make the pivot slightly larger because it gives you more flexibility, but I mean you can't be stupid about it because it's too expensive, so the way we get
30 round that is, I mean, we have a little and a lot of farmers could do this, put a little bit of K-Line around the outside of their pivot which would give them a bit of extra feed or flexibility during the spring and the autumn in particular and I don't think that's a bad thing. There's still the same amount of water but they can choose it and I can tell you from our figures

with the Maniototo Irrigation Company, so we have a roster of 36,000 cubic metres ever roster. Now a lot of the time we don't use that full allocation, but there will be a period during the summer dry that we will, but a lot of the time we don't.

5 Q. If you're thinking about stretching the water to go a little further, in terms of the drive for efficiency, would that require a shift in irrigation system to a more efficient system?

A. **H Sangster:** There's no doubt about it, that pivots, VRI, all those sort of thing are much more efficient than flood irrigation and border dyke.

10 Q. And in terms of those, that conversion, you've provided some evidence today around the costs of that, a significant farm investment?

A. **H Sangster:** Yes.

Q. And in order then to see a return on that, increases in production would be required?

15 A. **H Sangster:** Yes of course.

Q. And when you think about enabling the increase or if there's no restriction on the increase in the area, there's the potential for that increase in production to result in different effects on the environment than in terms of irrigated land compared to non-irrigated?

20 A. **H Sangster:** What's the question?

Q. I might actually leave that for a different witness. Perhaps I'll put it this way. You, through your experience with the current planning framework, there are no controls in terms of the current planning framework in relation to the intensity of farming land use, and so if irrigation areas are expanded, again there's a risk of there being no control on the effects associated with those increases?

25

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

Q. Do you agree with that? But if you're not familiar with the operative plan, you should say so?

30 A. **D Sangster:** No I think that your new National Water Policy Statements and everything else and you can't – we can't suddenly convert our farm to a dairy farm or cropping farm or anything else, we've got – it's covered off like that and as far as BRI goes, that's put on there for water quality

and everything else, you know we aren't irrigating drains and we aren't having run-off and we can stop irrigating those paddocks, we, it's an environmentally friendly way.

- 5 A. **H Sangster:** So I think when you talk about an increase in production, I mean we haven't changed anything that we were doing, what it means to us that we would perhaps grow our lambs a kilo heavier for example. So we're not talking about suddenly doing a lot of dairy or extra cattle or anything else, so we're just talking about doing what we do at the moment, but doing it better and also having more security around the fact
- 10 that we know that we've got the water in the summer and that its future-proofed for some time in the future if we had to turn our water off, we would have the storage and it would be more reliable, so you're not exposed to the store market.

CROSS-EXAMINATION CONTINUES: MR MAW

- 15 Q. But there are no restrictions in your consents that would stop you undertaking some of those activities within your irrigated area?
- A. **H Sangster:** Well I think when they – there's all the regulations coming from Government about waterways and water quality and all those things and we factored all that in to when we were trying to design our proposal,
- 20 so I mean we're aware of that and we think we farm with that in mind.
- Q. Thank you. You provided some evidence in relation to flow sharing and the arrangements that are in place with respect to your takes?
- A. **H Sangster:** Mhm.
- Q. In terms of the flow sharing agreements, they work outside of the consenting regime, have I understood that correctly?
- 25 A. **H Sangster:** So I couldn't tell you about the Taieri, but I know that, know the one in the Taieri, some of the people on the Taieri flow sharing aren't tied to the minimum flow in the Taieri, we are, the others are doing it voluntarily, whereas with the take with Crossans, that is a condition of our consent that we flow share with them or they have to flow share with us
- 30 really because we're downstream.
- Q. So is that a restriction on your permit?
- A. **H Sangster:** Yes.

Q. Is there a similar restriction on their permit?

A. **H Sangster:** Theirs, yes. So that has been in place since 2013 when they renewed their permit.

Q. Thank you, those are my questions.

5 QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK TO H SANGSTER

Q. So again in relation to your paragraph 24 and again the same sentence that Mr Maw's been asking you questions about, similar evidence has been given but no explanation has been offered by the witnesses as to the increase in intensity in production if you're not able to expand your irrigable area and do you understand that that's what we're talking about

–

A. Yes.

1140

15 Q. – it's not taking irrigable area, it's not the removal of irrigable area, it's the expansion out if the area's not hitherto irrigated, so that's what the area questions about, so you understand that?

A. Mhm. So, you know, it costs a lot of money and if you can spread that – your allocation. I mean, I don't – I wouldn't mind having a monthly allocation or whatever it is, but I'd like to be able to spread that water over a bigger area if I could. That would give me a lot more choices and a lot more profitability, but you know, like we do, using that K-line strategically so not investing in infrastructure that is fixed but having some flexibility around the edges and when there's plenty of water would really, really help farmers' bottom lines.

25 Q. Yes, and the counterpoint of that is that there is nothing in the operative plan and nothing in this Plan Change which manages the outputs of increase usage of land under irrigation and I think you've acknowledged that as well? For the record, if you could just say yes?

30 A. Oh sorry, yes.

Q. Yes, okay. And so I'm really interested in your answer that well, if you don't expand the area which may be irrigated then farmers will just more intensely farm their current farming area and for example whilst if you put

another KG on the lambs, so how do you achieve that? Where would you do it in terms of your property and how do you achieve them?

A. So the best way to do it is to grow specialised crops so you could do that for example. You could put in paddocks of Chicory or Rape. Lucerne's also very good, that type of thing, or new grass: high quality; more Clover, Plantain so it's about feed quality and growing them quicker.

Q. So feed quality. Is it necessarily about putting more stock on the land?

A. No. And I think at the moment like there really is a drive towards getting more value from what you've got rather than...

10 Q. From what you've got rather than increasing endlessly a number of animals?

A. Stock numbers, yes.

Q. Okay, all right, and then so if you are improving the quality of the feed, you've got the energy you need for the, I guess the meat on the lamb, is it necessary, do you also have a case that you need to put more fertilizer, more nitrogen on the land?

A. So we just put the same.

Q. You just put the same?

A. Yeah.

20 Q. So you're improving, or you're being more selective in the crop type, but you're not necessarily putting more fertilizer, more nitrogen on the land?

A. So look we soil test and we put on what is required.

Q. What is required, okay, all right, that's helpful. And that was my question.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL

25 **QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL**

THE COURT: JUDGE BORTHWICK

Q. Those are the Court's questions, so thank you for your presentation.

A. Thank you. Good luck.

Q. Thank you.

30 **WITNESS EXCUSED**

RACHAEL ANNE ARMSTRONG (AFFIRMED)

MARK JAMES MACGREGOR (AFFIRMED)

THE COURT:

5 Q. All right, so we're just going to ask Mr Maw to help us out by confirming who you are and whether you've provided a brief of evidence which I think you have. You have?

A. **M MacGregor:** Yes, thank you.

MR MAW TO WITNESS ARMSTRONG

10 Q. Right, we'll start with Mrs Armstrong.

A. Yep.

Q. If you could state your full name for the record?

A. Rachael Anne Armstrong.

Q. And you are here speaking today in support of a submission lodged by?

15 A. Balquhiddar Farming.

Q. Thank you. And Balquhiddar Farming Ltd has lodged a submission on Plan Change 7?

A. Yes.

20 Q. And you have also prepared a summary of the key points that you wish to make in support of that submission and a copy of those key points has been circulated to the Court this morning?

A. Yes.

Q. And do you confirm that the evidence that you are about to give is true and correct to the best of your knowledge and belief?

25 A. I do.

MR MAW TO WITNESS MACGREGOR

Q. Now Mr MacGregor can you state your full name for the record please?

A. Mark James MacGregor.

30 Q. And you too are here giving evidence in support of the submission lodged by Balquhiddar Farming Ltd on Plan Change 7?

A. Yes.

Q. And do you confirm that any evidence that you give today is true and correct to the best of your knowledge and belief?

A. Yes.

Q. Now I take it that you would prefer to read the summary statement?

5

MR MAW TO WITNESS ARMSTRONG:

A. Yep.

Q. Okay I will leave you to do that and then I may have some questions and the Court may have some questions.

10

MARK MACGREGOR READS SUMMARY STATEMENT:

Good morning everybody. My name is Mark Macgregor and this is Rachael Armstrong.

15 We have a small family run farm in the Nenthorn Valley in East Otago we farm with our two children Liam and Paige.

Neither of us feel comfortable up here presenting this so you'll have to bear with us, but we feel so strongly against the Plan Changes and what it will mean to the future of farming not just for us but for everybody, so we would like to present this to you.

20

My dream has always been to own my own farm. I left school when I was 15 and worked on various farms, then I went shearing for 20 years. I shored in the UK, America, Australia and New Zealand. I bought my first property, a lifestyle block in Oamaru when I was still shearing and then eventually Rachael and I bought a 115-hectare property: Matakanui. From there we purchased a 480-hectare property at Oturehua, and then a 720-hectare property at Dunback. In 2017 we purchased 'Rockburn' where we are now, a 740-hectare property with an irrigation right out of the Nenthorn River.

25

30

We have not been lucky enough to have the backing to get us into farming. All of these properties that we have bought have been run-down and have required a lot of work: new fencing; stock water; stock water schemes; re-grassing, and

irrigation systems. This has enabled us to add value to each property along the way providing the capital in order to purchase an economical unit to support our family.

- 5 So through hard work - 20 years' shearing and 10 years of developing properties we were in a position to purchase Rockburn which we hope would be our forever farm.

10 Within re-financing Rockburn, it was at an extreme limit of debt servicing. With also requiring a lot of love, it also did have the infrastructure of our irrigation in place. While it had not been used to its full potential, we and the bank could see the benefits it would provide in the form of finishing stock and establishing winter crops and feed to keep us out of the volatile stock market. It would safeguard us against draught conditions prominent in the East Otago region.

15

For example fat lambs fetch between \$115 and \$120 where a store lamb can be \$60 to \$80. This year, we didn't have to store a lamb. The irrigation allowed us to grow enough feed to furnish our lambs.

- 20 The water allocation associated with Rockburn is extremely important in keeping us viable and servicing our debt.

RACHAEL ARMSTRONG CONTINUES READING SUMMARY STATEMENT:

- 25 Plan change 7 has very real effects on our performance as an economical farming unit and poses a very real threat to our viability.

30 Policy IOA.2.2 which looks at imposing a short-term frame of only six years. This not only allows us to plan to the future but able to react to changes in the environment with any real certainty. We as families, need more certainty so that we can adapt and move forward with the changing times, with confidence that what we have undertaken in terms of investment and progress will remain within current permit conditions. A longer timeframe is necessary so that financial and productivity plans can be made.

We purchased Rockburn, a property requiring a major amount of development on the irrigation scheme to be done to establish it as a profitable and viable unit, and to service our debt. Under this policy any current and future developments are going to be risky as we have no assurance as to their future legal ability.

Short time frames are also going to impose higher financial burdens on us. We are currently in the process of renewing our deemed water permit. We are halfway through its completion and it has already cost in excess of \$15,000.

10 This is a huge expense and it is unrealistic to expect us to do this every six years, especially as such a short timeframe does not let us plan for the future, limits our confidence, and our ability, and also the bank backing to adapt to these changing conditions.

15 For us a longer timeframe is vital as it provides us more certainty, allows us to plan longer-term and make more decisive decisions. It provides flexibility to adapting changes in climate and farming systems.

We also oppose rule IOA3.1.1 which aims to limit water use in terms of area under irrigation to that used in the irrigation season of 2017 to 2018, and to limit total water take to that used between 2012 and 2017.

This is a very damaging and detrimental way to determine future allocations. It effects grandparents' water use, How did they come up with the arbitrary years? Had they considered the changing environmental conditions like more prevalent and longer periods of draughts? How did these irrigation seasons compare against a 10-year average? Have they looked at the different regions rather than putting a blanket cover over the whole of Otago?

30 It is unfair to base water use to one single irrigation season. Water use is seasonal-dependent. Records fluctuate from year to year depending on the amount and frequency of rainfall within a season as well as farm management practises for example crop rotation and pasture renewal. Draughts have become more common. Water is the key to productivity and viability in such

conditions. Us as permit holders who make substantial investments to increase the reach and efficiency of our water takes, while still operating within our current permit conditions, should be able to continue irrigating this land. The prohibition of this is both extremely unfair and detrimental to the permit holder.

5 I cannot see how the Council can go back in time and apply a date that is no longer current to where we are today. Everything changes, whether social, economic and technology. How can you base future water allocations on data from four to five years ago? You have to remain in the present to allow us as farmers to farm within current conditions.

10

These rules of in effect grandparenting water use also do not consider any investment the permit holder has made in good faith and within their current water permit conditions since these arbitrary dates. Using data from the past to base future water allocations is unfair and will have significant negative impacts on farmers in these draught prone areas who rely heavily on their current allocation to survive and remain viable.

15

As earlier mentioned, we bought Rockburn in April 2017. The previous owners had invested in irrigation infrastructure but had not really been used. We purchased this property as we could see it's irrigation potential. East Otago is renowned for its draught conditions and the last two years have been good examples of this. Being able to grow feed in such events is vital to ensure the wellbeing of our stock and to remain profitable. Our goal since possession has been to improve the effectiveness and efficiency of the current irrigation system which we have done whilst still operating within our current permit conditions.

20

25

In 2018 our dam permit came due. During the process of renewing this we had extensive discussions with Otago Regional Council staff. We have plans to invest heavily in the irrigation system to improve its effectiveness and wanted to ensure any investment made would be valid in the future. They reassured us on numerous occasions that as long as we could prove that we were using our current allocation then we would keep it. Since then we invested heavily with regard to capital and infrastructure to achieve the whole potential of the current system. We have spent in excess of \$157,000. We replaced an electric

30

pump. We have upgraded to a diesel pump at the river. We have replaced underground mains. We have built a ware in a dam for increased water storage. We have replaced above the ground aluminium pipes with K-lines and we have replaced our (inaudible 11:55:11) with PVC pipe.

5

The inclusion of the above rules would render this huge investment even though made within the confines of our current permit condition, non-compliant and prohibitive. This would not only impose a significant burden on our financial situation, as this investment will never be able to recoup its cost, but also significantly inhibits our ability to operate viably within this draught prone area.

10

This is punishing us for future-proofing our property against draughts and allowing us to remain profitable on these dry years. Making us apply for non-compliant activity consent when we have been working within our current water conditions is really extreme.

15

We undertook these developments to get ahead, to service our debt and to ensure the best welfare of our stock.

I feel we also need to mention that we are the only water take from the Nenthorn River. Our take has no implications on any other surrounding properties.

20

Through the process of renewing our deem permit we were required to employ an ecologist to examine the health of the river. Matt Hickey from Water Resource Management did his investigations. His findings show that the health of the river was in a good state. The habitat and fish species above the point of take were the same as those below the point of take indicating that us taking water from the Nenthorn River was not having any negative effects/impacts on the environment. Matt Hickey's report has been presented to the Otago Regional Council.

25

30

We have worked hard all our lives to achieve our goal of farm ownership and operating a viable farm to provide for our family. Farming is all we know. It is what we love. It is our livelihood, but quite honestly, if this policy is passed, our

ability to continue farming Rockburn which we had hoped would be our forever farm, will be in very real jeopardy. We will never recover the capital that we invested in developing the property with regard to its water use, as water records during the seasons of 2012 and 2017 and 2017 to 2018 show very little
5 low water use. Our future water allocation will be at a minimum rendering this property not far off a dry block land.

We will need to reduce stock units as we will no longer be able to produce the feed required. We will struggle to make debt repayments and our farm will no
10 longer be worth what we paid for it four years ago as it will no longer be capable of irrigating 19 hectares of flats which was reflected in the purchase price. We want to continue farming here to provide for our family and support the community but these policy changes have serious implications. Please consider the amount of effort, resources and capital that we invested and how
15 these policy changes will affect us. This is our livelihood.

THE COURT: JUDGE BORTHWICK

Thank you. Now I am just going to see if Mr Maw has any questions and he may well do. I think in part possibly because some of the rules are moving on. The schedule again is moving on. It is a bit what I was talking about this
20 morning. Actually there are some changes which are moving in response to farmers' legitimate concerns and quite some distance, so some of the things that you are rightly concerned about may be addressed but maybe some other matters are at large, so, yes, with that in mind, and that is what I was talking about, someone, somewhere has to effectively start communicating what those
25 changes look like, but it was a bit early in the process for that to happen.

CROSS-EXAMINATION: MR MAW

Q. Thank you for the statement this morning and thank you for raising what are very real issues with Plan Change 7 as it was codified in terms of the effect of the provisions as they then were on the farming system that you
30 operate. As Your Honour has just mentioned there have been some movement or changes in relation to particularly the schedule in Plan Change 7 to seek to address what are very real concerns being raised

and I want to ask you some questions this morning about your farming system and particularly your irrigation to help understand whether the way in which the method and the Plan Changes adapting is actually responding to some of the concerns you've expressed. So you've indicated in your statement this morning that you purchased Rockburn in 2017?

5 A. **M MacGregor:** That's correct, yep.

Q. And it is a 740-hectare property and is it that there's 90 hectares of irrigable flats on the property?

10 A. **M MacGregor:** Yeah, that's correct, yeah. Yes.

Q. So can you tell me a little more about the irrigation system that is in place on the property?

A. **M MacGregor:** So we have a right out of the Nenthorn Stream and it's a right of 60 litres a second. It's a sole take. We're the only one that takes any irrigation water out of that creek, so that is pumped into a storage dam, so that dam is filled over the winter from run-off from our hill country, so the start of our irrigation season, that dam is completely full and we use the take out of the river to top that dam up during the season when it's needed.

20 1200

Q. So winding the clock back to 2017 when you took over the property, the deemed permit was in existence at that point?

A. **M MacGregor:** Yes.

Q. But wasn't being exercised?

25 A. **M MacGregor:** There was a pump in the river, a little single phase pump in the river that pumped, we estimated about 10 litres a second out of the river, so it was completely uneconomical and it's been changed now.

Q. So you described having replaced an electric pump, so you've replaced an electric pump, so you've replaced that particular pump?

30 A. **M MacGregor:** Yes, so that was a single phase pump in the river, so we have replaced that with a diesel pump that lifts our 60, I think it's actually 55 litres a second out of the river, sorry, not 60, and that does it-

Q. And you've been able to take then your full allocation using the diesel pump?

- A. **M MacGregor:** Yes we have, yes.
- Q. And what would have been the first year that you took your full allocation?
- A. **M MacGregor:** Yes I think the fir- 17 we used a little electric pump and then in 18, 19 we replaced the pump with a diesel pump, yes.
- 5 A. **R Armstrong:** And then last year was the first time we had the pump at the other shed going completely –
- A. **M MacGregor:** So we'd also replace a pump that is used for the irrigation system, not the one out of the river, that has also been replaced as well with a three phase variable speed drive, much more economical pump in
- 10 the – out of the irrigation pond.
- Q. So sticking with the pump taking the water out of the river, is there a water meter attached to that?
- A. **M MacGregor:** Yes that's all part of our consent. There has to be a water meter there.
- 15 Q. And that water meter, is it a new meter that's been put in place with the diesel pump?
- A. **M MacGregor:** Yes it's all been done at the same time.
- Q. So you'll have a record from that point in time showing the maximum rate of take from that pump?
- 20 A. **M MacGregor:** Yes, we've got it and you've got it as well, yes.
- Q. And when you think about the area of land under irrigation, can you describe to me how the land is irrigated, what irrigation system you're using currently?
- A. **M MacGregor:** Okay, so when we went there, there was some
- 25 underground mains in, probably about three quarters of it was underground mains and they used a few K-Lines and they used aluminium pipes and sprinklers that they used to move every day. So now they don't exist, we, the whole lot is K-Line.
- Q. And when did you get the full extent of the K-Line in place?
- 30 A. **M MacGregor:** We're just getting it this summer was probably the first time we've had it all up and running.
- Q. So when you think about that K-Line, it is essentially being used on areas that had previously been irrigated using the aluminium pipes?
- A. **M MacGregor:** Yes, yes it was, yes.

Q. And the irrigation using the pipes, I want you to think about the period of time from September 2017 through to March 2020, and so the area of land under irrigation at that point in time, tell me about that?

5 A. **M MacGregor:** Yes well they had some K-Lines and to be totally honest I wouldn't know how much area they could cover with those aluminium pipes. To me it was a very time consuming inefficient way to use your water.

10 Q. So thinking about that date range, would you have been irrigating at some point during that period of time so the 2017 to 2020, the 90 hectares of land?

15 A. **M MacGregor:** No, no we don't, we use that land, we grow some crops to finish our lambs, we grow all our feed to make winter feed, make baleage and silage out of, so once we've used that water to establish those crops, those paddocks are not watered again over the summer, sometimes we can put another crop in, in the autumn and they'll be watered again in the autumn. With that allocation water we've got, it's not enough to do everything all at once. Our other permit out of the pond that we irrigate out of is only it's, - yes a storage dam, it's 60 litres a second but it's only for 12 hours a day, so the pump we've installed only takes
20 30 litres a second but we do it for 24 hours a day.

Q. So when you think about the area of land you had under irrigation between 2017 and 2020, if I ask you to shade on a map of your property the maximum extent of irrigable land, over that period, you'd be able to do that for me?

25 A. **M MacGregor:** Yes, yes.

Q. And if you think about that area as representing the maximum amount that you've irrigated, so if you've irrigated a paddock once in that time, it would be included, are you irrigating areas beyond those areas after 2020?

30 A. **M MacGregor:** No, no.

Q. So when we think about Plan Change 7 and these changes I mentioned a few moments ago, one of the changes that the experts are recommending to the Court, relates to the maximum area under irrigation, not being fixed to the 2017 year, but to cover that three year period, so in

so far as you've been irrigating over that three year period, you would sit within what the experts are recommending, so that's one of the changes that is being recommended. Perhaps the other concern that I understand you to have raised relates to the change in your irrigation infrastructure, particularly the pump, so you've described today that you now have a pump that can take at your maximum amount under your permit, so the in-river, the, it's not an in-river, the take from the river, your diesel pump, another one of the changes being recommended by the experts is that provided a maximum rate of take was taken prior to June 2020 I think was the date, 30 June 2020, so if we think about that date, would you have been taking using your new diesel pump at your maximum permitted or authorised take before 30 June 2020?

A. **M MacGregor:** Before, yes.

A. **R Armstrong:** Yes but you've got to remember this year, January we got six inches of rain. We didn't need to irrigate. So that's going to show a big difference in our maximum take as well.

Q. So when you think about the way that the schedule is now intending to operate, it's about reflecting the maximum rate of take, not the average of takes over a period of time, so concerns about gaps or drier years, those concerns have sought to be addressed in the changes that are being made.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. So do you understand what Mr Maw's saying, as long as you've hit your max, what's likely to be the maximum at once, before 2020 –

A. **R Armstrong:** Okay.

Q. – then that's it, we've secured what we think is you going forward if you like under the schedule?

A. **R Armstrong:** Okay.

Q. If of course you've been wet for the last three years since taking over the property, that's a bit more difficult because you wouldn't have been pumping?

A. **R Armstrong:** Okay.

Q. What do you think? We want to know where the gaps are so we can see where the response should come so if there are gaps in what we're saying, we need to know?

5 A. **M MacGregor:** The gaps are - like when we got that rain at Christmas time, we have to take our pump and everything out of the river because it just floods. Some of our land that we normally have stock on, we can't put stock on it because it's under water. So they're - that's where our gaps occur and when we're on our crop rotation and our grass rotation around the irrigated country, there can be gaps there because we - that
10 paddock is, we've just watered it to get it started and then it's fine, it's away or the Lucerne might be too high to cut, so we don't water it until we've cut it, so that's where our gaps sort of fit in our programme, is that -

15 Q. Yes, kind of but I still think you're covered. As long as you've irrigated - as long, the maximum area, you are not required to water all of that maximum every year, but once and so many, many farmers have a mixed model of farming, where only some paddocks are irrigated. Some paddocks are irrigated, once or twice or spring or autumn to start the crop up and that's it. But provided that 90 hectares has been irrigated at once,
20 if not many times over you know, the relevant period, that's enough, you're in. I think what the plan change is trying to do is to is, and there's a lot of debate around whether it should, it's a question for the Court but it's not to irrigate another hectares somewhere over there. So it's moving away from that because there are land use implications.

25 A. **A Armstrong:** So, for the water take as well if we had irrigated the 55 - taken 55 litres a second out of the dam - the river once then that's...

Q. That's your maximum.

A. That's, yes okay.

30 Q. And then the question is, you know because you guys haven't owned the property that long, it's only three years and it's got you know, new irrigation infrastructure all going to k-line but is that maximum, you know, a reasonable maximum if you like, for the growing conditions that you got out there?

A. **A Armstrong:** Yes.

A. **M MacGregor:** Yes.

Q. And if it is, I think you're all right under the schedule.

A. **A Armstrong:** Okay.

Q. But is there something that we're not getting. So, for example irrigation –
 5 we got a lot of folk who might have stranded irrigated infrastructures, so
 they've put down the main line but they haven't got it so far as actually
 putting in the pivot or putting in drippers of whatever it is, for cherry trees.
 So the proposal from the parties is that it is enough to get the irrigation
 mainline in even if you haven't rolled out the rest of it. But in your case, I
 10 think you say you actually have rolled out your k-line now. You've...

A. **A Armstrong:** Yes.

Q. Yes, you've made that investment that's there so I don't there's an issue
 about stranding investment, as far as that goes but is there any other
 investment that you've made which could've been stranded, maybe
 15 stranded of a different type you know, and I was thinking well maybe
 you're talking about your pumps but I'm thinking you probably your pumps
 are all right but if you were talking about your pumps then that would be
 something we'd look at.

A. **M MacGregor:** Everything's done isn't it?

20 Q. **A Armstrong:** Yes, no we've finished here.

A. **M MacGregor:** Pretty much everything's done. Yes.

Q. Everything's done, it's actually all been used too.

A. **A Armstrong:** Yes.

A. **M MacGregor:** Yes.

25 Q. What do you reckon?

THE COURT: JUDGE BORTHWICK TO MR MAW

It's covered. The situation's covered. No, it's been helpful and it's helpful to
 have some actual on-farm situations to test the evolving thinking around
 the schedule to make sure it is responding to the situations that have been
 30 helpfully raised in evidence.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. The final topic that I wanted to discuss with you, I suspect will be very brief but we're see. You have a deemed permit and you are the only take from the Nenthorn River, is that correct.

5 A. **A Armstrong:** Yes.

A. **M MacGregor:** That's correct yes.

Q. Does your permit by any chance have any priorities recorded on that you're aware of?

A. **A Armstrong:** We're the only priority I think.

10 Q. I have no further questions. Thank you very much.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. I just had one question. That was all very helpful thank you. I just don't know where the creek that you're taking the water from is. I wondered if you were able to tell me about that.

15 A. **M MacGregor:** Well, it comes of a – it's called the Deighton Creek and it comes from the country Macraes right round into the stuff that the DOC own. There's it's quite a bit catchment. We probably should have some photos in too because like, it's not a very big creek but there's a lot of water comes down it, it's a huge catchment, you know. It's called the
20 Deighton Creek.

Q. Okay. Well, thank you for that. It gives me more of an idea.

THE COURT: JUDGE BORTHWICK

Q. We have no further questions. Would say that it is really important for the schedule now to be properly communicated to everybody, there's still
25 some work to be done, but it's more or less now everybody is moving and all the witnesses that are moving in the same direction. So we think you are covered, but we're, we'll keep you in mind, we're just not sure, yes.

THE COURT: COMMISSIONER BUNTING

The thing is we've just received an update to the way the schedule works and
30 experts are going to take us through how it works and we need to be sure that we understand that and it's ...

THE COURT: JUDGE BORTHWICK

We're kind of like the farmers in the room and as much as no-one's actually pitched it to us, so we're just sort of reading it and we're going, ooh, what
5 does that mean and we think we broadly know what it means, but the witnesses actually have to come back and explain themselves and they're going to be doing that next week but that, yes, but we'll keep that in mind, yes. All right, very good, thank you very much.

10 **R ARMSTRONG:**

Thank you.

M MACGREGOR:

Thank you.

15 **WITNESSES EXCUSED**

THE COURT: JUDGE BORTHWICK

I think we'll just move onto, yes, we'll take lunch at 1 o'clock if we just finish the primary sector case. So Mr Crutchley.

5

GEOFFREY ROBERT CRUTCHLEY (AFFIRMED)**MR MAW CONFIRMS WITNESS CRUTCHLEY**

Q. Could you confirm your full name for the record please?

10 A. Geoffrey Robert Crutchley.

Q. And you've lodged a submission on Plan Change 7?

A. I have.

Q. And that submission was lodged in your own name?

A. It was.

15 Q. And you have prepared some notes highlighting the key points that arise with respect to your submission on Plan Change 7?

A. It's true.

Q. And you've circulated with the Court a copy of those notes?

A. I have.

20 Q. And do you confirm that the evidence that you're about to give is true and correct to the best of your knowledge and belief?

A. I do.

Q. If you could perhaps take the Court through your summary and then remain for any questions?

25

WITNESS READS SUMMARY STATEMENT

Thank you for the opportunity to speak to my submission. My Name is Geoff Crutchley. I am a farmer from Maniototo and hold shares in the Maniototo West Side Irrigation Company which is part of the Maniototo Irrigation Scheme.

30

My involvement in water management spans nearly 4 decades. I was Chairman of the Maniototo Irrigation Scheme in its various forms from its commissioning in 1984 until I retired in 2016. I Chaired the Taieri Trust for its first three years

from 2000. I remain as Chair of Upper Taieri Wai (Inc) which began as the Upper Taieri Water Management Group in 2006. This group is currently engaged in a major wetland management project named Tiake Maniototo. I served as Chairman of the Kyeburn Catchment Company during the consenting process.

In my submission I state my opposition to Plan Change 7, believing it to be flawed in both method and intent. I note that changes to the proposed plan have been submitted regarding the averaging of historic takes, and the requirement for applications to seek reduced allocation.

I believe the need for these changes is indicative of the haste in development and the failure to adequately consult, casting doubt on the fundamental assertion that the existing plan is not fit for purpose.

Discouraging increase in irrigated area as has been discussed by previous witnesses, is contrary to efficiency and "best use" objectives. Water quality issues have been unjustifiably associated with irrigation, but where there has been a correlation it has involved intensive land use with high application rates. In a water short region, it can be sensible to increase the land to water ratio where land is at a lesser premium than water.

I suspect that this focus on area stems from assumptions made in the Skelton report, which falsely linked deemed permits in the Taieri catchment to a large number of conversions to intensive land use. I am concerned that this may have contributed to efforts to reduce or limit the water assigned to these permits because in fact, the small number of such conversions in Maniototo is mostly dependent on RMA consents. It has nothing to do with deemed permits.

1220

Concern about "over-allocation" also seems to be a major driver. Although the Taieri river is often described as being over allocated, this state is of no significance to the health of the river. Where minimum flow settings are in place, any application to take water for immediate use should proceed under

the existing plan without posing any threat to other uses or to the health of the river.

It should be kept in front of mind that the reason for this upheaval of the lives, and businesses, and the general wellbeing of so many rural families is the failure of the Otago Regional Council to meet its obligations.

In these circumstances I believe the fairest compromise will allow applications to proceed under the existing plan where minimum flow settings are in place. Where these settings remain to be determined, the status quo should be maintained by the issue of non-notified consents, until such time as this work has been completed.

In conclusion, I reiterate my disappointment that this plan signals an abandonment of the effects-based approach that was the main characteristic of Plan Change 6, or the important characteristic, that was an approach which promised to incentivise and harness the energy, and the expertise and the passion that exists in communities.

Inflexible, top down, rules-based approaches tend to alienate the people most capable of owning the problems and developing innovative solutions. These are the people we need if we are to sustain the community-based structures that are required to honour Te Mana o Te Wai.

CROSS-EXAMINATION: MR MAW – NIL

QUESTIONS FROM THE COURT – JUDGE BORTHWICK AND COMMISSIONERS BUNTING AND EDMONDS - NIL

THE COURT: JUDGE BORTHWICK

Thank you very much for your evidence Mr Crutchley, I have no questions, I understand from where you are coming from and the perspective that you have, so your evidence is clear, thank you.

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK

Shag Valley.

5 **JAMES ALEXANDER THOMSON (SWORN)**
FOR SHAG VALLEY IRRIGATORS GROUP

MR MAW CONFIRMS WITNESS THOMSON:

Q. Can you state your full name for the record?

10 A. James Alexander Thomson.

Q. And you are appearing today to give evidence in support of the submission lodged by the Shag River Irrigators Group?

A. That is correct.

Q. And you have prepared a summary of the key points that you wish to make with respect to that submission and Plan Change 7?

A. That is correct.

Q. And a copy of your notes have been circulated with the Court just now?

A. Yes.

Q. And you confirm that the evidence that you're about to give is true and correct to the best of your knowledge and belief?

A. I do.

Q. Perhaps if you could take the Court through your summary and then remain for any questions?

A. Certainly.

25

MR THOMSON TO THE COURT: JUDGE BORTHWICK

Your Honour thank you for the opportunity. Indifference to the Tangata Whenua I prefer to refer to the Shag as the Waihemo because it actually gives some consequence to how the Waihemo works in that 70% of the water in the Waihemo is carried by way of the aquifer. So whilst we still use the colloquial title, we're basically a likeminded group of seven irrigators who decided to present collectively, we are members of our catchment group and felt that this was a more efficient way of making our thoughts known.

We feel very much that we're collateral damage in this situation because of the climatic difference we have to the traditional irrigation areas.

5 **MR THOMSON READS SUMMARY STATEMENT**

So one, we oppose Plan Change 7 in its proposed form as it fails to take cognizance of the various climatic differences experienced in Otago. And in fact, the Regional Council, its current plan for freshwater management units has East Otago and North Otago in a collective area, so what we have there is a provincial area that in the south catchments support Opotiki Forest to the extremely dry tussock lands of the Upper Waitaki and the Kakanui.

We suggest that treating the Waihemo on the same basis as Central Otago is manifestly unfair and I have actually supplied the Court with rainfall records that have been kept over 67 years at Ford's Dairy Farm for the Meteorological Service which shows the spread and the overall impact that rainfall can make on water usage in the Waihemo.

We totally oppose the proposal to limit consents to six-year terms on exactly the same basis that a lot of other submitters have made. But one of the things that we believe very strongly with in the Waihemo is the more efficient use of water and currently 44% of our members have or have under construction water storage facilities to allow water takes when the river flows are high.

The current health of the Waihemo is reported by land, air, water Aotearoa on a 10-year trend: 2011 to 2019 as the river being in the top 25% of lowland rivers in most measurement categories and in fact, the ORC's own 2014 study stated: "Water quality in the Waihemo is generally good".

We're aware that the Regional Council has other studies that have never seen the light of day because we actually had nine bores put down into the aquifer to measure water quality and we've never seen any results from that study.

We submit that the proposal to limit consents to a six-year term will undermine the development of more storage capacity and the adoption of modern irrigation technologies and has been alluded to by other submitters: capital requirements to borrow that money you need some tenure of supply or otherwise lending support is far harder to get.

Thirdly: we oppose the proposal to take, or the original proposal on the water usage and I understand that that as the modifications are now being in place. However, again, referring to the recorded waterfall, I'm a Southlander by birth and people always ask me about living in East Otago and I say that on a six-year average you have two dry; two average and two wet years. Don't think this is Southland and in fact, if we take the 12 to 19 years, we have had two years below average, one average and four years well above so for us to take water in those years that are well above? It's not only unnecessary but would be irresponsible.

As a group, we fully support the desire to support, protect and enhance our environment and use our resources wisely whilst protecting the underlying values of the Tangata whenua and the Waihemo Catchment. We believe that consultation and collaboration offer a far greater way forward than the current Council policies. That's us.

CROSS-EXAMINATION: MR MAW

Q. Thank you for your statement and I'm interested to know a little more about the source of water for the group. Are you operating under a standalone permit or is it a combination of deeds and permits, or?

A. I currently understand according to your counsel's information there are 17 permits issued for the Waihemo. In my particular case, I have two permits so I would think that there was a multiplicity in some of them and there are currently to our knowledge only seven of us who are using irrigation.

1230

Q. So let's start with your two permits. Are those deemed permits?

A. Yes.

- Q. And in terms of those permits, have you lodged an application to replace them?
- A. I don't need to at this stage because our permits don't come due 'til '23, '24.
- 5 Q. Okay. Are those permits Resource Management Act permits? Have the old deemed permits been replaced at some point?
- A. Well my understanding is that they're still deem permits.
- Q. In terms of the two permits that you are perhaps more familiar with, do those record any priorities on them?
- 10 A. Well we are – the use of the river is governed by a minimum flow and we've worked within that, as a group, within that flow for 40 odd years.
- Q. So do you have a flow sharing agreement with the other water users on the river?
- A. No. We are all limited by the flow at a certain point in the river, both
- 15 upstream and downstream.
- Q. Right, so in a sense, once the minimum flow is hit, you will simply have to switch off at that point?
- A. That is correct.
- Q. So there's no, what's been described furiously, as water sharing amongst
- 20 the groups where perhaps one of you takes on one day and another takes on another day, as the river gets down to its minimum?
- A. No. And I revisit the fact that a large percentage of our water is in the aquifer so that the river can at times appear to be extremely low but there is still river flow and variation in it.
- 25 Q. In terms of your two takes are they groundwater takes or are they from the river?
- A. They are pumped from the river.
- Q. Okay. Now in terms of your – I'm assuming you have a farm property yourself?
- 30 A. Yes.
- Q. And your water's used for irrigation?
- A. That is correct.
- Q. And what's your irrigation system?

- 5 A. I operate a K-line irrigation system. I have the drawings to install a pivot but I've been actually waiting – the property that I purchased had existing consents from the Waitaki District Council for the removal of gravel and part of the reinstatement of that area is – I've built storage facilities and again I'm simply waiting to see how this bears out as to our next course of action.
- Q. So in terms of the land under irrigation, what hectarage give or take would there be?
- 10 A. The property is 181 hectares. Currently there are 40 hectares under the K-line but that is only utilising one of the consents. Because of the logistics and the building of the pond I haven't used the larger of the consents so I've been taking the one that allows me to take 12 litres a second. My other one actually allows me to take 17 and I haven't touched that as yet.
- 15 Q. So when you say you haven't touched it as yet, how long have you been on the property?
- A. We purchased the property in 2013 but actually didn't physically live on the property until 2016 so the first one was to restore the system that was in a better state of health which we've done. We've then now concentrated on the building of storage and that will allow us to completely replace what was non-existent on the other side of the river.
- 20 Q. So when you think about the 40 hectares you've had under irrigation, would that have been under irrigation between September 2017 and March 2020?
- 25 A. In one year, yes, it was going red hot, but when God was doing the irrigating for us it wasn't.
- Q. So in that situation so the higher rainfall years, was there any need whatsoever for irrigation?
- A. No.
- 30 Q. Not. So just thinking again about that period of time, it did pick up on what we might describe as a dry year?
- A. Well as I submitted, if you look at the 67 years of records in East Otago, it fluctuates greatly. The other thing that we need to bear in mind is that the catchment for the Waihemo is basically tussock grassland and a

mature snow tussock has the ability to harvest in excess of 30 litres of water and hold and store that, so we actually, even in the dry years, we can still have a reasonable flow in the river and our contention is, again I come back, that we have managed that well. The health of our river is well, therefore, we would prefer to sit down with the Council and work collaboratively to take the issue forward not be beaten with a large stick and having conditions imposed that don't really relate to our community.

5

Q. So sticking with the 40 hectares under irrigation could you draw that on a plan or a map of your property for me?

10

A. I certainly could. And in fact, what I do, I grow Lucerne under that irrigation because part of my responsibility as a landowner and an owner of the Waihemo River because we're one of the only rivers in New Zealand where the title actually goes under the river, so to mitigate contamination of the river, I grow Lucerne on both sides of the river to exclude stock access to the waterway. However, your counsel chooses or is currently choosing to prostitute the science of the overseer programme which was never created to measure nitrification and even the Commissioner for the Environment agrees that it's an incorrect use of the programme so growing Lucerne up the river to preclude stock actually says under the overseer that I'm putting nitrogen into the groundwater.

15

20

Q. Well the good news is Plan Change 7 is not dealing with overseer for now.

A. I realise that but I'm having a crack at you while I can.

Q. Right, so we can show the 40 hectares of land under irrigation on a map –

25

A. Yes.

Q. – and in your words, your red-hot year where you were irrigating that you could show the maximum extent of that irrigation –

A. Correct.

Q. – quite easily on a plan for me.

30

A. Yes. Yes, no problems at all. And I believe that the rest of our group would be the same, certainly the properties that I am familiar with.

Q. Yes, thank you very much. I have no further questions.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. I just have the one questions. I was just looking at the Council's water plan in its schedule 2A which is the one that lists the minimum flows so I see the Shag Catchment and it says: "Both minimum flows apply", and one seems to be Goodwood Pump and that's 28 litres a second and the other one seems to be Craig Road and that's 150 litres a second. Is this ringing any bells?

A. No, that's correct. In actual fact, the two flows that the irrigators monitor is at The Grange which is further up from Craig Road but Craig Road is the minimum flow of 150 and I can't find any exact historical data but anecdotally my neighbours tell me 45 to 50 days has been the maximum time the river has been below that minimum flow. So in terms of storage, we're all working towards 60 days plus storage so that we don't impact the river.

15 1240

Q. And do you remember approximately what date this minimum flow came in in terms of this water plan?

A. Well I've been in East Otago since 1992 and it's always been there as far as I'm aware.

20 Q. Okay thank you.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. Now just to make sure that I've got the facts correct you said that you had 181 hectares under irrigation?

A. No. The property is 181, currently 40 of which is under irrigation but in actual fact I have the water to probably double that.

Q. Okay so that makes more sense of the note that I took so you've got two water permits. One's for 12 litres per second; the other for 17 litres per second, is that correct?

A. Correct.

30 Q. And the 12 litres per second, that's irrigating 40 hectares and you're using a K-line to do that?

A. That's correct.

Q. You have or have not got storage for that?

A. No. No, that's direct draw from the river.

Q. Okay. The consent – you've also got consent for the 17 litres per second but at the moment you're not actually irrigating out of that consent?

A. No.

5 Q. To do that you would need storage and you were thinking of putting in a pivot is that right?

A. That's correct. We've got the drawing. Everything's in place but for example the reinstatement of the gravel pit for the storage facility, had I had to pay for that it would have been 80 to \$100,000 for construction.
10 I'm looking at 100,000 plus for the plastic liner and then the infrastructure on top of it so I'm not going to go out and borrow then \$1 million to finish it off without some tenure of supply.

Q. Sure, all right, no I understand all of that.

QUESTIONS ARISING ALL PARTIES – NIL

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THE COURT: JUDGE BORTHWICK

Q. Well thank you very much for your evidence.

A. Thank you very much for the Court's time.

COURT ADJOURNS: 12.42 PM

20

25

30

COURT RESUMES: 1.47 PM

THE COURT: JUDGE BORTHWICK

So before we get to Mr Welsh's case, just a couple of matters arising over the luncheon break and we've had a look at the diagrams for Manuherekia and I think the proposal was from you Mr Maw to admit those by consent as an exhibit I guess by consent without any witness speaking to them. They're pretty straight forward but critical, we're happy to do that if nobody else has any objection to admit the two diagrams provided by OWRUG by consent, so we'll put them through OWRUG, so that's exhibit OWRUG, what number are we up to?

UNIDENTIFIED FEMALE SPEAKER:

We don't have one (inaudible 13:48:00).

THE COURT: JUDGE BORTHWICK

I thought we did, none yet for OWRUG?

UNIDENTIFIED MALE SPEAKER:

(Inaudible 13:48:09).

THE COURT: JUDGE BORTHWICK

Okay, good.

MR MAW:

I suspect the exhibits are possibly in the name of the individual submitters, I have in mind those other maps, and plans.

THE COURT: JUDGE BORTHWICK

All right, so exhibit OWRUG 1, a document entitled Figure 1 Manuherekia Catchment GoldSim Model – Model Logic Diagram and exhibit OWRUG 2, a plan entitled Manuherekia Overview Map dated August 2015.

**EXHIBIT OWRUG 1 PRODUCED BY CONSENT – DOCUMENT ENTITLED
FIGURE 1 MANUHEREKIA CATCHMENT GOLDSIM MODEL – MODEL
LOGIC DIAGRAM**

**5 EXHIBIT OWRUG 2 PRODUCED – BY CONSENT – PLAN ENTITLED
MANUHERIKIA OVERVIEW MAP DATED AUGUST 2015**

THE COURT: JUDGE BORTHWICK

Now the second issue which has arisen over the luncheon break is having a look at the sensitivity analysis which was presented over the weekend. We
10 knew that the sensitivity analysis was going to come in but this document would not pass the Court's requirements as being an attachment to a JWS for a number of reasons, firstly, it's unsigned. Secondly, we are unaware of who all the participating witnesses are, some initials are mentioned at paragraph 1 which is Dugald MacTavish and paragraph 3 with the initials noted there, we
15 don't know whether they are all the witnesses that needed to participate or only some of the witnesses that needed to participate.

Three, if it is hoped that this would pass the standard for evidence, it does not inasmuch as there is no explanation given for a new methodology which is
20 being proposed in this document. While we're quite content for joint witness statements to become evidence, without the need to provide a supporting brief, there are some minimum requirements for that and that is that the joint witness statement explain adequately but succinctly what are the facts being relied on and any assumptions made and it certainly notes the assumptions at least, but
25 does not in any sense take the Court through what are the proposed methodology changes. Now one of the things that is of concern, but it may be of absolutely no moment, we don't know because the witnesses aren't or participants aren't telling us, is that there seems to be a move back to the averaging – an average hourly rate for take data, as a methodology. Now there
30 may be nothing in that, there may be something in that but given that most of this hearing has been caught up with the use of averaging data, the use of the word "average", it may be in a different sense, in a different meaning, but it needed to have been explained.

Now I must make this really clear. Just because the experts say it is so, does not mean that the Court will adopt it. You've got to take us over the line in terms of an adequate standard of evidence and this is not it and I think that's one of the prevailing concerns about the conferencing process to date, I understand that it's in develop- what is being proposed or reviewed is in development, but there has to be an explanation by witnesses as to what they are doing and why, so that the people and communities within Otago can understand the development of the plan change at least in this key respect and not be in other words, information has to be clearly communicated and be available for the audience. That actually includes your members of your bench.

So this doesn't come anywhere near the standard that we would've expected for a joint witness statement. Now it could be that they've run out time, but they need to do something about it and if we don't – if you can't get us over the line, what will happen is that I will simply adjourn the hearing and take a big break to get the witnesses back in the room and working up a document with an adequate explanation. All right? So I'm not going to say anything more about that, we'll take a break actually after this week, so we won't go into next week, we will hear your case Mr Welsh and we will also hear the Territorial Authorities' case, indicate that the Court hasn't read all of the evidence from the Territorial Authorities, the latest briefs, the direction was 10 pages, they've all come in at 40 pages with numerous appendices which again the expectation is the Court has read, well it hasn't. Sitting really long hours and doesn't have time to be reading or hasn't made time to be reading well in excess of what the direction was so it may well be for the supplementary evidence which has been, and I'm looking at you Mr Page because you can tell Ms Irving your witnesses may have to read, all right?

So I don't know how you're going to take that back, but if somebody could take that back and communicate that back to the witnesses.

MR MAW TO THE COURT: JUDGE BORTHWICK

Yes I wonder whether Ms Mehlhopt just may address you on the ...

MS MEHLHOPT TO THE COURT: JUDGE BORTHWICK

So just one point of clarification your Honour, the signatures are at the back of the document.

5 THE COURT: JUDGE BORTHWICK

Oh well –

MS MEHLHOPT TO THE COURT: JUDGE BORTHWICK

I appreciate your comments around the content and the standard of the document and we'll report back to the witnesses on that, but I just wanted to note that –

THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT

Q. The signatures are at the back, so we've got some people happy with the mathematical formula, Dugald MacTavish wasn't there anyway because he was in front of the Court, yes what does that mean, even that you've got some people happy with a mathematical formula, what about the people who are not noted in here that have signed this document?

A. Yes and it was a product of the timing and the witnesses wanting to meet the reporting date of Friday, so we can go back to the witnesses and get them to work further on that and provide some further explanation.

Q. Okay, so if you know that this not going to pass muster, it's not going to take you over the line, you should be asking for –

A. Yes.

Q. Yes because I think that's what Commissioner Bunting's hesitation was with the couple from I think Balquhadder Station. I think he'd seen the word "average" and Mr Maw and I were talking about maximums. We could be talking about the same thing, we don't now know and now there's actually a large level of uncertainty and it may be that folk think that I rubber stamp things, I didn't think that was my reputation, but let's not – so you've got to get us over the line, okay?

A. Yes.

Q. All right, thank you.

THE COURT: JUDGE BORTHWICK TO MR WELSH

Q. So Mr Welsh, now we are in your hands.

A. Thank you, good afternoon your Honour and Commissioners. It's good to be back in the south. You should have before you a copy of my legal submissions.

5

Q. Very good. Thank you.

A. And in due course your Honour I'll, through Madam Registrar produce two summary statements, one for Mr Mitchell and one for Ms Styles. The third witness, Ms Foran will just simply read her one-page summary that's included in her evidence-in-chief if that's convenient to the Court –

10

Q. That's fine. Yes. Mhm.

A. – when we get to that stage. So Ma'am these submissions are made on behalf of Trust Power who opposes aspects of plan change 7 to the regional plan, as notified. And Ma'am throughout I'd note, when I'm talking or I try to note, when I'm talking about "as notified" because as you just pointed out, I, you know, parties don't know if we've got you over the – or the Court over the line on certain aspects in the joint witness statement. So I've approached it on both basis Ma'am which –

15

Q. Okay, no that's helpful.

20

A. – does extend the submissions somewhat but I thought that was necessary. Having said that, since notification and throughout this hearing the parties' positions and their relief sought have evolved, most notably the Otago Regional Council and Trust Power's current position is summarised below.

25

MR WELSH OPENS:

Due to the nature of Trust Power's takes, deemed permit replacement applications by Trust Power under plan change 7 as notified would be non-complying activities due to the inability to meet the controlled activity conditions and to comply with the schedule 10A.4 which is geared towards irrigation activities. They'd also be subject to the directive framework requiring six-year maximum consent duration. Trust Power's submission and evidence therefore sought amendments to plan change 7 to provide separately for hydroelectric generation activities at the objective, policy and rule level including changes to

30

the application of the schedule. Recently various changes have been recommended as a result of conferencing between the experts including Trust Power's two experts culminating in the version of PC7 attached, as the 7 May joint witness statement version. Broadly, while the version attached to the 7 May JWS deals with Trust Power's concerns in a different manner than sought in Trust Power's submission and evidence with one exception, Trust Power considers that the provisions recommended in 7 May JWS constitutes a workable and appropriate framework for hydro. In particular and I've got "in particular" but most importantly Ma'am, Trust Power supports the proposed amendments to the restricted discretionary activity rule 10A.3.1(a)(i), sounding like a tax code which provides a pathway for hydro water data to be assessed and take limits sets on a case-by-case basis, as opposed to under the schedule which does not in my submission appropriately deal with hydro takes. The exception I refer to earlier which has not been the subject of expert conferencing is the relief sought by Trust Power, that for hydro PC7 provide a realistic pathway for longer-consent durations than the six-year maximum, ie longer-term consents for hydro should be able to assessed in my submission on their merits.

Ms Styles has proposed and Trust Power will be seeking changes to the PC7 objective policies and rules to provide framework for hydro operators to seek that longer-term consent as a discretionary activity. And Ma'am I've included in annexure A and Ms Styles will produce this in her summary, but I thought given she's at the end of the presentation I should attach it at the beginning, a set of provisions which capture those changes from the joint witness statement, the 7 May version in red with the additional changes that Trust Power still seeks, they're not new changes, they're the continuation of the relief sought and that's in response to the issue around duration which as I say wasn't caucused on – conferenced on.

30

THE COURT: COMMISSIONER BUNTING TO MR WELSH

Q. Just to clarify then the red was what was agreed?

A. The red is the joint witness statement –

Q. Yes.

A. – and Trust Power experts have agreed to that and the blue, are the additional points of relief that Trust Power still maintains and still seeks, Commissioner. And Ms Styles will be able to take you through that your Honour but I just thought it was useful to provide it now.

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1400

MR WELSH CONTINUES OPENING:

Trust Power has, for each of its four races sought an expiry date in those applications of May 2038 which is approximately 17 years and as I've discussed with the Court previously that's to align with the hydro of the Waipori scheme. In 1.4, in the summary, Trust Power's considers that without the amendment proposed by Ms Styles, PC7 is an inappropriate all be interim planning framework. It treats takes for hydro the same as all other takes and in so doing, fails to give effect to the applicable higher order RMA planning documents with the respect to renewable electricity generation including the MPS for renewable electricity generation, the MPS for freshwater management and operative in part, regional policy statement. In terms of a road map, the scope of these submissions I intend to introduce the three witnesses for Trust Power, summarise how PC7 impacts Trust Power, briefly – very briefly comment on upon the statutory framework, outline Trust Power's position on PC7 and the relief it is seeking and address other certain other legal issues in precis form, Ma'am.

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As the Court will be aware there's three witnesses being called by Trust Power. The first Ms Nicola Foran is employed by Trust Power as a lead environmental advisor and Ms Foran will provide evidence regarding Trust Power, its assets in Otago and PC7's impact with respect to Trust Power's operations. And I'm calling Ms Foran as a company-witness Ma'am. Mr Paul Mitchell's a hydrologist with more than three decades experience with extensive experience in water projects for hydro and irrigation purposes. Mr Mitchell addresses the hydrological context of Trust Power's Otago water races and hydro activities in PC7's impact on Trust Power's existing and future assets / activities. Last but not least, Ms Stephanie Styles, a senior planner at Boffa Miskell will address the PC7 planning framework with a focus on the impacts on Trust Power's

Otago operations. And with that in mind in section 2, I address those very matters.

5 In the Otago region, Trust Power owns and operates two hydroelectric power schemes, the Waipori HEPS which includes the smaller deep stream – hydroelectric power scheme and Paerau and Patearoa HEPS located further north in the Maniototo. Trust Power’s hydroelectric assets in Otago produce approximately 278 giga watt hours, enough energy to supply the average household of 35,000 households or approximately 40% households in the region, just to try and provide that generation in some sort of context that we can all relate to.

15 The deemed permits held by Trust Power relate to the Waipori HEPS only. Trust Power holds, I’m sorry for being imprecise but it’s the very nature of these deemed permits, they’re very difficult to ascertain what they relate to and how many are actually held by Trust Power but by best estimates Trust Power holds approximately 100 deemed permits. But has only filed replacement consents’ applications for seven deemed permits which are associated with its Beaumont, Blackrock, Shepherds and Crystal water races and Ma’am I don’t intend throughout to take you to the footnotes which I use extensively to try and reduce the length of the submissions but I thought I should just note that three of those, so not Beaumont were filed prior to the notification of plan change 7 and they are discretionary activities under section 88A. And the fourth, Beaumont was filed in March of this year and that is a non-complying activity when measured or assessed against the plan change as notified. Trustpower is seeking up to 25 17 year consent durations for all of those deemed permit replacement consents which as I say will align with the expiry date of Waipori and Deep Stream.

30 The remaining approximately 90 deemed permits will finally expire in October of this year and this has been communicated to the ORC and they will be allowed to just expire. This will result in a significant reduction in the paper allocation currently held by Trustpower but not relied upon.

PC7 impacts Trustpower with respect to both, that's replacement of deemed permits and applications for new consents. Turning first to the deemed permits, PC7 includes the directive and restrictive standalone framework for reconsementing of deemed permits. Unless amendments to the notified version of PC7 are adopted, for example, the RDA rule in the version of the JWS, data analysis and limit setting methodology and requirements in the controlled activity rule, 10A(3)(1) mean that Trustpower faces either a controlled activity consenting pathway that would notably reduce Trustpower's total authorised takes compared to the current consented takes or a non-complying pathway.

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The former would impact on generation capacity and result in inefficient use of resources including existing infrastructure resources and the latter involves material consenting risks.

15 In addition Plan Change 7 includes a very directive set of provisions requiring short replacement permit durations. There appears to be consensus that because the policy 10A(2)(3) requires avoiding granting consent for more than six years, it is implausible if not impossible to conceive how any application for a consent term of more than six years could pass the second threshold of 104D.

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Even if an application passed the only plausible 104DA gateway relating to effects, it would at best be a significant challenge to gain consent in the face of the substantive 104(1)(B)(vi) analysis requiring regard to be had to the regional plan objectives and policies of which the only PC7 objective and policy 10A(2)(3) will be relevant is the issue of duration.

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Granting a consent of more than six years would require a decision maker to simply dispense with the only applicable policy, one which requires them to avoid granting consents for no more than six years, there are no specific provisions for hydro. Mr de Pelsemaker conceded in response to questions that it was possible that no consent for more than six years' duration will be granted under the PC7 framework.

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Turning to new applications, the PC7 policy framework relating to duration for new consent applications in 10A(2)(2) will be the only policy relating to duration applying to new resource consent applications by Trustpower to take and/or use water and policy 10A(2)(2) is drafted in similar directive terms and Ma'am I don't really see a big difference between "avoid granting" and "only grant", it's still not clear to me why there's a differing use of language.

THE COURT: JUDGE BORTHWICK

Q. Why the language changed?

A. Yes.

10 Q. And it wasn't clear to me either and I don't think they've got a satisfactory answer, but anyway apparently "only" still means or "avoid" "only grant" and "avoid" were meant to indicate the same, so –

A. Same thing.

Q. Yes.

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MR WELSH CONTINUES OPENING:

And that's my submission Ma'am, they're intended to achieve the same result, thereby effectively limiting consent duration to six years and I'll come later on Ma'am to some of the Trustpower applications that are already been caught by that policy direction in respect of maintenance works at the Beaumont Water Race and an enhancement at Deep Stream.

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The Legal Framework. The legal framework applying to PC7 is largely well settled and I would say largely uncontested between the parties and I'll only focus on the key issues for Trustpower if I may Ma'am.

Part Two. Renewal electricity generation is a key aspect of sustainable management purpose of section 5. Electricity enables people and communities to provide for their social, economic and cultural well-being and for their health and safety and I have gone back to the case, I think it was 2005, by his Honour Judge Whiting in The Awhitu Wind Farm up in Auckland, where his Honour held that electricity is a vital resource for New Zealand. There can be no sustainable

management of natural and physical resources without energy of which electricity is a major component. That's in footnote 15 Ma'am.

5 In addition, section 7J explicitly requires all persons exercising functions and powers under the RMA to have particular regard to the benefits to be derived from the use and the development of renewable energy. Section 7B relating to the efficient use and development of natural and physical resources and 7I, the effects of climate change are also key.

10 So moving onto the two relevant MPS's as least as far as Trustpower is concerned, Ma'am under section 67(3)(a) the water plan must give effect to any national policy statement and I address those two that are most relevant to Trustpower's PC7 concerns.

15 Turning first to the MPS REG. This is addressed as you'll be aware and detailed by Ms Styles. The matters of national significance to which the MPS REG applies are the need to develop, operate, maintain and upgrade renewable generation activities throughout New Zealand and the benefits of renewable electricity generation.

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Now as Mr Maw set out, all the seven weeks ago Ma'am, or back in March, the MPS REG has just a single objective and don't intend to read the quotes, with your leave Ma'am. Of particular relevance the PC7, the MPS REG explicitly recognises the following. The first is the contribution of renewable electricity generation regardless of scale and (b) Policy BA, the maintenance and generation output of existing renewable electricity activities can require protection of the assets, operational capacity and continued availability of renewable energy resource and in this case, that is access to the water.

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30 And as the Environment Court, in another case concerning the relevance of the REG in the regional planning context, this is the Carter Holt decision that Mr Maw referred to. Ma'am I might just read this if I may.

The protection of assets, operational capacity and continued availability of the existing renewable energy resource is required as acknowledgement of the fact that even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output and there needs to be the incorporation of provisions for renewable electricity generation activities into regional policy statements, regional plans and district plans to include objectives, policies and methods, to provide for new and existing hydro, wind and geothermal.

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Including in the context of the MPS REG I submit it's surprising that PC7 as notified did not contain a single provision or acknowledgement relating to renewable electricity generation. This is despite the reasons and the Minister's direction referring PC7 to the Environment Court stating that PC7 is a matter of national significance because among other things, there is a relationship between the matters, or the matter in the MPS renewable electricity generation given that Trustpower, Contact Energy and Pioneer Energy hold either deemed permits or other water permits in relation to renewable electricity generation.

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Secondly, ORC provided no substantive analysis addressing PC7's application to hydro including the cost benefits associated with PC7's application to hydro activities. The section 32 evaluation on the MPSREG has a porosity of analysis and does not specifically refer to any particular REG provision.

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Thirdly, despite the lack of analysis PC7 actively and intentionally discourages investment in hydro infrastructure and other water infrastructure in Otago. Mr de Pelsemaeker's unapologetically and repeated points to such discouragement as one of the key aims and outcomes of PC7 and Mr Maw confirms this in his submissions. Intentionally seeking to put water-related investment on hold for years is extraordinary, given the nature and the scale of the resulting cost to industry and the fact that at least in respect of hydro, such costs are directly contrary to the Government stated policy goals and national direction in the form of the MPSREG. The Government's national climate change goals which now include a target of 100% renewable electricity by 2030

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require investment certainty for renewable electricity generators and therefore regional planning frameworks need to appropriately provide for the substantial commitments that renewable electricity generation investment requires including appropriate consenting pathways and appropriate consent terms.

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Ma'am I'm now going to now address you on the issue around the MPSREG in the preamble and the reference to that that was put to I think, mainly Mr Ensor.

10

I submit that the MPSREG is relevant with respect of plan change 7 and that plan change 7 must give effect to the MPSREG. Now the preamble includes the following. This national policy statement does not apply to the allocation and prioritisation of freshwater as these are matters for regional councils to address in a catchment or a regional context and maybe the subject of development of national guidance in the future.

15

Now various stages before the hearing and before and / or during the hearing both Mr de Pelsemaeker and Mr Maw have acknowledged the required – requirements for PC7 to give effect to the REG. Mr de Pelsemaeker refers to the REG preamble in his statements of evidence where he offers his view that the MPSREG is relevant to plan change 7 and that plan change 7 must give effect to the MPSREG. Mr Maw also refers to the preamble in his 141837 opening legal submissions but also clearly acknowledges that PC7 must be given effect to the MPSREG.

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Mr Maw acknowledges in Carter Holt Harvey in Waikato Regional Council and that was that very long case Ma'am dealing with water allocation of the Waikato river, variation 1, I think it is.

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The Environment Court confirmed that the MPSREG preamble represents *no* barrier to the MPSREG application in the context of freshwater regional plan making including in respect of allocation and prioritisation of water.

And I set out a quote Ma'am which I won't take you through but and I've highlighted or bolded the relevant parts in paragraph 59 where his Honour

Judge Whiting makes that point and also 63 that wasn't submitted in Mr Maw's opening submissions that the provisions of the MPSREG are particularly relevant to the main issue between electricity generators and those seeking water for agricultural purposes.

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Counsel for the Minister agrees that the MPSREG is relevant to plan change 7 and that plan change 7 must be given effect to, which is consistent with the Minister's own views as recorded above.

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10 The relevance in application of the MPS REG to PC7 is also generally supported by the MPS REG implantation guide documentations and I don't believe that that at all is in the common bundle Ma'am, it's probably an oversight on my part but I do have copies if that is useful but I do set out the quote there and I may just take you through that Ma'am, parts of that where the
15 implementation guide notes that tensions may still arise, for example, between REG activities and activities that are subject of other national policy statements or between REG activities and matters requiring consideration under Part 2. However, in considering and addressing these tensions, decision makers need to recognise the benefits of REG are no longer up for debate and ensure those
20 activities are explicitly acknowledged in RMA assessments undertaken.

And then Ma'am I set out in some detail the other relevant points for - in that implementation guideline.

THE COURT: JUDGE BORTHWICK

25 Q. We'll just read them to ourselves and come back to you?

A. Yes, thank you.

THE COURT: COMMISSIONER EDMONDS

Q. Sorry, Mr Welsh is it possible to tell me what year this implementation guideline came out?

30 A. Was published?

Q. Was it after the MPS REG?

A. Yes Ma'am, I'll just get a copy.

Q. Thank you.

A. Well it's unhelpfully undated.

Q. Oh okay.

5 A. It's copyrighted in – it's November 2011 or published I should say, Ma'am on November 2011 so yes it would be after the notification of the MPS REG.

Q. Would be after. So just remind me what the date of the MPS REG becoming operative was?

A. Sorry, this is why they invented juniors.

10 Q. Sorry?

A. This is why then invented juniors.

Q. Oh I think somebody might be trying to help you there.

A. April, 14th of April 2011.

15 Q. Okay, so while you've got that implementation guide in your hand, perhaps you could look in possibly in the front, does it have a disclaimer?

A. No I don't believe it does from what I can see Ma'am. It records the -

Q. Well it may be in the back?

A. It records how it may be cited and who it was prepared by and who that was for, I would have to come back Commissioner.

20 Q. Sure, well I guess the reason I'm asking the question is that I did sit on the case to do with the NZCPS where the implementation guide was referred to us, but when you went back and had a look, we were led to observe that the disclaimer may in – yes, it was something that we needed to consider as well as what was in the implementation guide –

25 A. Right.

Q. – and when it had been prepared.

A. All I can say at the moment is I didn't identify a disclaimer of that sort when I was preparing these submissions, but I can at the afternoon tea adjournment, review that and bring it to your attention but I can't see it at

30 the moment Ma'am.

Q. Sure. Thank you.

THE COURT: JUDGE BORTHWICK TO MR WELSH

Q. All right we're at your paragraph 3.14?

A. Yes thank you.

MR WELSH CONTINUES OPENING

Notwithstanding my submission that the MPS REG preamble represents no
 5 barrier to the MPS's application to Plan Change 7, I submit that Plan Change 7
 only relates to the allocation and prioritisation of fresh water and that's the
 language of the MPS preamble, in the sense that it provides a framework for
 resource consent applications relating to fresh water. PC7 is not informed by a
 10 catchment or regional wide allocation, prioritisation, exercise as envisaged
 under the MPS REG preamble and as provided for under the MPSFM 2020.
 And Ma'am that's also evident by the lack of parties who are not involved in this
 process, for example –

THE COURT: JUDGE BORTHWICK TO MR WELSH

Q. Well I don't, have a particular difficulty with that, I was just trying to figure
 15 out what the second sentence in paragraph 14, 3.14 meant, so it only
 relates to the allocation and prioritisation of the freshwater and that's in
 some preamble is it –

A. That's in the MPS REG preamble -

Q. Oh in the MPS?

20 A. Yes. So I've just used that language that at most Ma'am, if one were to
 argue that PC7 is an allocation plan change, then at most, in my
 submission, it could only be an allocation plan change in the sense that it
 provides a framework for rolling over resource consents but that's all.

Q. Yes, okay, no I understand what you're saying now.

25 A. Thank you. So I was in the final sentence Ma'am in 3.14.

MR WELSH CONTINUES OPENING

To the contrary it's the future allocation prioritisation exercise that ORC and
 others are keen to ensure is not compromised by Plan Change 7. Even if I'm
 30 wrong on that point and I don't believe I am, but if I were, and the Court
 disagrees with me, then and the Court found that the REG was not to apply to
 Plan Change 7, the RPS provides, well the RPS gives effect to the REG and

contains strong objectives and policies which PC7 must give effect to. So we get there one way or t'other.

5 On the basis that the MPS REG does apply, I submit that Plan Change 7 as notified, plainly does not give effect to it. This is almost self-evident. PC7 provided no recognition or differentiation for hydro, nor does the wider water plan contain renewable electricity generation provisions giving effect to the REG other than those limited provisions that you heard about in March Ma'am, relating to the Waitaki Catchment.

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Without the changes recommended by Ms Styles, including as recommended in the JWS of 7 May, PC7 does not provide for the protection of assets, operational capacity and continued availability of renewable energy resources as required by policy BA and is directly counter to policy BBs confirmation that even minor reductions in the generation output can cumulatively have significant adverse effects.

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It fails to recognise the benefits of renewable electricity generation which is a matter of national significance under the REG.

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Mr de Pelsemaker briefly addressed the REG in his evidence-in-chief, concluding at paragraph 180, "Overall I consider objective 10A(1)(1) to be appropriate in light of the requirement to give effect to the MPS REG as it establishes an interim framework for (a) allocating existing hydro generation activities to continue." Mr de Pelsemaker is correct that PC7 does provide a framework (a) allocating existing hydro generation activities to continue.

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Mr de Pelsemaeker is correct that PC7 does provide a framework for the consideration of expiring consents but simply because PC7 applies to hydro, does not give effect to the MPSREG. The fact is, as notified PC7 framework for the consideration of hydro applications is the same framework that applies to all other activities including purely consumptive takes. Mr de Pelsemaeker's argument which appears to be shared through by counsel for Fishing & Game is tantamount to saying that any framework that provides for hydro, as anything

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but a prohibited activity gives effect to the MPSREG. The fact that the existing water plan does not give effect to the MPSREG does not serve as a basis for justifying PC7's failure to do the same.

5 So, Ma'am I'm now going to step into the second MPS and that's obviously freshwater management. And that's been addressed in detail by a range of parties and I simply want to outline several discrete matters relevant to Trust Power.

10 And the first is in respect of the overarching objective and my submission is electricity generation is a tier-two and a tier-three priority and I set out there the single objective in 3.21 and I note in respect of the tier-two priority, while drinking water is explicitly identified as an example of a use provided for the health needs of people, I submit that electricity generation also comes within
15 the tier-two of the hierarchy of priorities identified in the MPSFM objective, in addition to the third tier. Electricity is clearly required for people's health. And again, in footnote 48 Ma'am, I've delved back to the Awhitu decision where his Honour noted, "electricity is a vital resource for New Zealand. There can be no sustainable management of natural and physical resources without energy of
20 which electricity is a major component". Now this interpretation of my interpretation that electricity generation is a tier-two matter is explicitly confirmed in the MPSFM section 32 analysis.

EXHIBIT SECTION 32 ANALYSIS PRODUCED – TRUST POWER 1

25 And that Ma'am, the relevant section of that is Trust Power exhibit 1. I've put an excerpt of that to one of the witnesses.

THE COURT: JUDGE BORTHWICK TO MR WELSH

Q. Just pause there a second.

A. Yes?

30 Q. I recall you doing that but the witness didn't accept that proposition did she? Now I think it's she too and I've completely forgotten which witness you put your question to but I remember you asking a question –

A. Yes.

Q. – on exactly that point and they didn't accept it, maybe it was Mr Ensor, yes.

A. I think I had a go with quite a few of them Ma'am but I referenced Mr de Pelsemaeker because the exchange with him, I actually can recall and I've gone back into the transcript, so in 23 I'd put the excerpt of the section 32 or the quote from section 32 assessment to him and question whether he accepted that electricity was tier-two and his answer was, he acknowledged on that basis that hydro was a second and third tier order priority.

10 Q. Okay.

A. So, I'm not sure if Mr de Pelsemaeker considered that or he just accepted it on the basis of the section 32. It wasn't a ringing endorsement but Ms Styles does proffer her opinion that it is a tier-two matter.

Q. Okay. Thank you.

15 A. And Ma'am as you made the point to a number of the parties, so what in the end? But, it's not the – well you haven't put it so succinctly but, being tier-two or their-three doesn't mean you trump obviously the tier-one overarching objective.

20 **WITNESS CONTINUES STATEMENT**

Two policies that haven't had much attention – well they haven't any attention through plan change 7 and during the course of this hearing, the first one is policy four and that's freshwater is managed as part of New Zealand's integrated response to climate change. Now hydro contributes significantly to the national's efforts to reduce greenhouse gas emissions and the Government's goal to achieve 100% electricity generation by 2030.

And I have just again quoted from that same exhibit Ma'am in 326. If I may take that as read?

30 **THE COURT: JUDGE BORTHWICK**

Okay, thank you.

MR WELSH CONTINUES OPENING

Mr de Pelsemaeker confirmed in response to questions that Plan Change 7 adopts the approach of simply kicking the climate change can down the road to the future land and water regional plan.

MR WELSH TO THE COURT: JUDGE BORTHWICK

Q. And Ma'am if I can just depart from the written submissions?

A. Yes.

10 Q. It's not clear to me how the regional council, or on what basis I should say, the regional council has picked and chosen which of the objectives it seeks to bring through from the freshwater MPS into Plan Change 7 beyond those that which it can give effect to as reasonably practicable. And some of those four and 15 seem to me at least to be imminently suitable to giving effect to those as far as practical rather than simply ignoring them and waiting for a future plan to pick them up.

15 A. Yes. Okay.

MR WELSH CONTINUES OPENING

20 So that's policy four. The other companion policy I suppose is policy 15 and that's communities are unable to provide for their social, economic and cultural wellbeing in a way that's consistent with this MPS.

Policy 15 is an enabling provision intending to achieve the third order or third priority of the MPSFM objective. It clearly extends in my submission to recognising and providing for hydro which is a key contributor to social, economic and cultural wellbeing.

25 In conclusion in respect of those two MPS's Mr de Pelsemaeker states in his evidence that Plan Change 7 gives effect to the MPSFM to the extent it can but during cross-examination conceded that Plan Change 7 at least as notified does not deal with all policies which it could give effect to currently, for example, it does not give effect to policies of four and 15.

And Ma'am in footnote 58 I think things have moved on since I have last been before you. You had asked all counsel to confirm in respect of those provisions that Mr Maw addressed you on, and I simply note that in footnote 58 I agree with Mr Maw and his analysis and I've set out an additional case by His Honour Judge Kirkpatrick in Friends of Nelson Haven and Tasman Bay where His Honour notes that: "There is nothing in the RMA that prevents the processing of changes to regional policy statements and plans while the section 55 duty is being undertaken. It's just an additional authority for Mr Maw's conclusions.

10 While the MPSFM clause 41(1) requires ORC to give effect to the MPSFM as soon as reasonably practicable it is entirely practical to give effect to the policies four and 15 and others now through the Plan Change 7 process through the relief along the lines sought by Trustpower. In circumstances where freshwater national direction itself has specific provisions recognising and providing for hydro within the Te Mana o te Wai framework, it is entirely appropriate for Plan Change 7 to include recognition for hydro.

The changes Trustpower is seeking to Plan Change 7 is not just about giving effect to the MPSREG. They are also about giving effect to the MPSFM itself. Trustpower is not seeking to give effect to the MPSREG at the expense of the freshwater management MPS. The changes sought are consistent within both documents. In my submission, there is no inherent conflict between the two and the taking and use of water for hydro can be undertaken in a manner that is consistent with Te Mana o te Wai and the MPS's hierarchy of priorities.

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And in support of that proposition Ma'am I also quote from the regulatory impact statement which informed the development of the MPSFM and set that out at 333.

THE COURT: JUDGE BORTHWICK TO MR WELSH

- 30 Q. And I don't remember. Is that an exhibit or in the common bundle?
 A. It's in neither Ma'am.
 Q. Oh okay, well there you go.

A. So I have some homework to provide you. I have it here but I'll hopefully provide it Ma'am.

5 Q. Yes, then you might need to, yes. You will need to because I'm actually specifically interested – I'm interested in everything but I'm interested in a sentence: "No inherent conflict". You know, is there a conflict? Answer: "No". Answer: "Why not?" Yes, so why don't you think there's any inconsistency or conflict between the two MPS's for freshwater and electricity?

A. You're asking me why?

10 Q. Yes.

A. Well...

Q. I'm actually really specifically interested in that. I can't see why they can't stand together but you tell me why they can. I mean I think they can.

15 A. Well the first point I'd have to make is they have to. They have to stand together and it's much like the old part two approach where there's tensions in different directions. There will be times for example in the hydro context when not providing say a residual flow is appropriate and still in accordance Te Mana o te Wai but then there'll be other circumstances where an increase in the residual flow may be entirely appropriate to meet Te Mana o te Wai. I think
20 those decisions have to be made at the individual case, at the consent application stage but I don't think the part of the minister, certainly the documents that I've reviewed, had in mind that the two MPSs cannot be reconciled.

25 Q. So even though you might – say, for example, need to increase a residual flow, it will be subject to a minimum flow and that might reduce your electricity output –

A. Yes.

Q. – and then that's what it does?

A. That's what it does.

30 Q. Yes.

A. If the greater national direction or pull is to increase that residual flow. Now in other instances, that may not be the case and the national direction and the national importance of not reducing output may win in that instance but I don't think the MPS, REG or the FM trump one another.

They need to be reconciled and that's going to be a real challenge in the consent hearings, but I think they must be reconciled and the outcomes will be different in the individual circumstances.

Q. Okay, all right, thank you.

5 A. That's my submission anyway Ma'am.

MR WELSH CONTINUES OPENING

I'm at 334. While Mr Maw for ORC I see is correct at parts of the MPSFM are more directive than parts of the MPSREG it's not in my submission an either/or
10 equation and I know my client is disappointed to have had one of the early MPSs which is less directive but that is what it is.

Ma'am I now turn to the RPS. And under section 67(3)(c) the water plan must give effect to any regional policy statement and the RPS contains a suite of now
15 operative provisions strongly reinforcing the importance of renewable electricity generation in Otago and the need for regional plans to provide for this and they're set out in detail of Ms Styles' evidence and I won't try to do any pseudo planning but I just highlight three policies that have been discussed previously, that's policy 414. That sets out the need to provide for a renewable electricity
20 generation activities including recognising their benefits, recognising the importance of their resource needs, ie water and promoting efficient use of existing facilities.

Policy 443 includes a direction to protect the generation output of existing
25 nationally or regionally significant renewable electricity generation activities by a range of measures including by recognising their functional needs including physical resource supply, eg water needs; and

422 relates to climate change and includes a directive regarding the
30 encouragement or encouraging, I should say, activities that assist to reduce or mitigate the effects of climate change and hydro in my submission clearly has a role in that regard. And there's also Ma'am some regional and nationally significant infrastructure provisions that I've left for Ms Styles to address you on.

THE COURT: JUDGE BORTHWICK TO MR WELSH

Q. So with that previous discussion that we had in mind in terms of is there any inconsistency between the two MPSs? Answer: “Not case by case; judgment call; depending on the weight of evidence which direction you move in”. Does that hold true though when you start to look at the RPS policy 4.4.3 and the word *protect* because that's actually a very strong direction.

A. It is.

Q. Yes.

10 A. My friends' on my left would say well that RPS is getting reviewed as part of the work stream and whether that's advised but at the moment this is the RPS. I know ORC may deliver to the Court the new notified version partway through this hearing but at the moment this is the RPS and so my submissions are based on that. It's very strong language but I still would say that in certain circumstances the MPSFM might pull you another direction, notwithstanding that policy direction.

Q. Notwithstanding that?

A. Because there may be – I'm not going to submit that these policies or the REG will always trump Te Mana o te Wai because I think that would be incorrect to say that. It may do in individual circumstances. It may not, but I think it always, it will inform and has to inform the decision maker the consequence of their decision and how to try and work – navigate their way between those different tensions.

Q. Okay and you're submitting that because well in a context where we've got a brand new MPS for freshwater management which has yet to be fully expressed anywhere, so, therefore, on a consent by consent basis at least for electricity, we're dealing with the RPS in 4.4.3 in particular I would have thought but you will have to go back up to the MPS freshwater management to look at the – on a case by case basis, some expression of the MPS there and not through policy.

A. And also I think because of the water plan being such an incomplete coverage –

Q. Yes.

A. – taking out of the Plan Change 7 context, you know, that's a sitter for the King Salmon approach of delving back into part two.

Q. Yes. I was not thinking about Plan Change 7 when I was talking about that, yes, okay. All right. Very good.

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MR WELSH CONTINUES OPENING FROM PARAGRAPH 39

Through these provisions the RPS gives effect to the MPSREG at least in part. However, it's common ground that the RPS does not give effect to the MPSFM and that's no criticism, just a matter of timing between the two documents.

10

So I submit it's clear that PC7 as notified does not give effect to the RPS policies with respect to renewable electricity generation and there's no exemption under section 67 of not giving effect to an RPS. It's not give effect to – must give effect to the RPS unless this is an interim framework of six plus years. There's no exception.

15

So in summary, for hydro PC7 as notified is inappropriate and fails to give effect to those higher order instruments. It's essentially a stopgap measure until a fit for purpose planning framework can be delivered but Ma'am I have no confidence as to when that will be fully operative. It will be a matter of years that applicants are subject to PC7 and I submit that the consenting of hydro with appropriate consent durations should not be discouraged pending a new land and water regional plan and a new RPS.

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25 MR WELSH TO THE COURT: JUDGE BORTHWICK

Q. Ma'am probably at this point – I'll put the submissions down for a moment and I'll probably come to it in the very next paragraph but I heard on the transcript a few instances Ma'am where you had suggested perhaps some of the applicants were worried about or were wanting a longer-term duration in order to deal with the unknowns of the future plan coming through and I would just say from Trustpower's perspective, that's not the case. Trustpower welcomes to be involved to influence the contents of the new plan because currently it doesn't provide for the MPSREG and it would be great to have a

30

plan that does do that so the longer consent duration's not being sought as some sort of protection from the unknown.

A. Yes.

Q. I think Trustpower if it must, take its chances in a merit's based argument
5 under the new plan but it's seeking a longer-term for different reasons.

A. Okay, thank you.

1450

MR WELSH CONTINUES OPENING AT PARAGRAPH 39

Even in circumstances where plans are outdated, incomplete or invalid the
10 RMA does not contemplate decision-making being paused nor does the
MPSFM and planning – and it's one of the challenges and good aspects of
planning. It will always operate in a state of flux.

The notified version of Plan Change 7 is in my submission a blunt instrument
15 which adopts a one size must fit all approach with the same framework applying
to all takes and uses where it's subject to other national direction or other
planning legislation direction or where it sits in the MPSFM hierarchy.

I submit that the approach represented by PC7 as notified is the antithesis of
20 the MPSREG, the renewable electricity generation provisions in the RPS and
section 7(j). It also does not reflect the MPSFM's hierarchy and other electricity
generation provisions.

So why should hydro be treated differently? Mr Mitchell sets out in his evidence
25 the reasons why from a hydrological perspective the notified PC7 provisions
including schedule 10(a)(4) are fundamentally inappropriate for hydro. There
appears consensus in the 7 May JWS that there are material differences
between hydro takes and other takes and that, therefore, different
methodologies for data analysis and associated limit setting are needed in PC7.

30

Now probably in a sidestep that Richie Mo'unga would be proud of Ma'am,
instead of developing that schedule or bespoke schedule for hydro the
approach of the witnesses has been to develop the recommended provisions
for the analysis of data and associated limits through the RDA process which

Trustpower supports. As I say, that includes that RDA pathway that will be available to Trustpower whereby water data can be assessed on the case by case basis and that's where Trustpower really sees value through that joint witness process as at least the pathway where it can be developed and worked
 5 through with processing offices and the decision makers, so Trustpower has supported that and has supported changes to the schedule but I think it would be fair to say without the RDA pathway it would still have issues for hydro with the schedule.

10 The various JWSs now evidence a high level of agreement that a different treatment for hydro is required under the Plan Change 7. And Ma'am I don't intend – I framed it when I drafted these submissions taking the Court through Mr Mitchell's evidence but it is really can only be a reinstatement of his evidence and I don't think that's probably particularly helpful to read unless you disagree
 15 but I've tried to frame it in paragraphs 4(2)(a) through to I think it is (e) but they're the reasons for Trustpower's concerns around the schedule. I'm happy to read...

THE COURT: JUDGE BORTHWICK

No, no, it's okay because we've read his evidence. All right.

20

MR WELSH CONTINUES OPENING

I would just note in 4(2)(c) that changes in take volumes can materially impact the operation and efficiencies of the scheme and this is particularly so for Trustpower for these water races, these four water races which are used up to
 25 five or through five different power stations. The Black Rock Race delivers water into – just above power station B at Deep Stream and from there it flows to Lake Mahinerangi which is the storage battery and for use in four Waipori River schemes. So these water takes Ma'am while they're small from a hydro perspective in terms of the take, they very, very efficient because of the ability
 30 to reuse the same water and take benefit of the location of these races in the high country and, therefore, the energy delivered through that head to the lower power stations.

So Ma'am I will just lead from Ms Foran confirmation as to the relative efficiency of these four races. I think I'm at 4(3) Ma'am.

THE COURT: JUDGE BORTHWICK TO MR WELSH

5 Q. Yes, you didn't mention (f) but anyway (f) is also a summary of your witness' evidence isn't it, that would be correct?

A. Well, yeah, if it's just a matter of practicality that as Plan Change 7 was notified and Ma'am if we're being honest, the schedule wasn't drafted with hydro in mind, it was entitled as it related to in the title to irrigation. That's now been deleted and I think we've just been trying to ham-fit hydro into
10 the schedule without making too many changes but it's largely ill-suited and one of the problems is that if Trustpower which is an opportunistic user of water – it uses it when it's available, if it hit one of those monthly limits then to get to Beaumont to manually shut the gates requires, you know, a two-hour journey up into the high country and if it's snowing, by
15 way of a polaris and we just raised that or the evidence has raised it – Mr Mitchell's raised that as a matter of just the real world consequence of some of these planning provisions.

Q. Okay.

20 **MR WELSH CONTINUES OPENING**

Overall Plan Change 7 as notified would have the effect of reducing the total authorised takes compared to the current maximum consented takes. For Trustpower this is likely to reduce its long-term yield of each of the four water races. This, coupled with a short-term replacement duration as required by
25 Plan Change 7 is notified will, in my submission, inappropriately reduce available takes for generation purposes.

It will decrease generation; diminish the value of the investment. It is intended to disincentivise investment and that will have the consequence in regard to
30 maintenance and enhancements. It will create major uncertainty regarding the future availability of water and the risks associated with future consent replacements in six years' time which – and I think you've probably heard during the Cromwell sitting, that creates additional uncertainties and consenting costs.

Now for Trustpower it's likely that it would have to go through another two consenting processes to bring it in line just a few years apart with the Waipori Scheme and that in my submission promotes inefficient outcomes. There's no
5 acknowledgement in PC7 as notified regarding the level of investment in hydro schemes. The Waipori Scheme is in excess of a \$100 million scheme.

Plan Change 7's application to new resource consents, that is the six-year consent duration maximum will also create uncertainty and materially
10 disincentivise investment in new generation schemes. That is a deliberate outcome of PC7.

As Ms Foran notes, or as she confirms, PC7 will create considerable uncertainty with respect to investment decisions both for any new development and
15 maintenance of existing schemes and it may put the enhancements in jeopardy. At 4.6 I submit that there may be very good reasons why consent duration of six years is not appropriate which has been highlighted by several witnesses, for example, in the case of Trustpower's deem permits that 17-year term would
20 allow the replacement of consents to align with the expiry consents associated with the wider scheme and thus better enable the integrated management of the entire Waipori scheme.

MR WELSH TO THE COURT: JUDGE BORTHWICK

Q. Now Ma'am the decision maker hearing this application – he or she or they may disagree with that but at least Trustpower is seeking through
25 this process that merits based argument for the decision maker.

A. Yes.

Q. And Ma'am at 4.7 there's nothing you can do about this but I just noted that Trustpower's also concerned with the six-year duration applying to new consents so not the deem permits but new consents. It's concerned
30 that such an approach may be adopted by other regional councils throughout the country who face the similar challenges of ORC in needing to process new and replacement water take applications while giving effect to the MPSFM and working through its implementation

requirements. I don't think you – well I'm not asking you to take that submission any further, but I think that may be a consequence of policy, was it 10A(2)(2).

5 MR WELSH CONTINUES OPENING

ORC's Position. In his evidence-in-chief Mr de Pelsemaker states, there may be other reasons than those set out in the submissions that justify further amending the provisions of Plan Change 7 to better accommodate the needs of hydro electricity generation, but I'd like to hear from the relevant submitters on this before making any further recommendations. In his reply evidence, Mr de Pelsemaker provides three reasons why he considers that exempting hydro activities altogether from Plan Change 7's not appropriate. Now I would just say Ma'am, we're not seeking, or Trustpower's not seeking to be exempt altogether.

15

These are restated by Mr Maw in his opening submission. Firstly, Mr de Pelsemaker states that hydro schemes can involve a variety of activities, some of which may have significant hydrological and ecological effects. The AEs for all of Trustpower's deemed permit applications confirm that all adverse effects will be minor at worse.

20

Secondly, Mr de Pelsemaker states that it's necessary to take a longer term perspective on the impacts of climate change on freshwater bodies. The irony of this statement's not lost on Trustpower. Hydro schemes are long term assets and will play a fundamental role in addressing climate change management and adaption.

25

Thirdly, Mr de Pelsemaker states that there is a need to ensure that hydro schemes will make the transition towards a fresh management regime under the future LWRP in a timely manner. As I've outlined above, providing for hydro activities in a manner sought by Trustpower can be consistent with both MPSs and the concept of Te Mana o te Wai. There's no reason why, in my submission, PC7 relief sought by Trustpower should be at odds with the LWRP with respect to Trustpower's proposed Rule 10A(3)(2) which provides for

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replacement consents for hydro of more than a six year activity as a discretionary activity, that's the relief Trustpower's still sticking with. Trustpower has not sought to restrict the consent authority's discretion, conditions that could be imposed, or remove the ability to even decline consent. Trustpower's consent applications seek terms to 2038, less than half the 35 year maximum under the RMA and if necessary the Regional Council may review those consents under 128 if that is of concern.

Mr de Pelsemaker also acknowledged that further relief for hydro electricity generation within the PC7 framework may be appropriate if it were to be demonstrated that the application of Schedule 10A(4) would significantly impact on the continued operation and viability of HEG Schemes. It's entirely unclear where Mr de Pelsemaker required triggers of significant impact on the continued operation and viability of HEG Schemes or where that comes from.

Mr de Pelsemaker confirmed in response to questions that there is no statutory planning basis for that important qualification. Mr Maw, who in his opening submissions reaffirms the requirement for significant impacts on scheme viability, similarly has not explained any planning or legal basis for it. In my submission there's nothing the MPS REG or the NPSFM for that matter, that indicates the requirement to give effect to the MPS REG only in such limited circumstances. In fact, the MPS REG confirms the opposite. Even minor reductions in electricity generation of existing schemes can cumulatively have significant adverse effects on national, regional and local renewable electricity generation.

Ma'am I then come to the issue of review that have been spoken a bit, I think probably in around the Easter period and so I do set out some submissions in that respect. I'm not sure if I need to take you through that, but I would just note the High Court in New Zealand Wind Farms and Palmerston North City Council when it was revealing the 128 provision and those processes, noted it's no mere tinkering exercise. The provisions in the RMA covering public notification submissions and hearings in respect of resource consents, all apply with

respect to a review under 128. There is, therefore, very public correction process and reconsideration of the appropriate consent conditions.

5 Almost there Ma'am. Consumptive versus Non-consumptive. Ms Styles in her evidence states that it is generally understood that hydro electricity generation schemes return water to the environment in a way that can be utilised again by others or within a water body and thus are non-consumptive in the same sense as activities. Non-consumptive in the same sense, are not non-consumptive in the same sense as activities such as irrigation. By way of clarification, the relief
10 sought by Trustpower is not dependent on affected takes being non-consumptive as defined under the Resource Management, Measurement and Reporting Water Takes Regs. It's a very narrow definition which is for the purpose of those regs is to require metering. So it should apply as widely as it does. And the water plan Ma'am, it's definition simply adopts that under the
15 regulations, but Ms Styles in her evidence notes that the water plan does treat in other parts of the document hydro along with other non-consumptive takes.

Halfway through that paragraph, the MPS REG applies to all takes for all renewable electricity generation purposes and does not differentiate between
20 consumptive and non-consumptive including as defined under the water plans and those regulations. It takes a non-consumptive in the wider meaning of the word insofar as water is used, as the water used is not lost to the wider hydrological system and that is a fundamental difference between hydro where the water's available still for the river or the lake or other users as compared to
25 irrigation where the water is lost to the land.

Section 5, changes sought by Trustpower are appropriate. As Ms Styles states in her evidence, to give effect to the higher order of documents, PC7 needs to appropriately enable the replacement of resource consents for existing hydro
30 in the region including deemed permits and new consent applications for enhancement or maintenance of existing schemes and so Ma'am I just set out in 5(2) what Trustpower's actual position is. So Trustpower is seeking the wording proposed in the 7 May JWS version and I should say that's Objective A

because the witnesses or the experts came back with two versions of the objective for you.

THE COURT: JUDGE BORTHWICK TO MR WELSH

Q. You prefer A?

5 A. Yes A.

MR WELSH CONTINUES OPENING

Plus objective policy and rule amendments to provide an appropriate framework for hydro to be granted on a case by case basis for consent term longer than
10 the six year maximum duration.

And those aren't new changes Ma'am, that's what we've been seeking throughout.

15 Ms Styles' evidence is that this is an efficient and the most appropriate way to provide for hydro and give effect to those higher order documents. The framework will protect the efficient, flexible and sustainable, renewable generation on which the nation's climate change permits depend, while giving effect to Te Mana o te Wai as far as practical at this time.

20

The focus provisions sought by Trustpower will not provide for some kind of free for all for hydro applicants. Ma'am I don't think you've received any evidence thus far beyond me from the bar that the only water take from deemed permits is held, for hydro is held by Trustpower and it's the seven permits that
25 it's seeking is Pioneer with a – it's submissions refers only to the damming consent of, is it Falls Dam?

THE COURT: JUDGE BORTHWICK TO MR WELSH

Q. Oh they've got assets all over the show. Yes, they've got other assets from other larger schemes –

30 A. Yes.

Q. - and I can't remember now whether it's Manorburn, Poolburn, Loganburn, whatever, you know, but they have assets all over the show.

A. But I think the reality is the number of hydro generating operators that rely on deemed permits is a limited class as least.

Q. Why are you telling me this though? Why that point in particular?

5 A. Oh I was just making the point that it's not going to open the flood – so to speak the flood gates for all applicants to come in if there were a longer-term consent possibility for hydro operators. The class of operators that could try and seek that longer term is a limited one. That's all I see.

Q. Okay.

10 1510

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. It is not necessarily the case for new permits though is it?

A. No.

15 Q. It's we're extending beyond thinking about deemed permits and the ones that expire in '25 that discretionary – is that discretionary activity suggestion though that far just wanted to be clear, I need to have another look at it.

20 A. Well the only scope only plan change 7 or the only ambit of plan change 7 that applies to new applications that are not deemed permits or not replacements for applications that or for consents that expire by 2025, so the only provision is the policy direction on duration. None of the activity rules apply under plan change 7. They're still under the water plan at this stage.

Q. Water plan, now.

25 A. So, new applications, Commissioner will be subject to the policy on duration and that's all under plan change 7.

Q. So what you're suggesting is that it doesn't actually – well the only difference it makes is that the policy that's introduced in PC7 with the six years, that's the only difference that it makes?

30 A. For the new – for new applications, correct.

Q. For the new. Yes in terms of your proposition.

A. Oh, well the proposition there was relating and probably shouldn't have put it in. The proposition there was only in respect that there wouldn't be

a rush of people who are hydro operators seeking longer-term consents for their replacement *deemed* permits, that's all.

Q. Yes, well I was just trying to understand how *new* propositions came into your provisions that you're suggesting that's all.

5 A. They don't is the answer. The only way they come in, with the ambit of plan change 7 is through the policy direction, Trust Power has sought for hydro to expand that policy direction for new applications as well. So Trust Power is seeking that policy carve-out for new hydro.

Q. Yes.

10 A. Yes.

Q. I was trying to understand so, you've confirmed my understanding of the proposition.

A. We got there in the end on my part, yes.

MR WELSH TO THE COURT: JUDGE BORTHWICK

15 A. Ma'am I don't need to take you through but I was trying to find some safety in numbers in 5.5 in respect of...

Q. So you got some friends out there, have you?

A. Yes. (inaudible 15:12:49) otherwise at times but just in terms of the acknowledges by the planners in particular around dealing with a longer-term pathway for hydro and I just set that out including a reference back to Ms Dixon's submissions. So I won't read that to you in the interests of time, Ma'am. The only other matter and I don't do anything with this but I feel duty bound just to raise it and that's the and I mention this –

20

Q. You did.

25 A. – the Dunedin City Corporation Empowering Act which is an odd piece of legislation that's still on the Statue Book and that was for the raising of the Waipori Dam. It's not repealed and it provides for the mining privileges and water race licences held or later acquired by the Corporation, who was original developer of Waipori to continue in perpetuity. And I just include that Act, it's about three pages, just in annexure B. Now that, in my submission shows or demonstrates the importance Parliament at the time ascribed to the scheme, even a century ago but I do not that Trust Power's not relied on that provision or the Empowering Act and has filed

30

applications for replacements consents as if they were to expire or lapse on 1 October this year. So, it just background really Ma'am. So, my principal submission is that the relief sought by Trust Power appropriately gives effect to all applicable higher order planning instruments and in terms of section 32, Ms Styles' proposed objective is, the most appropriate means achieving the purpose of the Act and the provisions proposed by Ms Styles are the most appropriate way to achieve the proposed objective. Finally PC7 as sought the Trust Power will promote sustainable management purpose of the Act and thank you Ma'am those are my submissions.

Q. All right, have you got any questions?

THE COURT: COMMISSIONER EDMONDS TO MR WELSH

Q. I was just wanting to be sure that I was clear about your 2.2 at the bottom of page three.

15 THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS

Q. What about it?

THE COURT: COMMISSIONER EDMONDS TO MR WELSH

A. Policy 2.2 sorry?

20 Q. No paragraph 2.2.

A. Oh, paragraph 2.2.

Q. I just wanted to be clear about your 17-year consent durations that for you, all deemed permit replacement consents and then you mentioned that those are going to align – those replacement consents with the existing expiry dates of the wider Waipori and Deep Stream...

25

A. Yes. So, in terms of the relief we've sought...

Q. So that's in your application?

A. That's in the application.

Q. You've applied for 17 years, is that what you mean?

30

A. Yes, that exactly what I mean and thank you for raising that Commissioner because it was a point I was meant to correct because I

think the interchange between your Honour and myself and one point, I indicated we were seeking relief of 17 years –

Q. Mhm.

5 A. – and that was confusion on my part and I apologise to the Court and to my friends in that respect. The term sought in the resource consent applications is 17 years. We haven't tried to Trust Power-ise the provisions that much to have a 17-year term in plan change 7.

Q. That's all right.

A. So I apologise Ma'am for that.

10 Q. Right. And so those deemed permit replacement consents do they contain any enhancement measures because I guess, I might need to ask one of your witnesses about that but there was mention of one of these races enhancement takes and higher flows...

A. Yes, well that's the...

15 Q. So at that point, I wasn't clear quite what was envisaged here.

A. Okay, so there's two types of enhancements, to just be clear, in terms of the deemed permits they're at an early they'd been filed and they're on hold and the applications are seeking a rollover of those provisions. Three of the four were filed before plan change 7 was notified. So, they don't include any environmental enhancements beyond the status quo but they've got a long way to go through the consenting process. The reference in the Deep Stream enhancement is an application currently sitting before ORC which seeks to increase the take from Deep Stream in flood flows and to capture that. So for Trust Power that's an enhancement and in terms of renewable energy it's an enhancement but it's not an enhancement like plantings or so forth. So that's the reference there.

20

25

Q. And so what term has that been applied for?

A. That's been applied for 17 years as well and so it gets caught by that policy direction under plan change 7 but it sits outside of plan change 7 as a new water consent or a new water permit.

30

Q. It's a new water consent.

A. So, that's also consistently been tried to align to the Deep Stream.

Q. Right, so the actual application then has the term –

A. No.

Q. – that will align –

A. Yes.

Q. – with the, so that will be 17 years as well.

5 A. Correct. That's what's been applied for.

Q. Sure. That's for that. Clarifies the position, I won't have to ask your witness now, hopefully.

THE COURT: JUDGE BORTHWICK TO MR WELSH

10 Q. So, is the general thinking for Trust Power that if it were to be second and six-year consents it would go via an RDA route because there needs to be further work in relation to the schedule? Is it seeking more than six consents, it would go via a fully discretionary route?

A. Correct.

15 Q. So I've got it?

A. Yes.

Q. You're not anticipating ever going control for example.

A. Well we can't make control –

Q. Because you can't make it work.

20 A. – and I think to make control required a lot of changes that quite frankly a lot of the experts as I understand it, just weren't interested because they're not – it's hydro. So it was resulting in too many changes and that would make the schedule in my submission, more complex not less, because it would have double-up of provisions...

25 Q. Yes, well we thought. We thought you might actually need another schedule for hydro and other schedule for community but we did actually put that out there but that's okay, no?

A. Well they didn't deliver me another schedule. That's not what came back from the joint witness and I'm on the outside of that process Ma'am.

30 Q. As are we.

A. Yes.

Q. Very good.

A. So that's why I say the RDA deals with the schedule.

Q. Yes.

A. If we don't have the RDA we've got some problems.

Q. Yes, no understood.

A. But we'll probably if Trust Power seeks a six-year consent, be bumped up to discretionary.

5 Q. That was my question. So, we'll take the break before going got your next witness.

COURT ADJOURNS: 3.20 PM

COURT RESUMES: 3.37 PM

MR WELSH CALLS**NICOLA IRENE FORAN (SWORN)**

- 5 Q. Ms Foran could you please confirm for the Court that your full name is Nicola Irene Foran?
- A. Yes that's correct.
- Q. And are you the Lead Environmental Adviser with Trustpower Limited?
- A. Yes.
- 10 Q. And you have prepared a brief of evidence dated 5 February 2021, is that correct?
- A. Yes correct.
- 15 Q. Now since filing your brief of evidence, has Trustpower filed applications with the Otago Regional Council for consents associated with the Beaumont Water Race that you refer to in paragraph 6.7 of your evidence?
- A. Yes they're now filed.
- Q. And do you have any other amendment – well it's not an amendment, but do you have any amendments to your evidence?
- A. No.
- 20 Q. So you confirm that your brief of evidence is true and correct to the best of your knowledge?
- A. Yes.
- 25 Q. Ms Foran I just want to ask you one question. In paragraph 68 of your evidence, you record, the words, "the vital role Trustpower's four water races play in the Waipori Scheme", since preparing your evidence, have you had an opportunity to make inquiries as to the relevant efficiency of these four races compared to other Trustpower assets?
- 30 A. Yes I have. The four races contribute water that passes through multiple stations, so three of the races pass through the four Waipori Stations and the (inaudible 15:40:07) Race passes through five stations being Deep Stream B. Because of that and also the function of the scheme and its elevation and high head, it has quite a high efficiency factor in terms of the gigawatt hours produced per cubic metre of water, it's one of the very highest of all of Trustpower's assets.

Q. Thank you. I understand your evidence-in-chief, or I know your evidence-in-chief, page 2 contains a summary of that evidence and I just wonder if you may read to the Court that one page summary?

A. Yes sure.

5

MS FORAN READS SUMMARY

Good Afternoon. Trustpower owns 487 megawatts of hydro electricity generation assets throughout New Zealand consisting of 38 hydroelectric power stations across 25 individual schemes. In the Otago region, Trustpower
10 owns and operates the Waipori Hydro Electric Power Scheme, the Deep Stream Hydro Electric Power Scheme and the Paerau Patearoa Hydro Electric Power Scheme. The formation of Lake Mahinirangi for hydroelectric power generation in 1907 coincided with the end to gold mining in the Waipori area. A number of historic water or mining races were incorporated into the scheme
15 to divert additional water into Lake Mahinirangi for electricity generation.

Four of those races continue to operate, being Black Rock, Crystals, Shepherds and Beaumont. Applications for the replacement consents have been lodged with the Otago Regional Council for three races and at writing this evidence,
20 Beaumont had not been lodged, but now of course has been.

Trustpower filed a submission raising concerns regarding proposed PC7 to the regional water plan and the implications this will have on its renewable electricity generation schemes. Trustpower's applications for replacement
25 consents for its four races are subject to Plan Change 7 as are applications for new water permits in respect of the policy direction on term of consent, for example, enhancements to the Deep Stream Hydro Electric Power Scheme.

Trustpower is concerned with the way Plan Change 7 provides for the
30 consenting of hydroelectricity power generation given the focus of Plan Change 7 on the use of water for irrigation purposes and in particular the lack of consideration of the national policy statement for renewable electricity generation.

Trustpower has engaged a multi-disciplinary team of experts to prepare assessments for the four water races and has to date committed over 1.6 million in expenditure. Given that level of commitment, Trustpower is concerned that the notified version of Plan Change 7 proposes only a six year duration for these consents. This short duration consenting is not conducive with the long lifespan nature of these assets and creates a level of uncertainty such that investment decisions including significant operational expenditure such as upgrades and enhancements would likely be delayed or deferred indefinitely.

10 Mr Mitchell addresses in his statement evidence the hydrological concerns with Plan Change 7 when applied in the hydro electricity generation context.

EXAMINATION CONTINUES: MR WELSH

Q. Thank you Ms Foran. Now my friends and the Court may have some questions for you, so I'll ask you to address those?

15 A. Sure.

THE COURT: JUDGE BORTHWICK TO MR PAGE

Q. Mr Maw – oh sorry, Mr Page you're going are you?

A. Well I suppose I should go first because we're on the friendly side I suspect rather than Mr Maw.

20 Q. Oh are you going to calling patsy questions, because you shouldn't be.

A. We'll see.

Q. Yes.

CROSS-EXAMINATION: MR PAGE

25 Q. Ms Foran can you – looking at your paragraph 6(11) on page 7, which I think you summarised at your paragraph 1.5 of your summary evidence, I wasn't sure what you meant by "these assets", are you just talking about the races or are you talking about the dams and the whole suite of infrastructure?

THE COURT: JUDGE BORTHWICK TO MR PAGE

30 Q. Sorry, I actually didn't hear the paragraph you're going to, paragraph?

A. Sorry, 6(11) on page 7 of the witness' evidence?

Q. 6(11). Yes and that's a good question. Okay.

CROSS-EXAMINATION CONTINUES: MR PAGE

Q. So what did you mean by "these assets"?

5 A. The scheme in its entirety, so for clarification, that would start at the intakes for all the various water takes and diversions we have, it would include the canals, gates, communications, in terms of telemetry, things like that, the power stations, dams, other weirs even to the extent of roads, bridges that might be needed for access. It's the whole gambit.

10 Q. So thinking about dams, is there anything peculiar about dams for hydro electricity generation in terms of their maintenance and requirements? Or would your observation apply to dams for other purposes too about investment reliability?

15 A. Well it would apply in a more broader context I suppose. You know, these dams in this area, as across a lot of New Zealand, you know some of them are quite old. Over a hundred years old for Trust Power's assets here. So they do require that maintenance and enhancements over time and I'm also aware that we've got new guidelines coming out that will require some significant upgrades to dams to comply with those guidelines. So, yes it would apply across any assets.

20

Q. So what's the nature of the new guidelines that you're aware of that are due?

25 A. It's the New Zealand Society of Large Dams, I've been working on revising the existing guidelines of – it's like an engineering, structural component. It's as probably as much as I can say.

Q. Well, do you know and if you don't, just say, when those guidelines are due and to take effect.

A. No I couldn't say for certainty, sorry.

Q. But are you expecting that to occur during the life of plan change 7?

30 A. Yes.

Q. Nothing further Ma'am.

CROSS-EXAMINATION: MR MAW

- 5 Q. Thank you your Honour. Good afternoon. At your paragraph 6.9, you refer to the applications that have been lodged with respect to three of the four races and you note that technical assessments have been undertaken in relation to a number of disciplines there.
- A. Mhm.
- Q. Have any assessments also undertaken in relation to cultural values?
- 10 A. Yes well in so far as that Trust Power has engaged over a significant timeframe with tangata whenua, with (Māori 15:47:49) and continues to do, to understand their concerns and to work with them to see how we can address those concerns through the consenting process.
- Q. Are those issues still alive in terms of cultural concerns that have been expressed?
- 15 A. The applications are currently on-hold while we work through with (Māori 15:48:12) and with the Department of Conservation with their concerns as part of that process.
- Q. And have some of the concerns expressed related to the durations of consents sought?
- A. I couldn't answer that. That's beyond my involvement.
- 20 Q. Now you also note in your paragraph 6.9 the expenditure committed by Trust Power. When you say that Trust Power has committed over 1.6 million in expenditure to get the consent applications to lodgement, does that mean that that's the amount of money that has been already spent in preparing applications or something different?
- 25 A. Correct, that's money that's been spent in preparing the applications and / or the technical assessments such as freshwater ecology, hydrology and the such.
- 30 Q. You then go on to address the concerns and in you paragraph 6.11 with the potential short-term duration of consents and my friend has asked you some questions about the asset classes that you were referring to in that paragraph, if one of the purposes of plan change 7 is to send a signal that investment in infrastructure that requires a long period of time to repay in terms of capital expenditure, if one of the purposes is to send the signal that those investment decisions should not be made until such time as

the new land and water plan is made, then do you accept that it is achieving that purpose?

A. Sorry could you just repeat that?

1550

5 Q. If one of the purposes of Plan Change 7 is to send a signal not to invest in capital that requires a long period of time for repayment, so if that's one of the purposes of Plan Change 7, then would you accept that it is in fact achieving that purpose because it is in the context of Trustpower's applications, sending a signal not to invest at the moment?

10 A. Yes I think. Yes if the plan change results in a six year duration for consents, that sends Trustpower a clear message that we should not look at investments further in this region during that time.

Q. And one of the reasons why that signal has that affect is because of the potential uncertainties associated with the six year permit?

15 A. Correct.

Q. And when you think about uncertainties in terms of the access to the water resource, the new land and water plan may also create some or the fact that a new land and water plan is coming also creates some uncertainties?

20 A. Yes but it also creates some opportunities insofar as that it can hopefully implement the MPS for a new electricity generation.

Q. And one of the tasks for the new land and water plan is to establish flow and allocation regimes with respect to fresh water?

A. Correct.

25 Q. And there's no clear understanding or knowledge at present as to what allocation will be available for various activities?

A. Correct. In saying that, though, hydro electricity generation is obviously fundamentally important and significant to New Zealand, so given that status, with the MPS REG requiring that there's no loss in generation output, we would – Trustpower would be seeking that that new land and water plan preserves that generation output as required by those higher order documents.

30

Q. Do you take the view that it preserves the allocation for those purposes irrespective of any effect on the water bodies from which the water is taken?

5 A. No, no. Trustpower continues to look for opportunities where we can to make sure that the effects of our activities on the environment are mitigated, so through that process, if that was an outcome, that would be what we would be looking at considering.

Q. Do you take the view that the NPS REG gives priority to the water resource to the exclusion of all other users?

10 A. Well, sorry, the MPS REG provides recognition for hydro electricity generation, so that would need to fit within that framework of water allocation. It is recognised as a nationally significant activity that's fundamental for people's social economic well-being, social well-beings and all the or such like, so we would expect to see some balance given
15 in that allocation framework for all those different competing uses of water.

Q. And so there can be no guarantee that as a result of the new land and water plan, that the same allocation of water will be available in the future for, in this context, Trustpower's Scheme?

20 A. Yes well, I mean Trustpower knows there's no guarantee but there's a whole lot of other factors that need to be considered existing value of investment, national targets for generation of renewable electricity preserving the current output from renewable electricity. Yes, there's a whole range of factors, it's not solely at the discretion of a new land and
25 water plan.

Q. But there is the possibility that the allocation framework may result in a differing or a different allocation than that which currently exists?

A. That, yes, well that possibility would always sit on the table, but as I said, it's – there's a whole raft of matters that need to be considered and as I
30 understand at the moment, if the allocation framework were to change, you can only take water off a consented activity to return to the environment, it's not necessarily that you can return it to another, enable it for another user to take, so it would come back to those environmental considerations.

- Q. And just picking up on that point you make about water can't be taken off an existing holder, that's through the duration of a consent, that that statement would apply? To be allocated to another user?
- A. I think that's my understanding, yes.
- 5 Q. But on expiry of a permit, then allocation is –
- A. Yes.
- Q. – essentially up for grabs between competing uses?
- A. That's my understanding, yes.
- 10 Q. And so longer term or one of the outcomes of longer term durations, is that it precludes the implementation of a change in the allocation and flow regime?
- A. Not necessarily because the Council' have the ability to review consents to bring them in line with new allocation frameworks and new planner frameworks.
- 15 Q. You couldn't review the consent to allocate – you couldn't review a consent and allocate water to another user through the review process could you?
- A. Yes I believe that's correct, I'm not 100% sure but yes, not being a lawyer.
- 20 Q. And you mention that there were some other factors that would need to be taken into account when establishing a flow and allocation regime and one of those factors would be the first matter of priority in relation to Te Mana o te Wai?
- A. Correct.
- 25 Q. And what do you understand that first priority to be?
- A. As I have understood it through information that's been put out there, that it's really ensuring that the health and well-being of the water body is provided for first and foremost. The way I've heard it explained through various people is that if your water body is healthy and thriving, the effects and the benefits of that would flow down through your people.
- 30 Q. And in order to ensure that that first priority is achieved, a flow and allocation regime needs to be established with respect to each water body?
- A. That's my understanding, yes.

Q. And it is the role of the new water and land plan to ensure that outcome is achieved?

A. Yes.

5 Q. At your paragraph 6.14 you note or give evidence that there could be several rounds of re consenting required for the enhancement before all of the Deep Stream HEPS consents are aligned?

A. Correct. Sorry, did you say in my evidence or in our ...

Q. Yes, paragraph 6(14) of your evidence-in-chief?

A. Oh yes, here we go.

10 Q. Now I'm unsure as to why you are concerned about there being several rounds of re consenting required?

A. The time and effort that it takes to re consent, be the first concern as it takes several years in preparation for each consenting round. Obviously we lodge our applications in excess of six months prior to the expiry to ensure we can continue operations during that processing. The other factor is, every time we do re consent we do seem to lose value through our operations through additional controls and conditions being placed on our ability to operate, just general inefficiency really of multiple re consenting of the same activity.

20 Q. It was the reference to several rounds that I had in mind. I understand that the effect of plan, well do you accept that the effect of Plan Change 7 is that there will be perhaps one additional round of re consenting?

A. That would be the hope, but there could be two or possibly three rounds depending on how future planning processes play out.

25 1600

Q. So that's dependent on the outcome of the new land water plan in terms of duration?

A. Yes.

Q. Thank you. Those are my questions.

30 **RE-EXAMINATION: MR PAGE – NIL**

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING AND COMMISSIONER EDMONDS – NIL

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

- Q. The only question that I have and I thought this was where Mr Page was going, but then he went somewhere else and that was perfectly fine. I thought but I may be mistaken that Trustpower after it, you know, dams the water, takes the water, uses the water for hydro then may convey it to other irrigation systems which are then used by the primary sector, is that right?
- 5
- A. It is for our Paerau Patearoa scheme where there's the joint activities so there's the storage component then the generation component and then it's available for irrigation use downstream. It's not the case for the Waipori Scheme.
- 10
- Q. Okay and so when you were talking about assets at paragraph 6.11 do you mean – were you meaning to include, you know, the conveyancing system of the primary sector for irrigation by the primary sector or were you mainly thinking to include only your assets for hydro?
- 15
- A. No and at that paragraph I was referring to the Trustpower assets, in particular Waipori and Deep Stream. Our Paerau Patearoa Scheme isn't subject to Plan Change 7 that's already been consented. So that was, yeah, specific to Waipori.
- 20
- Q. And Waipori, so there's so many schemes –
- A. Yeah, sure.
- Q. – in front of me, Waipori does or does not convey water to a downstream primary sector in races?
- A. Yeah, not to my knowledge.
- 25
- Q. Not to your knowledge?
- A. No. The only – so we have races obviously above Lake Mahinerangi. I'm not aware of any irrigation drawn off those races or conveyance systems. The only other thing to note there is that the reservoir for Deep Stream provides emergency water supply for Dunedin City, so it's not irrigation but it's, yeah, obviously critical.
- 30

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

- Q. So when does this Paerau consent expire?
- A. Paerau expires in 2034.

Q. Right, okay, thank you.

A. I'm pretty sure, yeah.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

Q. Okay so that was my question.

5 QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL

QUESTIONS ARISING ALL PARTIES – NIL

THE COURT: JUDGE BORTHWICK

Q. All right, well thank you very much for your evidence.

A. Thank you.

10 WITNESS EXCUSED

MR WELSH CALLS**PAUL MICHAEL MITCHELL (AFFIRMED)**

Q. Mr Mitchell can you confirm your full name is Paul Michael Mitchell?

5 A. That's correct.

Q. And you are a director and hydrologist with Mitch Hydro Limited?

A. That's correct.

Q. And your qualifications and experience are set out in pages 2 and 3 of your evidence-in-chief?

10 A. Yes, that's correct.

Q. And you have prepared a brief of evidence dated 5 February 2021, is that correct?

A. That's correct.

15 Q. And you have participated in and been a signatory to two joint witness statements, the first in relation to Hydro as it relates to the schedule dated 30 March 2021 is that correct?

A. That's correct.

20 Q. And you also participated in and were a signatory in respect of the joint conferencing on the schedule with technical experts and planners between 4 and 6 May is that correct?

A. That's correct.

Q. In respect of your evidence do you have any amendments that you wish to make?

A. Yes I do. There's two of them.

25 Q. Can you talk – take the Court to the relevant paragraph and then explain your change please?

A. Certainly. The first change is at paragraph 24(g).

Q. And that's on page?

A. Seven of my evidence-in-chief.

30 Q. And what is that change?

A. And the change is: "Operates at capacity and", and cross out: "0.52", and write in: "0.68 metres cubed per second approximately". Cross out: "15 to 20" and put: "10 per cent".

Q. Thank you.

A. And the second change...

Q. So that's on page?

5 A. On page 8, 27(b). Paragraph 27(b) and diverts flow from approximately – cross out: “4.0” and write: “3.7”. They’re the only changes.

Q. Thank you and with those changes made can you confirm your evidence-in-chief is true and correct to the best of your knowledge and belief?

A. I can.

10 Q. Now Mr Mitchell given the passage of time since you've prepared that statement of evidence I understand you've prepared a short summary statement of today's date, correct?

A. That is correct, yes.

Q. And can you also confirm that that statement is true and correct?

A. It is, yes, thank you.

15 Q. And can you please read aloud to the Court that statement please?

WITNESS READS STATEMENT

My evidence-in-chief (5 February 2021) was based on the notified version of Plan Change 7 or PC7. This summary refers to the recommended version of
20 Plan Change 7 contained within appendix 2 of the JWS dated 7 May 2021 which has addressed a number of issues identified in the expert conferencing including deleting the 1 July 2015 start date limitation in rule 10(a)(3.1.14) and six, would address the issue of major hydro outages during the 1 July 2015 to 30 June 2020 period resulting in legitimately higher maximum monthly and/or
25 annual take volumes due to the inclusion of wetter years in the assessment period.

The Trustpower water race flow compliance records are of limited length – eight to 19 years relative to the longevity of the water races. The inclusion of
30 validated synthetic flow records would in some cases better define historical use. The proposed Plan Change 7 schedule 10(a)(4) has been designed to enable a largely automated assessment of water metre flow data from mainly primary sector irrigation takes which make up in excess of approximately 95% of all deemed permits.

All technical experts agreed, however, that typical water use data for hydro electricity generation and community water takes is different to water use in the primary sector. Unlike irrigation takes there is no decision made to turn on or
5 turn off the four Trustpower water race intakes.

The four water race gravity intake structures operate infrequently at capacity, that is during wet periods and/or floods with the greatest take volumes occurring during wet months and/or years.

10

Plan Change 7 seeks to limit the respective instantaneous daily, monthly and annual rates of take to the typical maximum historic usage. For the four Trustpower water races it is unlikely that Plan Change 7 would reduce the maximum instantaneous and daily flow volumes as these would typically occur
15 during most, including dry years. Monthly and annual maxima volumes, however, would be limited to those included in the historic record as determined from the measured or synthetic flow records. A consequence of this could be the requirement to shut down the water race intakes during a wetter than recorded scenario. For example, an early winter June flood might necessitate
20 the closure of one or more water race intakes due to the maximum monthly and/or annual volume limits being reached.

From a health and safety perspective it could likely prove difficult, if not impossible during winter flood conditions to access the intakes and manually
25 close the gates.

In conclusion the four water race diversions Beaumont, Black Rock, Shepherd and Crystals account for approximately 5.6% of the total inflow to Lake Mahinerangi and the Waipori Hydro Electric Power Scheme. The Waipori
30 Hydro Electric Power Scheme currently delivers an average annual output of 192 giga watt hours. Reducing the available take would diminish the value of the investment and would represent an insufficient use of the resource. Any loss generation in giga watt hours would be difficult to replace in the current consenting environment.

EXAMINATION CONTINUES: MR WELSH

Q. Mr Mitchell can you please answer any questions my friend, Mr Maw and the Court may have of you?

A. Certainly.

5 CROSS-EXAMINATION: MR MAW

Q. Thank you your Honour. Good afternoon Mr Mitchell. Now in your evidence-in-chief and in your summary, you've highlighted the reasons why schedule 10A4 doesn't work particularly well for the Trust Power Hydro Electricity Scheme or Schemes. My understanding is that the
10 framework being advanced by Trust Power is such that recourse to the schedule is not required through the restricted discretionary activity pathway which states the concerns that you had expressed with the schedule have now in a sense been addressed but through a planning lens as opposed to a technical lens. Have I understood that that's the
15 state of affairs in terms of Trust Power?

A. I think so. There were some technical issues with the schedule and the fact that it had been developed largely for you know, the great majority of the deemed permits being primary sector or irrigation takes and it didn't really recognise hydro, so whilst I had some technical concerns with it
20 and I outlined those in relation to the notified version, during the joint witness – the JWS process, following the hydro conferencing, the planners went down the RDA pathway as a means of providing a solution for hydro.

Q. Yes, so in so far as the schedule, doesn't respond adequately in your
25 opinion to the needs of the generators, that issue has been addressed otherwise than changing the schedule. So changes haven't been recommended to the schedule to address the issues that you have raised?

A. No, I don't think there was a great desire to develop a separate schedule
30 for hydro or for community water supply.

Q. Okay I do have some questions for you in relation to those parts of your evidence where you discuss the four irrigation races starting at paragraph 24. Now I might start at paragraph 25 in relation to the Black Rock water

5 race, if I might. So, you've set out in your paragraph 25 some of the key hydrological pieces of information in relation to that race, what I didn't see when I was looking down the list is whether there was any residual flow that applied in relation to the Black Rock race. Do you know whether any residual flow is left in the river as a result of that take or is the full extent of available flow taken by Trustpower in relation to that take?

A. Pattle Delamore Partners have prepared groundwater studies as part of the consent application and they identified pools pretty much immediately downstream of the diversion weir.

10 **THE COURT: JUDGE BORTHWICK**

Q. They identified what sorry?

A. Pools.

Q. Pools?

A. Pooling.

15 Q. Oh pooling, okay.

A. And flow within about 25 metres of the structure, so there are, there's wetted areas if you like and within 25 or so metres, there's flow visible in the residual flow channel but there's no form of release at the intake. I mean these structures, they tend to leak a bit and there's also ground water inputs pluses and minuses as you move down the residual flow channel and then in broad terms, the effect of the take diminishes as you move downstream, as you get other inflows into the residual flow channel.

20

CROSS-EXAMINATION CONTINUES: MR MAW

25 Q. So let's step through that. So is any residual flow left at the point of take or is the full extent of the flow taken?

A. Up to the capacity of the intake, yes. So the intake sits there, their manual gravity structures, so the intake's open, whatever flow comes along will essentially force its way into the pipe and into the race. At a certain point, as the river heads up, and a maximum flow is achieved through the gravity intake, it will overflow down the residual flow channel.

30

Q. And what proportion of time might there be an overflow from the diversion channel?

A. That's in the evidence-in-chief I think, 25H, it operates at capacity, .17 metres cubed per second, approximately 1½ % of the time, so during wet periods only there is an overflow.

5 Q. So one in 1.5% of the time there would be water passing the intake and staying in the stream, is that how I should read 25H?

A. It could be greater than that because essentially the river has to head up for the pipe to reach its capacity and at a certain point it will overflow anyway before the pipe reaches capacity. So that's just the per cent of time that it's flowing at, at pipe full.

10 Q. So looking at then the Shepherds Water Race, does the intake or the diversion structure take all of the available flow much like the Black Rock Race?

A. It operates in the same fashion and you can see 26F that it operates at capacity, approximately .4% of the time. Same sort of function.

15 Q. So, no residual flow left in terms of periods of low flow, all of the water is harvested?

A. The same pattern was identified, Shepherd – I think the distance downstream is greater in terms of there being a flow in the residual channel, I think it's in the order of 100 metres, Pattle Delamore identified, but the same pattern.

20 Q. And then we move onto the Crystals Water Race?

A. Was there a question?

Q. In relation to the Crystals Water Race, the same pattern?

A. Yes, yes.

25 Q. So all of the water taken from the water body at the point intake except in periods of high flow being 0.01% of the time?

A. That's correct.

Q. And in relation to the Beaumont take set out in your paragraph 24, does the Beaumont Water Race take all of the available flow as well?

30 A. Up to the capacity of both intakes and 10% of the time flows exceed the capacities of both intakes.

1620

Q. So in periods of low flows the full extent of available water is taken into the scheme?

A. From these relatively small catchments yes.

Q. And Trustpower has recently lodged applications to replace each of those four deemed permits?

A. That's correct.

5 Q. Are you familiar with those applications or have you seen those applications?

A. I was the peer reviewer for the hydrology studies undertaken by Riley Consultants Limited.

Q. I'd like to hand you up a document if I might?

10 **WITNESS REFERRED TO DOCUMENT**

Q. Now this bundle of paper includes excerpts from the applications for resource consent lodged by Trustpower for Crystals Race, Shepherds Race and Black Rock Race and do you recognise the document or the documents from which these excerpts were taken?

15 A. I haven't seen this before, but I'm familiar with the general applications, yes.

Q. If you could produce this as exhibit (inaudible 16:22:16) Exhibit Trustpower 1 Excerpts from Applications for Resource Consent?

THE COURT: JUDGE BORTHWICK

20 Yes, I'll hear from counsel.

UNIDENTIFIED MALE SPEAKER:

It would be exhibit 2.

25 **UNIDENTIFIED MALE SPEAKER:**

Also Ma'am I don't know where Mr Maw's going, but Mr Mitchell's confirmed he was only the peer reviewer of the hydrology assessments so if Mr Maw wants to put questions to Mr Mitchell around the application proper, then he may have to walk him through that and not presuppose he has infinite knowledge of the
30 AEE component of that, because he does not, to the best of my knowledge.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Where are we going with this?

A. My questions relate to the hydrology and the proportion of flow taken from each of those races and that which is then being sought in the replacement consents.

Q. I think my only concern is that he hasn't seen the document.

5 A. Yes.

Q. But he may know the answer without the looking at the documents, probably a safer way to go I think.

UNIDENTIFIED MALE SPEAKER:

10 My concern Ma'am is a bit more fundamental to that because as best I can see, Exhibit 2, Trustpower 2 doesn't contain, for example, the aquatic ecology assessments which don't recommend any residual flow for reasons of protecting galaxiids for example. So I think that's not in Mr Mitchell's expertise, but there's reasons for the application as they've been framed which are wider
15 than just whether residual flow's being provided or not, then there may be supporting technical reasons for not providing a residual flow which Mr Mitchell has no knowledge of whatsoever.

MR MAW TO THE COURT: JUDGE BORTHWICK

20 My questions were simply going to be around whether any changes to the historic pattern or rates of taking were being pursued in the applications.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. You can ask the question but I'm just wondering how much weight the Court could give to an answer which was say no change because the
25 Court has no, really doesn't have any information about what ecological values remain now in these water bodies where there's nearly, virtually 100% interceptions say that times of high flow are infrequently are where the flow's actually passing the intake structure.

A. Yes. Well perhaps I'll put my question and we'll see where to.

30 Q. Yes.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So in relation to the four races for which replacement permits are being sought by Trustpower currently, are any changes sought to the operational flow regime in relation to the take of water from each of the sources for those four races?

5

A. No. No, there's no changes at the intakes. The intakes are unchanged since 1999 when Trustpower took ownership of the water races so whilst they've made changes to the infrastructure downstream in terms of the roads, the culverts – they've replaced culverts, the race itself has been repaired due to embankment failure over the last – in the last two or three years, they've done a lot of repairs and upgrades, spillways included. Access has been improved. They've done major works downstream of the intakes but at the intakes themselves they haven't made any changes since 1999 when they took ownership, so in terms of how the intakes operate, they're still operating as they did back then.

10

15

Q. And that is the proposal with respect to the new applications lodged? No changes to the intake structures are proposed?

A. There's no changes to the intake structures. I think what Trustpower's done is they've been very transparent in terms of how those intakes operate and when – as I identified in the joint witness statement of 7 May, appendix eight, you'll see that there's an example provided for the Beaumont Scheme and there's a table in the back of that. I'll just get it. So at these intakes there's three components essentially of flow that is taken into the race, one being the primary allocation at the intake. If, and Riley Consultants undertook theoretical hydraulic calculations of how much flow could be forced through the intake when the river's elevated and they've come up with maximum theoretical flows that the intakes will pass. In some cases that exceeds the primary capacity, you know, for a limited time as these small percentages we've discussed and – so they're two components, one being primary; two being supplementary at the intake and three being supplementary flow collected in the races due to the local catchment inflow that naturally runs into the race. You can see that in appendix eight of the 7 May JWS in figure two which shows you the local catchment that runs – it's approximately I think – it's around

20

25

30

about two square kilometres of catchment in addition to the approximately 15 square kilometres of catchment at the intakes.

THE COURT: JUDGE BORTHWICK

- Q. Oh sorry we haven't – just let us catch up and try and find the appendix.
5 Which appendix number are you up to?
- A. It's appendix eight of the JWS dated 7th of May.
- Q. What does your page look like? Can you show me a copy – you've signed that, okay.

10 **MR MAW:**

It's got a blue coloured text and it's about five pages from the end.

THE COURT: JUDGE BORTHWICK TO WITNESS MITCHELL

- Q. I've found seven.
- A. It's right at the back.
- 15 Q. Yeah. Okay so I haven't got an eight, is that what you said?
- A. Appendix eight, yes.
- Q. Well I haven't – I've got a – after appendix seven comes appendix letter A. You're talking about A as a numeral 8, the number eight?
- A. Eight, yes.
- 20 Q. Yeah, okay, well I haven't got that. That's all right. Let me just look on screen. It doesn't help looking for blue. No. I'll just see if I can find it on the screen.

1630

COMMISSIONER EDMONDS TO JUDGE BORTHWICK:

- 25 I have found appendix eight in a version which seems to have blue.

WITNESS MITCHELL:

Figure two.

THE COURT: JUDGE BORTHWICK

- 30 Right, I have it now. Got it.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. Right, so what are you drawing to our attention in this document?

5 A. This is a plan view of the local catchment that runs into the race and so at the very left of the screen you can see the WPI Beau intake so that's the Beaumont intake and WPI Beau intake upstream or there's effectively
10 two intakes there, the main intake and the minor intake being Little Beaumont and then you've got five kilometres of race. On the western side of the race you've got all that local catchment that runs into the race. The fully dark blue areas are the catchments that bypass the race. So essentially the three components of take being primary take, being your
15 deemed permit allocations; supplementary take at the intakes where the primary allocations are exceeded in during flood events only and the third component being local race inflows from the slopal [*sic*] catchment that actually physical intercept the race. And what I can say from – whilst the numbers in the applications may seem very high in terms of the flows that Trustpower is applying for, these only occur during flood events and the combined volume for Beaumont, the additional inflow volume that the supplementary takes provide based on the end of race capped record
20 between 2001 and 2019 in table one of that same appendix, the difference between it on an annual basis in the wettest recorded year being 11.8 million cubic metres relative to the total flow measured at the end of race gauge being 12 million cubic metres and there's some rounding there, the difference equates to 1.2% of the total volume and for the other races, it's less than 1% of the total inflow volume.

25 **CROSS-EXAMINATION CONTINUES: MR MAW**

Q. So in relation to the Beaumont part of the scheme, in conditions of low flow the full extent of the flow in, is it the Beaumont Stream from which that water is sourced?

30 A. It's sourced from two streams being the Beaumont River and the Little Beaumont River which is downstream of the main intake.

Q. But the full flow from each of those sources is taken during times of lower flow?

A. If you look at – in that same appendix, figure eight which is the flow distribution.

Q. Sorry, in figure?

A. Eight.

5 Q. Eight.

A. If you've got a colour version, the black line is the combined natural flow of the Beaumont River and the Little Beaumont River, so combined flows based on a synthetic record from 1981 to 2019 and the blue line is the sum of the combined takes being the Little Beaumont take and the
10 Beaumont River take and the dotted red line, 679 litres per second, is the sum of the primary allocations and you can see there that essentially the scheme runs at capacity approximately 10% of the time.

Q. So when I look at where the blue line and the black line intercept, is that indicating that the full available flow from each of those sources is taken
15 at flows within those ranges, so flows below say 400 litres per second?

A. The exceedance probabilities will vary for each intake so there's a combination of flows here so it's not entirely straightforward in terms of how that flow distribution works because there's two streams involved and one intake will cap out before the other for example, but in broad terms they run at capacity approximately 90% of the time, ah, 10% of the time,
20 sorry.

Q. I suspect I'm looking at not necessarily whether they're operating at capacity, I'm looking at more the low or the lower flows at the end of the curve, so does the black line, which is the Beaumont River combined natural flow, does that merge with the blue line because I can't see a black overlaid on top of the blue line.
25

A. Okay. About 25%. So all of the flow has been taken approximately 76% of the time where they separate, is that what you mean?

Q. Yes, I think that working backwards, yeah, that intersection of 25%, so
30 75% of the time the full extent of the flow is taken?

A. That's what that shows yes.

Q. And those flows are taken during periods of low flow as opposed to at periods of high flow when the intake infrastructure has insufficient capacity?

A. Yes, yes I mean it's a flow distribution so it's flow exceedance so you're starting at the bottom right-hand corner. 100% of the time flows are greater than that figure there and then you know, approximately 25% of the time flows are greater than 400 litres per second.

5 Q. And were there any similar flow duration curves prepared in relation to the other three water takes?

A. No. As I said I only received the hydrological records from Riley Consultants about two weeks ago in response to a request for an example for the joint – the JWS process on the 4th to 6th of May.

10 Q. But based on the information in your evidence-in-chief and I'm referring specifically to the percentages of time where the races are operating at their maximum capacity, for those other three races they operate at their maximum capacity for over 98% of the time?

A. For 2% of the time.

15 1640

Q. Yes, for 2%, yes.

A. Yes, only during wet periods or floods as I've stated in my evidence. This type of design is not uncommon for hydro water use. It's designed to capture the bulk of flows from upper catchment locations where there's not a lot of other competing demands, so it's quite a common type approach for upper catchments to be diverted whilst leaving the bulk of the catchment unaffected.

20

Q. Is it common in your experience for the full extent of those rivers and streams to be diverted without any residual flow left?

25 A. Certainly schemes that have been there for, you know, in the order of 100 to 150 years, that would be common, yes.

Q. If you were designing a scheme afresh would you approach it in a different manner?

30

A. I think it's fair to say that yes there'd be a lot of other people interested in the project outcomes, yes.

Q. And that would likely result in some form of residual flow being left in the water body below an intake point?

A. That wouldn't be something that I would have input into other than determining what the hydrology looked like. Ecology and natural

character, you know, all those sorts of issues would be looked at in terms of determining what was appropriate cultural issues.

Q. I think you've answered my questions.

THE COURT: JUDGE BORTHWICK TO MR WELSH

5 Q. Re-examination?

A. I don't think so. What I may do because I think it might be more efficient, is I might just lead some questions from Ms Styles hopefully tomorrow just to cover some of the things that – because I don't think we'll get usefully where we need to for the Court so I'll just hold that over Ma'am.

10 Q. Okay, no that's fine and I noted that OWRUG was down for questions but Mr Page is not here so we'll move straight to the Court's questions.

QUESTIONS FROM THE COURT: COMMISSIONERS BUNTING AND EDMONDS – NIL

15 **MR MAW TO MR WELSH:**

Q. But perhaps – my friend may be able to assist. Does Ms Styles have knowledge of the applications that have been lodged?

A. We didn't go for a call in of the Trustpower applications Ma'am so the team of witnesses that you have before you are not the same as the
20 consenting team and that's because we're not trying to consent those so Ms Styles has looked at the applications but she's not – just in – so she can answer some basic questions but she's not the planner, she's not a peer reviewer, but she's experienced enough to say I don't know when she gets a question that she doesn't know so my friend could put
25 questions to her but she's not the planner.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. That's fair enough. What can you do? She isn't the planner. I mean she can either answer the question based on something that she's read or not.

30 A. Yes, well I'll test her understanding of what's being sought.

Q. Yes.

A. And I may or may not need reference to that exhibit to do so.

Q. Okay, fair enough. Okay.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

5 Q. I only had one question. I think you said, but correct me if I'm wrong in response to Mr Maw's question, that the Beaumont and the Little Beaumont are rivers or tributaries in the upper part of a particular catchment and all of the water from either the Beaumont or the Little Beaumont is effectively being captured by the Trustpower race is that correct?

10 A. Yes Ma'am except for during floods when they overflow.

Q. Yes. Yes.

A. Yes.

15 Q. So I got that, it wasn't – and is that also the same for the other three which is Crystals, Shepherd and something else – Shepherd's Race and Black Rock Race and the question here is, is Trustpower capturing effectively all of the water on a water body into those races?

A. For the great majority of the time, yes Ma'am, albeit it from relatively small upper catchments.

20 Q. Yes, and that was the key point that you're making. It's relatively small upper catchment or high elevation catchment with the rest of the wider catchment are left to capture in water from other tributaries downstream, yes?

25 A. Yes, well when the scheme's running at capacity during wet periods or floods then adjacent catchments, downstream catchments, all things being equal would also be wetter than average, experience flood conditions.

Q. And when you're talking about catchment what are you talking about in the – is it the same catchment in every case draining into Lake Mahinerangi or was it different catchments draining into there?

30 A. They're different catchments.

Q. Different catchments, okay.

A. So where the rain falls, it hits the catchment, runs off into the river, so it's the basin essentially that's collecting runoff.

- Q. Anyway, and so we can see from the JWS you've got a plan that figure one Beaumont Water Race and there you've got the Waipori River Catchment and the Waipori River Catchment is intercepting water from – it looks like Beaumont's at least, anything else?
- 5 A. Which document are we looking at Ma'am?
- Q. You're looking at the JWS, the missing appendix eight which I now have on my screen.
- A. Okay. What aspect of it Ma'am?
- Q. Okay, so you've got that plan, figure one, rather in front of you?
- 10 A. Okay.
- Q. So the figure one we can see the Waipori River Catchment shown in blue. It's draining into Lake Mahinerangi, correct?
- A. That's correct, yes.
- Q. All right and Beaumont, I can see where the Beaumont is on that figure.
- 15 A. Yes.
- Q. Am I to also find Crystal, Shepherd's and Black Rock in that catchment or in another catchment somewhere else?
- A. They're separate catchments.
- Q. Okay.
- 20 A. And in my evidence-in-chief which I've got here, there's an appendix, so appendix 1 you can see the whole of the catchments draining to Lake Mahinerangi and Beaumont is in the top left-hand corner and Black Rock is sort of centre right towards the top and then in the bottom right-hand corner you've got Shepherd's and Crystals each draining into Lake
- 25 Mahinerangi so four races.
- Q. Okay. And so for Shepherd's Creek Race is that a particular water body which is being intercepted high up in the catchment?
- A. Shepherd's?
- Q. Yeah.
- 30 A. Yes, it, essentially would drain in a different direction than towards the lake and so it's been diverted into the lake so that it can be passed through four power stations. It forms part of the storage for Lake Mahinerangi and that water's able to be generated through a chain of hydroelectric power schemes. The same with Crystals, the same with

Beaumont. In the case of Black Rock it also goes through the power station V of Deep Stream. So Black Rock goes through five power stations.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

- 5 Q. Along this map there are a number that have been removed from service since I think is that 1994 or 1984?
- A. 1984 I think it says.
- Q. It is 1984?
- A. Yes.
- 10 Q. So that was all before Trustpower bought the schemes was it?
- A. I think so. These will be a few of the deemed permits that were allowed to -
- Q. Were relinquished?
- A. – expire that Mr Welsh spoke about.
- 15 Q. Sure.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

- Q. So the purpose of my question was simply to get a sense of whether or not for the other three races, whether they were draining the upper part of the catchment that they are located in or are taking in you know, the upper part to midrange section or are taking in virtually all of the catchment and it's intercepted and it goes into Lake Mahinerangi, that was the only purpose. Can you comment on that?
- 20
- A. They're relatively small catchments and the catchment sizes are included in my evidence-in-chief starting at paragraphs – there's a table actually that might assist, table one on page 5 and you can see there that for example Beaumont Race has 11.3 at the main catchment; 4.4 for Little Beaumont and 1.9 square kilometres of local catchment so 17.5 in total so you can see the size of those upper catchments for Black Rock, Shepherd and Crystals, being all less than four square kilometres.
- 25
- 30 1650
- Q. Just pause a second. Well it's hard for us to read the map and the contours that have been provided and I'm having difficulty relating it back

to the table that you've got so I'm going to try the question again. As I understand, with the Beaumont water bodies which have been intercepted by that particular race, it's the upper part of the catchment leaving the lower part of the catchment continuing to flow, if you like, un-intercepted by Trustpower and down to wherever, you know, the water would naturally drain to, so I understand that. I want to know, is the same thing or similar thing going on for the other three, so is Crystals capturing the upper part of the catchment with the majority of the catchment flows still coming into a water body and draining where the Crystals drains, that's all I want to know.

A. Yes, that's correct.

Q. It is? And is that also true for the other two?

A. The Black Rock and for Shepherd, yes.

Q. For Black Rock?

15 A. Yes.

Q. I mean typically you can't divert upper catchments unless they're close to the ridge so if you've got a catchment and the boundary's there then people will pick catchments and then move them into the adjacent catchment to get it to drain the other way so you can't do that unless it's at the top of the catchment.

A. Right, yes. All right, that all. Anybody got any questions arising?

QUESTIONS ARISING ALL PARTIES – NIL

THE COURT: JUDGE BORTHWICK TO WITNESS MITCHELL

All right, well thank you very much and that's your evidence.

25 MR MAW TO THE COURT: JUDGE BORTHWICK

Q. Ma'am Mr Mitchell was on instructions to talk slowly if we got near about quarter to five so he wasn't being evasive, he was following counsel's instructions to talk slowly so we didn't put Ms Styles on.

A. Ms Styles goes tomorrow?

30 Q. Yes please because she's not going to finish Ma'am today.

A. No, no, she's not. No, that's absolutely fine. We should not swear her in, so no that's fine, we'll start again at 9.30 tomorrow.

Q. Thank you Ma'am.

A. Thank you very much.

5 COURT ADJOURNS: 5.03 PM

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COURT RESUMES ON TUESDAY 18 MAY 2021 AT 9.31 AM**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Good morning anything arising overnight?

5 A. I can report back on a number of the matters discussed yesterday. The first of which relates to the trend analysis for the water quality, state in environment reporting. That work has been concluded and a report is now available.

Q. All right.

10 A. My plan at this stage is to have Dr Snelder prepare a brief supplementary statement of evidence simply attaching that report in much the same way as he did with the outlying data.

Q. Okay and it's going to report on how – is it going to be reporting against the what do you guys call it? The NOF?

A. The national bottom – the NOF framework in the 2020 NPSFM.

15 Q. NOF framework okay and is it going to conclude any trend analysis or not?

A. Yes it does include trend analysis.

20 Q. All right. As I indicated yesterday, I mean it's generally relevant but as an indicate yesterday, dams – irrigation dams were to you know go ahead alone and I know that's not the OWRUG case when you know it's more than that but if there was some provision for irrigation dams because of health and safety dam integrity issues then we've got to be looking I would have thought at water quality because we need to be taken whole catchment mountains into the sea approach which is NPSFM. So, we
25 need to sort of go in with, eyes wide open in terms of what's actually been proposed here. Nothing yet have been proposed here so, you know it's still an issue that's development. Okay so when you think you'll have that in?

A. Within the next couple of days I would hope.

30 Q. All right. Any issues arising counsel, who are here? No? No issues. Okay and so just for the record we've got Mr Welsh, Mr Page and Ms Williams here now for the Director-General. So, good morning to you. Okay, right. Thank you, so within the next two days.

A. Yes.

Q. All right. So that's first issue.

A. Second issue, my friend Mr Page and I working on a joint memorandum in relation to the dams and the issues that arise. We will have that filed
5 as soon as we have concluded the drafting of that joint memorandum and in addition to that – the counsel team is also trying to track down the various permits that aren't able to be easily located by Mr Page in relation to the clients that he represents.

Q. Yes and Fraser Dam, I'm rather hoping, well I don't whether Fraser Dam's
10 up of re-consenting or not in this round but if it were surely it's actually in its application so you can find the details there. Yes.

A. Yes. Do you want to?

MR PAGE TO THE COURT: JUDGE BORTHWICK

15 Landpro are working on that and we've got two from Landpro in the back of the Court who have personal knowledge of what's going on there. Fraser Dam's operated as a hydro dam only by Pioneer Energy and Fraser used to be irrigation, but it's not now and so Fraser and on the Onslow Dam in the Teviot Scheme are the two big dams for the Pioneer and they are subject to current
20 applications.

THE COURT: JUDGE BORTHWICK

Q. Is that consistent or inconsistent with evidence given via Friday I think?

MR MAW:

25 A. Thursday maybe?

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Yes, Thursday, Friday, and I've forgotten the witness' name?

A. Yes.

Q. There was a farmer who came out for Fraser Dam and concerns
30 (inaudible 09:36:00) about integrity of the structure and the use of water irrigation I thought, but ...

A. It was a chair of one the irrigation schemes.

UNIDENTIFIED SPEAKER:

(inaudible 09:36:21).

5 **MR MAW:**

Sorry? MacMillan. Mr Martin possibly?

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Not Mr Martin, Mr Martin, Graeme Martin's the foreman EO, isn't it for...

A. Pisa actually.

10

UNIDENTIFIED FEMALE SPEAKER:

(Inaudible 09:36:41).

MR MAW:

15 Mr MacMillan.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Mr MacMillan.

A. Yes my recollection was he was discussing Fraser Dam in the context of supply of water for irrigation. We'll have to get to the bottom of that.

20 Q. Have to get to the bottom of that.

A. Yes.

Q. I know he gets free electricity I think was it, which was relevant also for the irrigation scheme as well, yes.

25 **MR PAGE TO THE COURT: JUDGE BORTHWICK**

I happen to know because I acted on the consenting of Earnsclough Irrigation Company's permits and Earnsclough is the owner of the dam that Pioneer operates which is the Fraser Dam and the irrigation supplier was replaced when Clyde Dam was built and it now uses Lake Dunstan water, so I'm not sure what

30 Mr MacMillan would have been discussing, but –

THE COURT: JUDGE BORTHWICK TO MR PAGE

Q. We shall get that to you and you shall see what we have to say about that, but certainly Fraser was on our radar.

A. Yes.

5 Q. And in fact that was the first time the region responded and said, yes, might need to have a closer look at some of these dams structures, but it is contingent on getting primary evidence.

A. Yes, well I'm not sure that the – whether it's hydro or irrigation matters particularly in terms of the maintenance obligations for the dam, there
10 might be some policy differences in terms of the MPS REG, but the practical difficulties for dam owners are the same no matter what the water is used for really. So, but I can't take it any further, I'm not, I don't know what evidence the Court's received about that.

Q. All right, well we'll send you a copy, this morning, as to what we've
15 received from Mr MacMillan and I'm not sure that our questions or your questions really got much further because the witness couldn't assist us.

MR MAW TO THE COURT: JUDGE BORTHWICK

No he didn't have a working knowledge of permits underpinning that structure.

20 THE COURT: JUDGE BORTHWICK

Yes, okay. So I'd be grateful for you response in relation to Fraser when you see the evidence, especially if Fraser has be re consented and it's not up for, you know, the dam structure itself, either the impounding of water or the use of water for hydro or the take and use for water for irrigation is not up for
25 re consenting, so, yes.

MR PAGE TO THE COURT: JUDGE BORTHWICK

Well the other thing I can say about that is that Mr Curran, who's supplementary evidence, there's an application for the Court, two things about that, Mr Curran
30 is also acting on Fraser issue, so he has personal knowledge of the consenting arrangements for Fraser dam, secondly I can report that no counsel has raised any objection about Mr Curran's supplementary evidence being received, so...

THE COURT: JUDGE BORTHWICK TO MR PAGE

Q. Yes we certainly have questions about that, the relevance of that evidence, yes. So anyway, Mr – we'll send you and you can show Mr Curran what it is that we've received, but we certainly thought the dam structure itself was, you know, it's been raised with us so you thought it was related to irrigation, whether it's related to hydro and irrigation, the issues are just the same, I don't know but anyway it's there, so we're just trying to get to the bottom of it.

A. Yes all right.

10 Q. Okay.

MR MAW TO THE COURT: JUDGE BORTHWICK

The third topic to provide an update relates to the sequencing of witnesses to be called next week in response to the joint witness statements.

15 0940

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Yes, I'm going to send you a direction about that. I mean I have taken on board the entire region's desire not to hear too much from the Court, so I've been trying to save things for a single minute which we can release, should be able to release today now that we've got the priority JWS in and I ask counsel to confer and to report back to Mr Cooper actually about your timing and sequencing issues, rather than bog us down because we'll do whatever, we'll be ready, yes. Does that help?

20
A. That will certainly assist your - right, Ms Mehlhopt asks, does that mean we don't need to file a memorandum today which we had – must have -

Q. Yes definitely, no memo today.

A. Very good.

Q. You'll get a minute today that says, "Please talk to Mr Cooper by Friday."

25
A. Okay, well that, discussions are reasonably well advanced so we should be able to ensure that next week hopefully runs smoothly.

30
Q. Okay, yes, no that's good and you hope to have the issues documented as between, I guess it's, is it yourself and Mr Page at the moment?

A. Yes.

Q. By when?

A. I would hope by this time tomorrow morning.

Q. It's just that you might actually have – knowing what the issues are that will frame, surely that will frame your questions for the witnesses to come today?

5

A. Correct. There's one witness, Mr Sheehan today and he's dealing not with the planning related aspects, but in terms of the questions for the witnesses tomorrow, then –

Q. Mr Sheehan's on tomorrow or on today?

10

A. He's on the , I think he was on the schedule for today.

Q. Yes, you see I don't know what the integrity issue is, I mean what we had with Fraser from my recollection is there may be an integrity issue, well there may be or there may not be. But we had an absence of technical evidence to support an integrity issue with that dam structure. It's not a good place for the Court to be in, if we've been asked to do something, so again this is the evidential foundation. So you'd have to know what you are going to be asking Mr Sheehan about the same thing, and with Falls Dam I'm aware through the evidence that there's been longstanding discussion as to what to do with Falls Dam. I think in both, in terms of reconsementing the dam or raising the dam, all options on the table, but again is that an integrity issue or is that actually more about a resource response in terms of what the demand is for water?

15

20

A. I'm having –

Q. So you'd have to know your technical questions?

25

A. Yes having read Mr Sheehan's evidence, he draws a distinction between the permits for the structures and the permits for the taking use of water and says he's only commenting on the former, so I thought I could explore the first part of that with him to get a better understanding in terms of what his state of knowledge is because it's not clear from reading his evidence which dams he actually has any knowledge of, it's not grounded in any context in terms of individual dams, so...

30

THE COURT: JUDGE BORTHWICK TO MR PAGE

Q. And also and this is properly more question for you Mr Page, is Mr Sheehan across the other dams with the exception of Fraser perhaps in terms of the structural integrity of those dams?

5 A. I know that he has personal knowledge of seven of the nine Manuherekia catchment dams.

Q. When you say seven of nine, are we actually talking about there, on-farm structures as well as public, the larger structures such as Poolburn and so forth?

10 A. Well there are a great many.

Q. And you have to pin this, you know, what are we being asked to do, write policy for nine or write policy for the five that we know about, I think it's about five?

A. Well...

15 Q. Or don't write policy because you want everything, you want everything to, I'm not sure where your relief is standing at the moment –

A. Yes.

Q. – but you may want everything to go into the operative plan so we don't really have to worry about writing policy?

20 A. Yes, well I mean the relief that was in Mr Curran's evidence-in-chief seeks a carve out, for want of a better description for damming consents and that's not specific to the dams that the Courts identified as being of interest, it would apply more widely than that.

25 Q. And so, that could be a direction that the Court could go in, but we would want to know again, the four corners, I'm putting it out that there that these are the following irrigation dams. If you know that's wrong your obligation is to tell that that is wrong and then to identify all of these dams unless of course it's spelt out in Mr Curran's evidence and I didn't think that it was but it maybe. So apologies to him.

30 A. Part of the difficulty is around the current regulatory state in relation to large dams because as Mr Sheen will be able to explain to the Court, regulation is expected to arrive I think later this year which specifies what are large dams that regulations are going to apply to and thus various maintenance obligations arise in relation to. And that hasn't hit the ground

yet and so we can't be precise about exactly which of the dams in Otago, the Large Dam Regulations are going to apply with and which ones won't. That will become clear in due course but as at today, I can't give you a list of the large dams in Otago that the pending regulatory framework are going to attach to and I don't the regional councils are in better position than I am about that.

5

Q. But you could give me a list of dams that you think ought to be carved out, yes?

A. Well that, my clients are aware of, yes we can do that.

10

Q. Well and I think, yes can and yes you will so that we know what we're dealing with.

A. Yes.

Q. You know, are they the large dams which providing a service for multiple uses, you know hydro irrigation or other they on, you know on-farm storage dams as well. I don't know.

15

A. Yes.

Q. And I want to know what we're dealing with. Yes.

A. Thank you.

Q. All right. So when do you think you'll identify that or will you leave for Mr Curran?

20

A. Well I need to consult with my team over various breaks during the day to see what the state is of databases which enable dams of particular scales to be identified.

Q. Okay. So I've noted today and again we can halt the hearing in order for this evidence to come through Mr Sheehan, quite possibly through Mr Sheehan and through Mr Curran to identify the dams in relation to which OWRUG are seeking an exception or a carve out for. That's your case, you're to identify them, Court is interested in the topic either for a carve out or perhaps an exception PC7, don't know which way it ought to go but are quite clear we should be told what is the structure that you have under consideration so that we know, you know what is the ambit of the carve out, is it all dams, is it on-farm dams, off-farm – on or off-farms dams or both and you should be able to tell us and I would have thought that that was something that we're quite interested to hear from

25

30

Mr Sheehan about, you know if there is an integrity issue which has health and safety consequences, that is something Mr Sheehan as the engineer should be able to tell us about. What does that even mean? Other than a general unease about some of these dam structures because they're old.

5

A. Yes.

Q. So we're getting the unease, we've heard it, we get it, now we're looking for you know, how is it just an unease or is it actually based on fact? Now what are the facts?

10

A. Yes. Well we can certainly pursue that with the witnesses.

Q. And if we need to call a halt for your – for those two witnesses, I think in particular, there may be others but those two in particular to do some work around this. We'll do that because the issue of dam integrity is too important for them to be winging it you know, it has to be founded on fact.

15

See what the policy response is.

A. Yes. All right thank you.

Q. Right, so if we proceed with your witnesses, it will be on the basis that they in fact are across the dams that they're interested and that they're able to articulate the dams to which the carve out will apply or a bespoke policy will apply in PC7, it could go both ways.

20

A. Yes. Well...

Q. It may in fact go no way at all because of the MPS is looking for water quality / quantity issues now to be managed (inaudible 09:49:56) catchment, (Māori? 09:49:57) you know it's both the whole, the parts of the catchment now. So it may be that it goes nowhere and again that's why water quality is really important in understanding that.

25

A. Yes well I understand and accept that the Court may well decide that dams shouldn't be treated any differently.

0950

30

Q. No.

A. But that's – it's a live issue.

Q. Yes.

A. And that's really a matter for policy, as much as anything else but I accept that the Court need to know what are the issues in relation to the dams

we know about and which ones they are. So we'll certainly work on making sure that the Court has that information.

5 Q. Okay. Thank you. So, Mr Curran, I'm quite sure why Mr Curran has written a brief of evidence and I haven't read it. I glanced over it. I think you were seeking leave to adduce further supplementary brief from Mr Curran because, I think of a change to the objective or not?

A. Well, the plan is joint witness conferencing didn't include Mr Curran because his evidence-in-chief didn't address the schedule.

10 Q. But he could have come in on the objective, we plainly said the objective wasn't – we wanted people to look at the objective for these purposes.

A. Yes.

Q. And the purposes are spelt out and Tom de Pelsemaeker's evidence-in-chief. Do you also need to respond to that, broadly with some question—you know those five sub-paragraphs in his evidence?

15 A. Yes. Well, I have to say that for part I wasn't alert to the fact that Mr Curran wasn't part of that process and therefore wasn't alert to the need to have him included to discuss the objective. So what has happened is that the joint witness statement has been produced and then the question about whether the objective of the plan change directly deals with the NPS had caused Mr Curran to reflect on what that means in relation to dams and what the NPS has to say about water bodies that are formed by dams.

20 Q. I don't think that the questions asked planner to consider the NPS. The question, we – you know because there could be broader issues in the objective in play if you like?

25 A. Yes.

Q. Because you know it may be that there is – that objective needs to be worked on more you know, to go in the OWRUG way or to go in the Director-General way or the Fish & Game way.

30 A. Yes.

Q. So there may be other reasons why we would want to revisit the objective but we said for this limited purpose, did we need revisit the objective you know, to pick up on some of the signals or purposes in Mr de Pelsemaeker's evidence. So, it wasn't working particularly on the

NPS, it was working – or it was meant to be working on policy signal for example one of the policy signals I think in sub-paragraph (d) or (e) Mr de Pelsemaeker’s evidence, paragraph number I’ve utterly forgotten was the discouragement of further investment in irrigation infrastructure.

5 So that was the policy signal, did that actually have to be spelt out in the objectives? So we weren’t particularly working on NPS. The NPS applied.

A. Well that’s understood but it’s simply the way that that came forward, triggered in Mr Curran’s mind an issue about what is the NPS have to say about the water bodies that are created by damming permits and so, we felt that the better way to deal with his thinking about that is to put in writing by way of supplementary brief rather than to deal with that through examination of witnesses and closing submissions.

10

Q. So is this – so, in fact it’s got nothing to do with the expert conferencing it’s Mr Curran thinking about his evidence further and it looks like either a policy or a legal argument being raised by him as to the application of the NPS to storage or water –

15

A. Yes.

Q. – behind a large dam or a small dam.

A. And whether that constitutes a water body for the purposes of the NPS objective.

20

Q. That’s a legal argument isn’t it? Looks like it. Honestly when I read through it, I thought that looks a – that looks like a submission – that, yes.

A. Well, yes it is but it has a – there’s a policy consequence to the outcome of that one way or the other.

25

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. What’s your response to this?

A. I’ve only read that evidence very briefly and it struck me on that initial reading as going a little further than I would have anticipated at this point in the hearing. It struck me that the issues being raised might have been issues that were to be addressed following the provision of the joint witness statement, so the joint witness statement and the drafting of the objective, two options of it put forward, I had thought that perhaps some

30

of those issues might have been addressed then in questioning of those witnesses rather than –

Q. You mean actually in the conference itself?

A. No in the testing of the output from the joint witness statement.

5 Q. You mean the first joint witness statement?

A. Yes which we haven't had, no it will be this 7 May version with the two different versions of the objective. These types of issues I thought might have then been tested with the empanelled witnesses at that point.

Q. Oh I see what you mean, rather than Mr Curran?

10 A. Yes.

Q. Except that the empanelled witnesses don't necessarily have dams on their hearts or in the forefront of their minds?

A. Quite possibly. It may well have been that Mr Page may have led that evidence when Mr Curran was called in and he's due tomorrow I think with the schedule, yes.

15

Q. I tend to agree with Mr Page, it's better if the evidence has just come, it's better to be in writing rather than led?

A. Have it in writing given the complexity of it.

Q. Yes.

20 A. So in terms of what to do with it ...

Q. It appears to be evidence, I don't think it appears to come out of the joint witnessing process conferencing itself, but it just appears to be some further thoughts if you like to do with the water body. Not sure what the issue is, but, yes what is the nature of impounded water, is it a water body or not?

25

A. Yes which that struck me as a legal question in so far as the evidence was perhaps, well was also helpful, it did provide some further information about Falls Dam –

Q. Well it did.

30 A. – in terms of the permit, so that part of it, in a sense, (inaudible 09:57:08) some enthusiasm to see we're actually getting some factual information.

Q. Yes, okay.

A. And so I'm happy to have the evidence produced and I'm – I'd be minded then to cross Mr Curran on the contents of that.

Q. Yes, okay. All right.

THE COURT: JUDGE BORTHWICK

5 Q. Anybody, counsel or parties, anybody have any different view in terms of the production of Mr Curran's supplementary brief, raising an issue as to whether impounded water is – I think it raises the issue of whether impounded water is a water body for the purposes of the MPS?

MS BAKER-GALLOWAY TO THE COURT: JUDGE BORTHWICK

10 A. I don't have a different view, it sounds like it's relevant and it will be of assistance, better to have in writing.

THE COURT: JUDGE BORTHWICK TO MR PAGE

15 Q. Okay. So we will allow it but before we hear from Mr Curran, I want you to identify the issues which are arising in relation to that in your brief. Have I sufficiently articulated the issue which I think you would say is both a planning and possibly a legal issue which is whether impounded water, that is water impounded behind the dam structure, is a water body for the purpose of the MPS, I think is the issue you're raising?

A. Yes.

20 Q. I might have got that wrong?

A. Well, yes that's the issue and if they are water bodies, then should the permits which authorise their continuance be subject to the same short term permitting regime as other species of water permits.

Q. Be subject to the same, what was that?

25 A. Short term consent regime.

Q. Should they be.

30 A. So the significance of that is that the Regional Council's case for six year permits is that it may not be appropriate to renew those permits in the light of the land and water regional plan. The question arises if they're water bodies, would draining those water bodies be anticipated, then?

Q. Sorry, it may not be appropriate to renew?

A. Yes.

Q. Well for longer than six years anyway?

A. Correct.

Q. Yes. So may not be appropriate to renew permits for longer than six years and then you raise the issue of whether the dam should be drained?

5 A. Well because if the permit's not renewed, that's the consequence, that the dams would have to be drained.

Q. And that is your theoretical future environment is it?

A. Well –

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10 Q. Yes it is isn't it? It's your theoretical future environment and the question to test that is what? What's the test on a hypothetical whether it is...

A. Well in terms of the Hawthorne case law, as to whether that's a likely outcome.

Q. Fanciful or not is the test isn't it?

A. For the permitted baseline, yes Ma'am.

15 Q. So how would the Court go about testing the hypothetical that the permits will not be renewed and the dams will be drained?

A. Well that's not quite the proposition.

Q. Oh what is your proposition?

20 A. The proposition is if they're water bodies and the needs of the water bodies are the first priority of objective 2.1 of the NPS, is it appropriate to contemplate that they might be drained at the end of six years?

Q. Is it appropriate? What does "appropriate" mean in this context?

A. Well in terms of whether that's consistent with objective 2.1 of the NPS.

25 Q. Is there any issue that the rivers or streams filling those dams, are water bodies?

A. They would have been.

30 Q. Yes. So is the legal issue, there's no issue that the rivers and streams filling the dams are water bodies, the issue is the impounded water therefore also a water body to be regarded as a water body, is that your issue?

A. That's correct Ma'am.

Q. That is a legal and planning issue isn't it?

- A. Well the question on whether it's a water body is a legal issue, the consequence of that in terms of the achievement of objective 2.1 and how that interrelates with Plan Change 7 I submit is a planning matter.
- Q. The consequences are planning, so the question of whether a water body is a, what was it again? Whether the impounded water is a water body is a legal issue?
- 5 A. Yes.
- Q. Consequences of (a) impounding and (b) draining I would have thought ... draining are planning.
- 10 A. Yes, I think the context is, I don't get the sense from any party in this proceeding that draining dams is contemplated.
- Q. No, so why are we running with this?
- A. Well because that's the consequence of Plan Change 7 is that if those permits aren't renewed at the end of the six years, then that's a possibility that dam owners have to confront.
- 15 Q. But isn't that for the decision maker to come, because it may well be that a decision is taken, not to renew dam structures, a dam structure. If that is the decision, then the non-renewal of the structure and any hydro or irrigation that take off it or are dependent upon it, is a matter to be considered in the future, but I don't understand that anyone that there are – that any of these dams, at least the dams that we've – and the Court has identified are not to be renewed?
- 20 A. Well –
- Q. So you're dealing with a hypothetical in six years' time or whenever, yes.
- 25 A. Yes, well but the problem is, and this is the purpose of Mr Sheehan's evidence, is to understand what the consequence between now and that six years is in terms of dam owners' ability to manage those dams in accordance with their legal obligations beyond their legal obligations to be on there.
- 30 Q. That's a different - I get that that's an important but different issue.
- A. Yes.
- Q. Not before us, is a decision by a dam owner not to seek a renewal unless, or is it your case that, well if you don't give us long term consents, well nothing will be renewed and there'll be no irrigation in Central Otago?

A. Well similar to what you heard yesterday from Ms Foran for Trustpower is that uncertainty about whether the consents can be renewed in six years' time has practical implications for the maintenance of these structures.

5 Q. It may well do.

A. Yes.

Q. That's the thing, it may well do and there is a lot of uncertainty about the process after, you know, going forward in six years' time, there just is, has to be.

10 A. Yes and so the case is really as simple as this, which is that if nobody is contemplating that other – that the dams should be drained at the end of six years, where is the value in having those dams captured by plan change 7?

15 Q. I don't know because we're – we are trying to assist parties who have an interest in dams and permits around dams to put into place an evidential, you know factual basis upon which policy can be tested, either new policy in PC7 for a longer duration and anything else that might hang off that or going in the operative plan. We are doing our best to assist your clients –

20 A. Yes.

25 Q. – in this. I don't know that a technical argument whether it is impounded water is or is not a water body assists, I don't even and I'm sorry I just not sure where that is going. I am sure it is really important for counsel to confer and identify the issues, so that we actually track the thinking through evidence and through submission.

A. Yes well that's a work in progress and we are doing that. And we're...

30 Q. I'm sure you ought to be doing this in relation to Mr Curran's evidence as well, what are the issues? Because you know, said and said again, there is so much evidence now before us, that it's not always clear what are issues, planning or legal issues and was there factual basis underpinning it as well? So, I'm going to ask you to do – we'll allow that evidence, leave is granted to produce that evidence but before Mr Curran comes to the stand you are to have conferred and identified what are the issues both planning and legal arising out of Mr Curran's evidence, yes. Okay?

A. Thank you.

Q. Just check to see if there's anything else I meant to be covering off in the draft minute which is written.

THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT

5 Q. Sensitivity analysis, what's happening there Ms Mehlhopt?

A. So I've been working on that overnight your Honour in terms of some further work for the experts to do on that appendix so that is sits with the joint witness statement that has been produced and does provide some further explanation and addresses the matters that you were raising yesterday, so that is a work in progress.

10

Q. Okay, so when you have that done by? This Friday?

A. That would be the intention your Honour because we need that for next week.

Q. Yes we do, yes. Okay that's fine. So, that's Friday the 21st and that is – has that joint witness statement gone up on the website yet? The attachment which came in, Friday, probably.

15

A. No, I don't believe it has Ma'am.

Q. Perhaps, okay probably it's best to perhaps go in as an addendum to an amended document or to be re-filed because at the moment is not helpful and it's actually troubling.

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A. Yes, I think particularly the discussion around the use of the term "average" in that document, I think it's best if it's perhaps not on the website. It has been circulated to counsel for those who were participating in it, so they do have a copy of it without relying on the website for that.

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Q. Okay. We will withdraw that from the website, it is plainly not helpful absent any explanation, it's got – purports to change something which the planners had at least agreed to so we don't want to – so we'll have you re-file. It's not your fault, it's the witnesses. So, we'll have you re-file on Friday and that's what we'll load to the website and I don't know whether you want tracking or not tracking on that document but – or just to re-file it I mean there's virtually nothing there in terms of text anyway, so...

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- 5 A. Yes, it's a matter of working with what's there and fleshing that out with explanation and a question for the Court is whether the Court would be assisted by where there are some amendments in that document, from what I can see, I'm putting the amendment that refers to average to one side, the amendments to the formula for removing A-typical data are minor – just wordsmithing amendments from what I can see.
- Q. Yes.
- 10 A. Whether the Court would be assisted by those changes being made, well being shown in the full Plan Change appendix that was attached to the 7 May joint witness statement so that you're only looking at one document.
- Q. Oh I see, so actually bring it forward into, yes, into the 7 May as an amendment to 7 May rather than as a separate attachment in and of itself, is that what you're saying?
- 15 A. So there would be a document attachment that sits with that joint witness statement because this testing has come out of that joint witness statement.
- Q. Yes.
- 20 A. But in terms of any further amendments that are recommended, if they are tracked into the 7 May version of the Plan Change so that everyone's working off one document for next week.
- Q. That would be really helpful. I mean we did spot the two formula and again, explanation needs to be given as to what the formula represents. It looks that to be that a lot of data has been run and you're looking for formula that best describes the outcomes of those data runs or something that seem to be it, but again, there's just not guilty there.
- 25 A. Yes, and my understanding, the purpose of that testing was to confirm the formula that was in the joint witness statement and if you amended some of the values, whether that had significant changes. I think that the confirmation was that the experts were happy with the formula. I think the wordsmithing is just a better choice of words rather than actually having an effect on how the formula works.
- 30 Q. And I haven't got that – you know, that JWS is a hundred pages at least and so I haven't got to the back end of even that document in terms of

trying to understand what the formula represents or doesn't represent and so there needs to be an explanation.

A. Yes and I have asked for that explanation to be in this attachment to set up the purpose for that, we'll call it step four, that formula where that's
5 come from in the previous joint witness statements, the purpose for it and how it works.

Q. Yes, so that would be – we're quite happy to receive that I think as a tracked change to the 7 May or not?

10 **THE COURT: COMMISSIONER EDMONDS TO MS MELHOPT**

Q. The only thing I'm wondering about is if these are vast technical witnesses as opposed to the planning witnesses does there need to be some differentiation so there isn't some confusion with the plan saying we never saw that. We don't like that. What's that about?

15 A. Yes, and this has been discussions between – given the timing between the technical experts and not the wider planning experts so I would have in that attachment, any changes identified in a different colour as being those changes that are agreed to by the technical experts if we don't have time for agreement of the planning witnesses on that. Now in terms of
20 the amendments that have been made to the formula, I don't anticipate there being a level of disagreement between the experts and the planners on that and there is the addition of the sentence that has the reference to *average* in it, that hasn't been agreed to by all of the experts so that does need to be further worked on and that may change as a result of
25 discussions between now and Friday.

THE COURT: JUDGE BORTHWICK TO MS MELHOPT

Q. And are you talking there about planners or even the technical people?

A. I think the technical people in the first instance.

Q. They can all agree?

30 A. But bringing – well I understand in terms of the timing, there wasn't the time for all of those to agree but the witnesses who did agree to it wanted it to be on the record because...

Q. I think there was about four from memory.

A. Yes.

Q. Yes. And then there was one who was in Court last week so he couldn't participate and then there were several others whose views aren't recorded I don't think but, yes, okay.

5 A. Yes, there were emails going backwards and forwards of all of the technical witnesses I understand, other than Mr McTavish who wasn't in Court and they are signatories to that document but we will clarify it, all of that in the next iteration of that.

10 Q. All right, so as I understand it, you want as an attachment the sensitivity testing, that runs themselves and that's fine, that's going to be dealt with and that becomes a replacement document and then you want to amend the 7 May JWS and to record the formula, the amendments to the formula and the amendment, and any proposed amendment to the methodology which includes the word *average* back again, that is to come in to attract
15 changes to the JWS dated the 7th of May and you will at that stage – everybody will at that stage have their plans and technical witnesses record their agreement or otherwise to those amendments to the 7 May JWS. If they agree, why do they agree? If they disagree, why do they disagree? And what is it anyway that they are actually proposing here,
20 so you know, so we actually have some context. Is that what you're wanting?

A. Yes.

THE COURT: JUDGE BORTHWICK

Everyone happy with that? Yes, everyone's happy with that.

25 **THE COURT: COMMISSIONER BUNTING TO MS MELHOPT**

Q. Are you also going to provide some background evidence on the process of reaching those formulas?

A. In terms of the purpose for this formula or in terms of stepping back to their previous joint witness statement explaining...

30 Q. How the formula's evolved.

A. Okay. I can get that included in that document as well if you'd find that of assistance.

Q. Just some appreciation. They're all sort of sensitivity testing I think but some background on that would be helpful I think for us if we can, thank you.

THE COURT: JUDGE BORTHWICK

5 All right so I've recorded that in relation to the dams by tomorrow, 9.00 am, we will have a clear idea what are the issues together with the dams identified, you know, if there are more than what we've noted, particularly. And we've asked Daliah if you could send to Mr Page, Mr McMillan's brief of evidence yesterday so you just send that through to Mr Page so he
10 knows what – that's the Frasier Dam so he knows what the thinking was there by our representative there.

THE COURT: COMMISSIONER BUNTING TO THE COURT: JUDGE BORTHWICK

15 Q. I think it came out in discussion.
A. It's actually in his evidence.
Q. Isn't it...
A. I'm sure he's tracking in his evidence a concern about dam integrity, yes. But it will be there in the transcript too.
20 Q. Yes. He talked about the fact that they were a part owner and the reason when the things were handed over and the reason was to provide electricity if my recollections correct but, yes.
A. I've noted that, was it Friday or was it in two days' time which is Thursday, Dr Snelder's report, which one?

25 MR MAW TO THE COURT: JUDGE BORTHWICK

A. Two days.
Q. Which is Wednesday/Thursday. By the close of business Thursday?
A. Yes.
Q. Okay, close of business Thursday, a report by Dr Snelder presenting
30 analysis of the raw data from March including NOF analysis and trends and that will be a brief of evidence anyway, correct?
A. Yes. It will be a very short brief attaching the report itself..

Q. Oh I see, yes, yes, so he's actually got a full report there has he?

A. Yes. There's a 134-page report which actually helpfully steps through and shows the current state of affairs.

1020

5 Q. Okay. And where did we say for the dam issues? Dam issues to come in when? The issues in relation to dam both our identification of the dams of concern before Mr Curran gives his evidence?

A. Yes, I'd written down 9.00 am tomorrow morning.

10 Q. Yes, and then I've written that down too and then the general issues as to dams by 9.00 am tomorrow morning and that includes also the issue raised in Mr Curran's evidence about whether impounded water arising out of whether impounded water is a water body and those are both legal and planning issues. Right, okay so that minute should issue today with those additional – we will also be saying in the minute – we are going to be talking to planners about the drafting of objective policies and methods so while, you know, they're agreed who their representatives are, all are invited to attend, yes. Okay?

15 A. In that too Ma'am you may recall I filed a memorandum in respect of Ms Styles whose largely unavailable next week but could join by way of an AVL link.

20 Q. Okay.

A. Which Your Honour did grant leave for that to occur so I just need to remind you for that logistical arrangement Ma'am.

25 Q. No, you're right to remind me. I mean we've got so much surge now happening with the documentation. That was very efficient of me. I made that direction and promptly forgot about it, so, yes...

A. No, well Ma'am I'm sorry, it was just that Ms Styles is in charge and leading a large counsel workstream and is all over the Marlborough Region that week so...

30 Q. That meditation, yes.

**THE COURT: COMMISSIONER EDMONDS TO THE COURT:
JUDGE BORTHWICK**

Q. Public engagement.

A. Public engagement now. There's a lot happening in Marlborough, I know that.

MR MAW TO THE COURT: JUDGE BORTHWICK

5 Q. And Murphy's Law will be Ma'am that the day Ms Styles may attend would be the location with the least reliable internet access I'm sure.

A. Okay, that's fine. Yes, so okay that's kind of dependent on what day we're actually going and for you guys to get back to Mr Cooper by Friday and that actually might build in some reliable internet access consideration for you to attend by AVL. This is the Court's questions by AVL. Okay, so
10 that's good. All right. Sorry to take up so much time. So we are with you.

MR WELSH TO THE COURT: JUDGE BORTHWICK

Q. Ma'am just before I call Ms Styles, I should have confirmed last night that I provided Madam Registrar with a case book of the authorities that were referred to?

15 A. Got that, yep.

Q. Not included in that were those central government policy documents that I referenced in my submissions that Your Honour would like to receive being the section 32 on the RPS.

A. Yes.

20 Q. The regulatory impact statement and the implementation guide. My intention was to print copies of those overnight but two issues with that. One: I'm well away from my office; and secondly: they exceed 500 pages and I'm not so sure of the utility in providing a 342-page regulatory impact statement that addresses well beyond what I was referencing to the
25 Court.

A. Yes.

30 Q. So I can't have Ms Styles produce that and I will speak to my friends as to whether those documents can be admitted by way of consent. I'm not relying on them on any other purpose than they say what they say and they're not evidence or any opinion as such, other than central government documentation.

A. All right. Well no I'm happy with that. I will just leave it for you to talk with your friends about producing that, I think, as you said, as part of the common bundle.

Q. Yes.

5 A. So that's fine.

Q. Thank you Ma'am.

STEPHANIE AMANDA STYLES (SWORN)

Q. Good morning Ms Styles.

A. Good morning.

5 Q. Ms Styles your full name is Stephanie Styles?

A. Stephanie Amanda Styles.

Q. Well I should have asked. I didn't see that in your evidence so Stephanie Amanda Styles, thank you. And you are a senior resource management planner at the firm Boffa Miskell?

10 A. I am.

Q. You hold the qualifications and experience set out in page 2 of your evidence-in-chief?

A. It is.

Q. And you have prepared evidence-in-chief dated 5 February 2001?

15 A. Yes.

Q. And you also prepared a supplementary statement dated 23 March of this year as well?

A. I did.

20 Q. You have participated and been the signatory in two joint witness processes, the first in relation to hydro electricity generation as it relates to the schedule 10(a)?

A. Yes.

25 Q. And you also participated in – I should have mentioned three actually, the planners joint witness conference and also the joint planner and technical conference of 4 to 6 May, is that correct?

A. I did.

Q. And do you have any amendments to your brief of evidence?

A. No I don't.

30 Q. So you can confirm that your evidence-in-chief and your supplementary statement are true and correct to the best of your knowledge?

A. Correct.

Q. Given the passage of time I understand you've prepared a short summary statement and I'll ask you to read from that to the Court please?

A. Thank you. Good morning.

WITNESS READS SUMMARY OF EVIDENCE:

My evidence focusses on Proposed Plan Change 7 to the Regional Plan: Water for Otago or PC7) in relation to its impacts on Trustpower's operations in the Region. PC7 impacts Trustpower's operations regarding:

- (a) The ability to efficiently and effectively obtain replacement consents; and
- (b) The ability to obtain an appropriate duration for any new consents for water associated with enhancements or maintenance.

10

Renewable energy is a matter of national significance and the benefits of existing and new renewable energy are recognised under s 7(j) of the Resource Management Act. In my opinion PC7, in addition to addressing freshwater matters under the National Policy Statement-FM must recognise and provide for renewable electricity generation activities in order to give effect to the RMA, NPS-REG and the Otago RPS.

15

The Council reports and evidence emphasise the intent for PC7 to reduce paper allocation and discourage investment in irrigation and land use intensification, but largely disregard the same impacts on existing investment in infrastructure for hydroelectricity generation. No acknowledgement is given within PC7 (as notified) to the level of existing investment, the national importance of hydroelectricity generation, the local and regional benefits of hydroelectricity generation or the differences between hydro electricity generation and the primary sector activities such as irrigation.

20

25

I recognise the evolution of evidence and the recommended PC7 text during the course of this hearing process and I have considered the proposed and recommended changes as they have arisen. I have been involved, as Mr Welsh said, in the Hydro, Planners, and Planners + Technical Experts conferences, and support the approach put forward in the May, 7 JWS which in summary includes:

30

(a) Amending the objective to better emphasise the purpose of the plan change, my preference being for Version A of that text.

5 (b) Amending the controlled activity rule and the associated schedule to apply to the majority of deemed permit renewals using water meter data.

(c) Technical amendments to Schedule 10A.4 to achieve that.

10 (d) Amending the RDA rule and associated matters of discretion to apply to all other deemed permit renewals where water meter data is inadequate to represent historical use; and

(e) Retaining the non-complying activity status for applications seeking an increase in water take.

15

In my view, all of these points enable better connection of consent renewals to historical use and would enable appropriate assessment for hydroelectricity generation activities through the RDA pathway if water meter data is enabling the data record to be examined on a case-specific basis.

20

In addition to the agreed matters above, the issue of duration of consents was not explored within the conferencing. I remain of the view that hydroelectricity generation activities, both in relation to consent renewals and new water takes, should not automatically be subject to a maximum six-year duration. This is especially the case where the implication of seeking greater durations is a non-complying consent with a policy position requiring avoidance, such that no application could conceivably pass the second threshold test under section 104D. That approach does not recognise the importance of hydroelectricity generation to the region and nationally, the existing investment in infrastructure, or the complexity of the existing schemes functionally. I continue to recommend that the duration policies (10A.2.2 and 10A.2.3) be amended to enable consents for hydroelectricity generation activities to be considered for a longer period (in addition to recognising recognition including recognition for hydroelectric generation in the PC7 objective). I also continue to recommend

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that an additional rule be included enabling replacement applications for hydroelectricity generation activities for more than six years' duration to be assessed on their merits as a discretionary activity.

- 5 I consider that the combination of the outcomes of the JWS, and the additional provisions relating to duration set out above and in my evidence-in-chief and supplementary evidence (and which I have provided to you in a summary version in Annex A to this summary, are an effective and efficient way to provide for hydroelectricity generation activities within PC7 and give effect to the
10 relevant national policy statements and regional policy statement.

Having considered the intent of PC7, and the necessity to give effect to all higher order documents, I consider that PC7 (as notified and recommended in the 7 May JWS) is inadequate in recognising and providing for hydroelectricity
15 generation. I do consider it possible to give effect to both the NPS-FM and NPS-REG and I am of the view that there is no inherent conflict between the way the two MPS's – between the two MPS's as the use of water for renewable electricity generation can be undertaken in a way that recognises Te Mana o te
20 Wai and which meets their hierarchy of obligations set out in the NPS-FM.

Thank you.

1030

EXAMINATION CONTINUES: MR WELSH

Q. Thank you Ms Styles, I just wonder if it would be useful if you could turn to your Annexure and explain to the Court the various differences
25 between red tracking, blue tracking and your black text?

A. Certainly. What I was trying to do here your Honour and Commissioners was help, give you a summary of the different pieces of the jigsaw puzzle and so what I've given you here in red are the outputs from that latest joint witness statement on the 7th of May, so those are the ones that I've
30 put commentary down the right-hand side saying where things have come from. The blue are my additions which are the things that were not covered by the joint witness statement process in the conferencing, generally relating specifically to hydro and/or to duration, so where

there's, in the left hand column where there's black text, that's the base plan change text where it wasn't altered through the joint witness statement and what I haven't included is things like the lengthy schedule and all of its bits and pieces, just the main guts of the plan change and just a really, really simple statement at the very end of that in relation to hydro, what the activity status outcomes would result in.

5 Q. Thank you Ms Styles, can you please answer any questions my friends and the Court will have for you?

CROSS-EXAMINATION: MR PAGE

10 Q. Ms Styles looking at your drafting attached to your summary and the blue additions that you've made to the provisions, the provision that you've made for hydroelectricity generation seems to be specific for take and use permits. Have I understood that correctly?

A. Which piece of blue are you referring to?

15 Q. Well let's look at the discretionary activity rule?

A. Yes.

Q. 10A3.2.1, do you have that?

A. Yes.

20 Q. Refers to, oh I see so the way I understand, if where A or B is concerned, it's any deemed permit or a take or surface, taking use of surface water if it's not a deemed permit?

A. Correct. It's exactly the same wording as the rest of the rules, but the piece that makes this specific to hydro is at the top of the next page where it specifies those activities relating to hydro.

25 Q. So what I'm trying to understand from the drafting is whether you intended to capture permits for the storage of water for hydro-generation purposes?

A. No I have not. They don't come into these provisions currently.

Q. Yes, is there a reason for that?

30 A. Simply because they're not currently covered by the plan change.

Q. All right. Is that because Trustpower doesn't have permits for or damming permits that are covered Plan Change 7?

A. The deemed permits that Trustpower has that are covered by Plan Change 7 that they have sought renewal for, relate to the intakes, the taking of water and then putting of that through into the races and the hydro system.

5 Q. Yes.

A. So that's where I focus my energy. I don't know the wider hydro resource for the region.

10 Q. Right, okay. So if there are other permits, for example, with Falls Dam, where Pioneer Energy generates from, that have permits to impound water behind the dam and the water's used for hydroelectricity purposes, would it be consistent with your approach to include the damming permit as part of your regime?

A. It would seem that on face value, but I don't know enough about the specifics to be precise.

15 Q. Okay, thank you. Nothing further Ma'am.

CROSS-EXAMINATION: MR MAW

20 Q. Good Morning. I just want to explore a little further, the level of your understanding in relation to schemes or generators of electricity across the Otago region other than Trustpower, so my friend has just asked you a similar question, but when you were preparing your evidence, did you have it squarely in mind that the factual situation you were responding to was simply the Trustpower set of facts in terms of its deemed permits?

A. That is my focus, yes, I'm aware there is other hydro but I have not focused on that, I don't know the details of the other schemes.

25 Q. And in relation to the Trustpower schemes, is it your understanding that the various takes and uses of water are exclusively for hydroelectricity generation?

A. That is my understanding for the ones that relate to these deemed permits.

30 Q. And you don't have any understanding as to the use to which water is put by other hydroelectricity generators in the region?

A. I do not have details.

Q. And you haven't turned your mind to any implications in terms of your planning framework in relation to those other situations?

A. Not in any detail, no.

5 Q. I thought we might move now to the NPS REG, I'm assuming you have a copy with you?

A. I do.

Q. There is a copy in the bundle and the bundle reference number is, well it's Volume 3, CB813?

A. Yes.

10 1040

Q. Now I would like to start with the preamble, which is on page 3 of that document, CB815 and in particular, the second-to-last paragraph in the preamble which I'm sure you've read and re-read and...

A. I am familiar with it.

15 Q. Very good. Now that part of the preamble makes it clear that the MPSREG does not apply to the allocation and prioritisation of freshwater as these are matters for regional councils to address in a catchment or regional context and may be subject to the development of national guidance in the future. Now I want to start with the very end of that passage, "national guidance in the future". When you think about allocation and prioritisation of resources and you think about national guidance that has been issued subsequent to the MPSREG, is the national policy statement for freshwater management, the type of guidance that is being referred to in this part of the preamble?

20 A. I suspect so.

Q. I want now to understand what you take the words "allocation" and "prioritisation" to mean in the context of this preamble. So when you think about allocation and what that means, what do you understand in this context, allocation is referring to?

30 A. My understanding of the term, "water allocation" relates to the process through which the regional council needs to understand what is in the various water resources, what water is available and then determine how that is best allocated between different users coupled with the

prioritisation that goes with that allocation as would normally be done through a regional water plan process.

5 Q. And so when you think about allocation and prioritisation, those issues are addressed in a regional planning framework which establishes a flow and allocation regime through a waterbody?

A. Usually, yes.

Q. And when you think about prioritisation, what do you understand prioritisation to mean in this context?

10 A. In the context of it being linked to allocation, I consider that that's most likely to be intended to mean *how* the allocation is prioritised between and two different users within what's available within a catchment or waterbody.

15 Q. And when you think about both allocation and prioritisation of a resource do you accept that resource consent decisions have and can have the effect of allocating a resource?

A. Yes they have that effect, as guided or enabled through the planning provisions that they sit under.

20 Q. In the absence of a flow and allocation regime, considering the allocation and prioritisation of water, do you accept that resource consent decisions can have the effect of prioritising the use to which water is put?

A. I'm not sure that I would call it "prioritising", allocating yes but prioritising only by virtue of what is before them, not in any holistic sense.

25 Q. So if the entirety of a water resource was allocated to a single use, through a resource consent decision, would that prioritise that use over other potential future uses?

A. It would allocate the resource to that use, I guess you could call it a "priority" it's more of a default from the nature of that consent having been granted than any deliberate decision to "grant" a priority in the sense that this is intending.

30 Q. So, you are seeing or you are reading this part of the preamble and allocation and priority as synonymous in terms of their meaning?

A. As part of a deliberate process by which both aspects are considered together in a regional planning context, yes.

Q. Now we've touched briefly on the national guidance in the future part of this paragraph and the national policy statement for freshwater management, that does set out the framework within which allocation decisions are made in relation to freshwater?

5 A. Correct, from the point that regional councils apply that new NPSFM, the process through which they must go by to work through allocation, prioritisation and new regional planning frameworks, yes.

Q. And when this national policy statement for renewable electricity generation was prepared there was some guidance material prepared?

10 A. There was.

Q. And you were going to produce that this morning but given Mr Welsh's challenges with printing the 500 pages etc, we don't have the document before us but are you familiar with the guidance document?

A. I've read it but not recently, I wouldn't say I'm intimately familiar with it.

15 Q. Are you familiar with the part of the document that refers to the inter-relationship between that NPS and other Government initiatives and policies?

A. I've read that, yes.

20 Q. And just for the record that would be located on page 3 of that guidance material and there's a paragraph on page 3 in relation to the then-national policy statement for freshwater management 2011, you understand the passage I'm referring to?

A. I've read it, yes.

25 Q. And that passage notes that the NPS for freshwater management will be at the 2011 iteration, "provides direction and guidance on the framework required at a regional level to avoid over allocation of freshwater and that no new hydroelectricity development would need to operate within that framework", so again the guidance material is clearly signally that decisions around allocation of freshwater are to be considered under NPS
30 for freshwater management?

A. As it was at that time which has obviously moved on a few steps since then.

Q. Yes it has but do you accept that that perhaps gives an indication as to the separation between consideration of allocation to occur under

separate national guidance? Allocation isn't to be considered through the lens of the MPSREG?

A. I don't believe that it was intended to be quite that simple. I believe that what they were intending was to not signal that the REG is intended to trump any other national policy statement when matters of allocation are being considered at a regional level holistically under *all* the relevant documents. If you weren't to have *any* regard to REG when setting allocation, then you wouldn't have things like hydro as a specific activity within the allocation lists which regional councils commonly do, so it's again it's part of considering all relevant national direction, at the time that you're going through such processes.

Q. And you touch on that later on in your evidence about the need to give effect, in this context both national policy statements...

A. All relevant national policy statements should be considered at the time of any planning policy framework.

Q. And you express an opinion that the MPSREG and NPSFM can be read together, there's not conflict between them in your opinion?

A. In my opinion there's no need for an *inherent* conflict between them at a policy level.

20 1050

WITNESS REFERRED TO PARAGRAPH 6.3 EVIDENCE-IN-CHIEF

Q. I want to move now to the objective in the MPSREG. And you've helpfully set out the objective at paragraph 6.3, your statement of evidence-in-chief you provide some analysis in relation to the need to give effect to the overarching objective and you say that Plan Change 7 needs to recognise that there are existing resource consents relating to existing hydroelectricity power schemes in the region that include deemed permits and consents which will need to be renewed for operation to continue and for new permits that seek to enhance or maintain the scheme. You then go on to note that PC7 hinders that ability because the six year duration which you say does not provide certainty for Trustpower or security for the generation of supply. Now when you read the objective, does the objective refer to providing certainty for generators or to security of supply?

25

30

A. Not explicitly, but I believe that to be considered within the providing for operation and maintenance and upgrading of existing renewable which is directed by the objective. So those aspects are simply part of operating and renewing and upgrading large complex systems that are in place.

5 Q. The objective itself provides no explicit reference to consent duration?

A. No it does not.

Q. And when you think about Plan Change 7, Plan Change 7 does provide for the re consenting of the existing scheme?

10 A. For six years as a controlled activity or restricted discretionary under the recommended joint witness statement, yes. Longer than that is not provided for, enabled.

Q. You then go on to consider the policies and Policy B in particular, you've set out at the top of your page 7 of your evidence-in-chief, subparagraph (a) of that policy and that policy is about maintaining generation output of existing renewable electricity activities?

15 A. Yes.

Q. Plan Change 7 with the recommended amendments in relation to the treatment of hydroelectricity generation and by that I mean the controlled activity and more particularly the restricted discretionary activity, that does seek to maintain existing generation output?

20 A. My understanding from the technical advice through that conferencing is that to enable recognition of actual historical use for the hydro schemes, requires the use of supplementary information to the existing water meter data and, therefore, the proposed amendments through that joint witness statement bringing that pathway as a possibility through the restricted discretionary activity would be the mechanism of reflecting historical use and thereby maintaining that generation output which otherwise would not be achievable through the way it was framed technically previously.

Q. So assuming that the RDA does achieve the outcome, then maintenance of the existing generation output is enabled and facilitated by Plan Change 7?

30 A. To the extent that the deemed permit makes up part of that generation and again is qualified for that six year period.

Q. And then if you look at subparagraph (b) of the policy, it speaks to the potential effects of minor reductions, again the intention now through the RDA is not to reduce the availability and supply of water for hydroelectricity generation and so that part of the policy now has been addressed?

5

A. Correct that is the intent with having that pathway.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Sorry, say it again? Put that question again? I heard the answer was correct but just didn't quite pick up on the whole thing?

10 **CROSS-EXAMINATION CONTINUES: MR MAW**

Q. So looking at the second part of the policy, subparagraph (b) which speaks to the need to ensure that minor reduction in generation output do not occur, the change is now recommended in relation to the restricted discretionary activity would ensure that Policy B is now achieved?

15 A. Yes that was the intent of that pathway.

Q. I want to move on now to the National Policy Statement for Freshwater Management and if I can perhaps take you to paragraph 6(11) of your evidence-in-chief?

A. Do you want me to get the NPS as well?

20 Q. It might be helpful to have that.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Can you remind me which bundle that's in? Number 3.

A. The same bundle, CB665, Tab 4.

Q. Yes.

25 **CROSS-EXAMINATION CONTINUES: MR MAW**

Q. And in this paragraph you are referring to the need to address or give effect to both the NPS REG and in this context, the NPSFM and you note that there's no inherent conflict between the two NPSs because you say that the use of renewable electricity generation or the use of water for such can be undertaken in a way that recognises Te Mana o te Wai?

30

A. Yes.

Q. And which meets the hierarchic obligations in the NPSFM. Now when you think about the hierarchy of obligations in the NPSFM, what's your understanding of the first of those priorities?

5 A. The health and well-being of the freshwater environment, the ecosystems and resource.

Q. And the place within which the hierarchy that hydroelectricity generation falls, do you see that as falling within priority 2 and/or 3?

10 A. I agree with what's been discussed previously in the hearing that it is in part in both priorities, 2 and 3.

Q. And when you think about these priorities and the hierarchy, priority 1 needs to be done first before you move onto priorities 2 and 3?

A. Yes.

15 Q. And when you think about priority 1, the health and well-being of the water body itself, and you think about the four irrigation races that Trustpower is seeking to consent, is it your understanding that those races essentially take all of the flow out of the four water bodies?

20 A. The takes from the creeks, I understand from the evidence that you've heard, the technical evidence, that most of the time they take what is available.

Q. And in relation to the replacement applications that have been lodged, those applications seek to perpetuate the current taking regime?

25 A. I have not been involved in the writing of processing of those applications. I have a very brief overview of those and I understand them to not be as simple as just rolling over the deemed permits, that's an aspect of them, but they've been applied for in the context of other aspects of the operation of those schemes, so they're being processed on a more holistic basis than just rolling over the existing take.

1100

30 Q. What do you mean by a more holistic approach?

A. So my understanding is that in parallel to those deemed permit renewals, there's also an application associated with each to regularise the historical situation of things like overland flows when it's raining, ending up in the water race and formalising that as a consent aspect which it

hasn't historically been done. So that changes the numbers as I understand it but I don't have detail of how that all works.

Q. And the applications are also seeking to take even greater volumes of water from each of the water bodies in terms of higher flows?

5 A. No, my understanding is again, that the intake is designed to take a certain flow after which it goes past and on down the waterway. But there's been further data or analysis that shows that under certain pressures more water can force its ways down the pipes or races and so again that's an existing situation that's changing which these current
10 consents are seeking to respect and put in writing as something that just happens when there's pressure.

Q. So perhaps if I phrase that as regularising the way in which the intakes have historically been operating?

A. The very nature of them as an opportunistic take of water that happens
15 to be there and / or going past when it's raining or not, yes.

Q. When you think about then the first priority in relation to Te Mana o te Wai, and you think about the helpful and well-being of the waterbody itself, do you see any inherent conflict between an activity that takes the entirety of the flow of water from a water body and meeting the needs of
20 that waterbody?

A. I think you've got a contextualised any kind of statement like that to the circumstances. As I understand it in the case of the four Trust Power intakes that are being considered, the health and well-being of those water bodies and their ecosystems have been very much assessed and
25 incorporated into that consenting regime. So that has been at the foremost of the assessment involved with those and my understanding is that that assessment has shown those waterbodies to be healthy and well-functioning.

Q. So when you are thinking about the framework that you've recommended
30 to be included in plan change 7, again you have it very firmly on your mind, the factual situation relating to the Trust Power operation.

A. I do, yes.

Q. And so, some care would need to be exercised in terms of understanding the broader implications of that framework and how it might be used by other hydroelectricity generators?

5 A. And that was very much on my mind in recognising that you need to understand the circumstances of the case when you are applying these kind of considerations, hence my recommendation for a fully discretionary activity status for longer than six years. So, outside the original *intent*, if you can call it that of this plan change to enable considerations of the case specific issues that might arise.

10 Q. When you think about the – or one of the overarching purposes of plan change 7 which is about ensuring that water allocation does occur into the long term such that the flow and allocation regimes to be established under the new land and water plan to come can be implemented sooner rather than later, do you accept that long-term consents push against that outcome?

15 A. I think that could be said at face value but I don't think making sweeping judgement that *all* cases, that would be the case. There's also the ability through what I've put forward to consider those kind of situations and under the discretionary activity status and to put in place adaptive management, review conditions or the like should that be seen to be necessary.

20

THE COURT: JUDGE BORTHWICK

Q. So we're now going to just pause there for morning tea then just seeing in the Court's interest, and what are the outcomes articulated by Plan Change 7 should a fully discretionary resource consent regime for permits greater than six?

25

A. Yes.

Q. So that's where we're going. You said: "Adaptive Management", and what else did you say? Something else?

30 A. Adaptive management; review conditions or similar mechanisms through conditions of a consent.

Q. Okay, so good time to pause because I saw Mr Maw smile at me, presumably going next to – what's the policy content or outcome for a

fully discretionary regime and that's important to understand that. Okay, we'll take a break.

COURT ADJOURNS: 11.06 AM

COURT RESUMES: 11.24 AM

5 CROSS-EXAMINATION CONTINUES: MR MAW

Q. Now just before the morning tea break we were just starting to explore the discretionary activity and how that might work in the context of both Trustpower and other potential applicants in relation to hydroelectricity generation and we had reached the point where the consideration of those applications and the question of how those applications might be considered in terms of the policy guidance through Plan Change 7 might occur. Now I can assure you we are going to get to that particular point but I want to deal with the regional policy statement provisions first and then we'll drop back into the drafting provisions or the drafting but I can flag that that's certainly something that we will be exploring in a little more detail. So in relation to the regional policy statement you have referred to objective 4.4 of that document and you have set out policy 4.4 at paragraph 6.12 of your evidence-in-chief?

A. Yes.

20 Q. And when you look at objective 4.4 that objective does not say anything about consent duration?

A. Not explicitly, no.

Q. And insofar as Plan Change 7 is providing a framework within which hydroelectricity generation can be reconvented, it is providing for that activity?

A. It provides a framework within which all activities are to be considered but it doesn't in my opinion recognise hydro as a specific activity as this objective and its associated policies expect.

30 Q. Do you recognise in this context to mean prioritise hydroelectricity use over other uses?

A. No I do not but recognise comes under the heading of provide for. So in my opinion you've got to do something obvious to recognise and provide for something not just have it in amongst everything else.

5 Q. So when you now think about the recommended restricted discretionary activity rule, that is enabling the treatment of hydroelectricity schemes perhaps differently to other activities?

A. That is enabling the circumstances that hydroelectricity schemes have in relation to their water meter data to be recognised more appropriately in establishing what actual historical use is through that RDA pathway.

10 Q. You then in your evidence go on in your paragraph 6.13 to provide the text for objective – let me just get this right. It's the text from policy 4.43.

A. 443, yes.

Q. Yes. And again when you look at the wording within that policy it doesn't speak to consent to duration?

15 A. Not explicitly no.

Q. And insofar as the chapeau of that policy applies, it's about protecting the generation output of existing infrastructure?

A. Correct, yes.

20 Q. And again the generation output of existing infrastructure is protected by enabling the reconstituting of the historical rates of take through Plan Change 7?

A. The RDA pathway provides for that recognition of historical use to protect that capacity under the deemed permits, yes.

25 Q. Yes. And that policy does not refer to new hydroelectricity generation activities?

A. No. No, that one's specific to existing.

Q. And there isn't, for completeness, a policy dealing with new hydroelectricity generation in the RPS?

30 A. Policy 441 which was the one above is not explicit to new or existing. It covers both.

1130

Q. Yes. I want to move onto paragraph 7.4 of your evidence-in-chief now and in this paragraph you're drawing a distinction between different types of uses, different activities?

A. Yes.

Q. And you've noted that there's a different higher order policy framework that applies to renewable electricity generation?

A. Yes.

5 Q. And then the final sentence of that paragraph over the page, you note that: "Such activities..." and I'm assuming you're referring to renewable electricity generation, "...should be recognised for their different uses of water and managed differently through provisions where it can achieve all relevant legislative requirements". Isn't what you're speaking about in
10 this paragraph the decision around allocation of the resource between different and often competing uses?

A. No. What I was trying to highlight here is that Plan Change 7 treats all activities equally and at the time I wrote this evidence-in-chief many months ago now, the relief that we were seeking was to specifically
15 recognise hydroelectricity generation activities throughout the Plan Change as being different. Obviously things have moved on now and the framework which has been evolving and has come out of the joint witness statement has enabled changes that I don't believe any longer need hydro to be explicitly taken out and run parallel. What I was trying to say
20 at that point in time was simply what I've said about lumping everything together doesn't recognise the functional and fundamental differences between something like irrigation and hydro.

Q. Right, so those concerns have now been addressed through the drafting that's come forward in the joint witness statement?

25 A. As I said in my summary, that has covered some of the issues. What we didn't cover in conferencing was duration and so I've given my views on that again.

Q. Do you accept that allocation of water resources for long durations has the potential to allocate the water?

30 A. Do you mean a resource consent for a long duration?

Q. Yes.

A. It allocates the right to use water under the conditions of that consent.

Q. And insofar as that consent is in force that water can't be allocated to a different user?

A. That's my understanding unless there's some mechanism within a specific consent.

5 Q. And so if in the future the land and water plan to come sets in place a flow and allocation regime that allocates water amongst a number of competing uses, if all of the water has already been allocated to hydroelectricity generation through a long-term permit, then that flow and allocation regime would be frustrated until the point in time that the hydroelectricity permit expires?

10 A. What I'm not sure of is the ability to do a review of consents to enable recognition of changes that come in the future, so I understand the purpose of the Act in allowing review is to recognise that things move on. What I don't know and would need legal advice obviously on is the ability – how far that ability to review consents extends when things change over time.

15 Q. So just to test that, so assuming that the legal position is that water cannot be reallocated as a result of a consent review, and I say: "Reallocated..." to a different use, then the effect of the existing long-term allocation, or do you accept that the effect of the existing long-term allocation to one use would frustrate the implementation of a new flow and allocation regime?

20

A. Yes, if that's not built into a consent at the time that it's considered.

THE COURT: JUDGE BORTHWICK

25 Q. Are you saying in order for a consent to be reviewed you need to build into the consent decision, or the conditions of a consent, a review clause that says will be reviewed in accordance with a new flow and allocation regime?

A. That wasn't what was on my mind Your Honour.

Q. All right, okay.

30 A. I was thinking that in terms of a consent that was seeking a longer-term, that conditions could be built into that that may have, for example, trigger points or references upon which you might review what is going on in the nature of that, if it was over a very long term, where you knew that changes in things like allocation may come in or changes in other

circumstances around how that consent might be considered including environmental.

Q. Yes.

A. So it's very case-specific.

5 Q. Yes, that probably was the same question I think as I put to you, so you're saying that unless there is a review condition, just say the change in the plan to carbon's not changed in terms of allocation from the four water bodies in relation to which Trustpower draws its water, but – so it's not a change in allocation – divide that between irrigation and hydro, hydro gets
10 it but it is a change in flow regime, so instead of taking everything out, you start from the proposition of you can only draw water when flows in the river are whatever they are, so it's a flow regime. Are you saying that you cannot review a resource consent if the new land and water plan puts into place a flow regime unless there's a condition of consent that says that
15 you can?

A. No, no, I'm not saying that.

Q. Oh, right.

A. I thought the question that I was being given was whether you could review something to allocate it to someone else.

20 Q. Oh I see, yes.

A. Whereas yours is essentially allocating it to the environment which is a different proposition as I understand it under the section 128 review ability.

Q. Yes, and is that causing you any concern, that proposition?

25 A. No.

Q. No. But it's more the take it off hydro, give it to a different entity. That, you know, you're saying, mmm, I'm not sure about that?

A. Yeah, not sure about that and not sure particularly in the context of these Trustpower races where you're very high up in catchments –

30 Q. Up in the catchment, yes.

A. – small amounts of water, considerable catchments and other users downstream largely unaffected by this situation that is foremost in my mind.

Q. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. Do you accept that with reference to the four high up in the catchment examples that you have on your mind, that the current regional plan for water does not establish a flow and allocation regime compliant with the national policy statement to freshwater management?

A. That's my understanding, yes.

10 Q. In your – I think it was your supplementary evidence, you attached a number of examples of planning frameworks from elsewhere in New Zealand highlighting how consent duration was dealt with in other situations?

A. Yes. Yes, that was an appendix to my supplementary, appendix two.

1140

WITNESS REFERRED TO APPENDIX 2

15 Q. So I'm now at your appendix 2 and I'm looking at some of the examples that you had helpfully provided. In the context of the first of those documents, the Canterbury Land and Water Regional Plan, is it your understanding that a flow and allocation regime for the allocation and management of water had been established in relation to the waterbodies from which water was being taken for hydroelectricity use?

20 A. I understand that the Canterbury Land and Water Plan has flow allocation regimes in place for many waterbodies but not all and I don't know if it's covered all of the hydroelectricity users in that region. That was not the purpose for which these examples were provided.

25 Q. Do you accept that each of these examples given will – the planning frameworks from within these examples are taken are all different?

A. Yes.

Q. And they, in terms of duration, the integrated way in which each plan works is important when considering the relevance or considering the application of the duration policies?

30 A. In all cases, the case specifics to each region have attempted to deal with different scenarios and that was my very point in providing these examples.

Q. And turning over the page there's an excerpt from the proposed Southland Land and Water Plan –

A. Yes.

Q. – that Plan is still subject to appeal.

A. It is.

WITNESS REFERRED TO POLICY 40

5 Q. But you've highlighted their policy 40.

A. Yes.

Q. And there you'll see sub-paragraph 7 which pushes or suggests shorter duration where that will be better enable implementation of a revised framework established in those sections, referring to the FM – the
10 freshwater management units.

A. That clause 7 talks about, shorter or longer durations to enable implementation of FMU outcomes.

Q. Yes.

A. Yes.

15 Q. And so the timing of the development of provisions for each FMU in this context a relevant consideration?

A. My understanding of the Southland context; is they have *not* completed that exercise and so the ability to determine the right outcome is not yet in place.

20 Q. And so that policy is indicating shorter-term consents in that situation?

A. It's enabling the consideration of those where it's appropriate or "better enable implementation", I think is the words they use.

Q. When you think about better enabling implementation, shorter-term consents would better enable implementation of new flow and allocation regimes?
25

A. If a flow – if an FMU required a significant change in a flow allocation regime that *required* consent durations to be shorter, shorter than what had been relative term, then that is one of the considerations that this policy directs consideration of.

30 **WITNESS REFERRED TO RED AND BLUE VERSION**

Q. Right, as promised I do have questions about the drafting that has been put forward and the version that I am looking at is the red and blue version attached to your supplementary evidence.

A. Okay, so the extracts that I put together –

Q. Yes.

A. – not the other drafting –

Q. Yes that.

A. – because that all comes from...

5 Q. It's the extracts.

A. Yes.

Q. And I want to start with the objective, so you have recommended the addition of the blue text at the bottom of the objective?

A. Yes that comes from my previous evidence.

10 Q. And you maintain the view that that wording is appropriate?

A. Yes.

Q. So in relation to the use of the word "importance" of hydroelectricity generation, where have you taken the word "importance" from in terms of superior documentation? What is it you're seeking to capture in terms of importance?

15

A. The use of the word "importance" was trying to encapsulate the terms that I used in other documents that are around benefits of significance of, I was trying to keep simple a relatively complex set of directions from other documents. You could replace that with other terms such as significance which may connect more closely with terminology used in other documents.

20

Q. So in a sense you're seeking to capture the essence of the higher order documents and the way in which hydroelectricity generation is referred to within those documents?

25

A. And recognised as being important in various ways.

Q. Continuing on with that objective, I then see reference to community water supply and I didn't recall reading any evidence that you have put forward in relation to community water suppliers and the need to provide for them in the objective?

30

A. And I've noted that as my footnote that I have included that text only in so far as to align with other evidence. I was trying to be helpful to the Court in recognising that that has been put forward as having a different angle on it in a similar way to hydro does to irrigation. It's just simply there for completeness.

Q. So you're not recommending, and you haven't expressed your independent opinion as to the appropriateness of the inclusion of community water supply within the objective?

5 A. No I have provided no evidence on community water supply. I am simply trying to be complete.

Q. We then move onto the policies and again presumably the same comment applies in terms of the reference to community water supply in each of the policies where that phrase is used?

A. Exactly the same with the same footnote.

10 Q. I'm looking now at policy 10A2.2 and the additional text here in blue, "Unless the take and/or use is for hydroelectricity generation". Now this policy would apply to all hydroelectricity generation that is the subject of a deemed permit?

A. That's my intent, yes.

15 Q. And again you don't have any working knowledge of the other hydroelectricity generation that might be captured by this wording in the policy?

A. Correct.

20 Q. And when you refer to hydroelectricity generation in this policy, are you referring to that being the exclusive use of water or just one of the uses of water?

A. No I'm referring to that as the activity that's under consideration.

25 Q. So in so far as there might be some ambiguity in the wording, if the wording was adjusted to refer to the water being used exclusively for hydroelectricity generation, it would be consistent with the outcome that you're intending?

A. That's more explicit, but I don't think there's ambiguity. It simply says, "the take and/or use is for".

1150

30 Q. So how would you then consider the use of water through a dam that is used for a mix of purposes, say irrigation and hydroelectricity generation and a combination thereof, where does that activity fit?

A. Well that's simply something that the Council has to work through at a processing level when they get an application and determine what the activity sought is for.

5 Q. Do you foresee that there could be a cause for argument as to whether or not that activity is envisaged by this policy in light of the wording you've recommended?

A. It's possible but not intended.

10 Q. And in so far as your intention is that it's only water taken and used exclusively for hydroelectricity generation, isn't it better to be really explicit in the policy about that?

A. Yes.

Q. Now you refer also in your text back to consideration of the duration to be in accordance with policy 6(4)(19) of the operative regional water plan?

A. Yes I do.

15 Q. And that plan you say does not give effect to the NPS REG?

A. That plan does not give effect to the REG.

Q. So when you read policy 6(4)(19) is it your opinion that that policy would likely result in significantly long term consents being granted for hydroelectricity generation?

20 A. I don't think that's a presumption that could be made, that's a functional policy which provides a series of considerations to be turned to when considering durations of a consent and my purpose of linking that was to not have duration completely open ended and unbound by anything, but to use some mechanism and I simply did not wish to put a whole series
25 of considerations which you might turn your mind to within these policies and overly complicate them.

Q. And do you have any experience with the practical application of policy 6(4)(19) in the Otago region?

A. I do not.

30 Q. If the practical application of that policy has resulted in long term consents being granted for most activities, would that change the way in which you have approached inclusion of that policy or reference to the policy?

A. I don't think so because that policy does not direct long term, it simply directs a consideration and that comes down to how that policy and the

consideration is implemented on a case by case basis. Simply saying that that has occurred in the past does not, in my view, mean it has to occur in the future.

Q. Consistent application of policy though is an important consideration?

5 A. It is, but things change and so should implementation.

Q. You then go on to make some similar or perhaps precisely the same recommendations in relation to policy 10A2.3?

A. Yes that's the same.

10 Q. In so far as these policies apply to new applications for water to be taken for hydroelectricity generation, you accept that the outcome of the drafting that you have put forward would enable consideration of a 35 year term for a water permit?

A. It would enable consideration of any duration up to 35 years on a case by case basis against those parameters.

15 Q. When you look at the objective and the policies in plan change 7, does the objective or the policies are those the only objectives and policies except for the duration policy, that would be considered when an application for a discretionary activity was lodged under your discretionary activity rule?

20 A. The wording that has been used *in* the plan change makes that the case by using the term, "irrespective of other policies". So it limits consideration for renewals under this plan change to these policy provisions.

25 Q. In relation to the potential for long-term consents for renewals, does the objective or the policies provide any guidance as to the matters that should be taken into account when considering those applications?

A. Currently or with the amendments that I recommended?

Q. With the amendments that you have recommended.

30 A. That's the entire purpose of referring back to the existing policy that allows consideration of key criteria for duration because in the absence of that, these policies do not anticipate any longer than six years or give any parameters around what you might consider.

Q. So, let's put duration to one side just for a moment, does the objective and the policies in plan change 7 provide any guidance as to the

environmental outcomes that would need to be considered or achieved when processing an application for a long-term permit?

A. Not really, no.

5 Q. And therefore there's a policy vacuum in terms of how such an application might be processed?

A. In terms of effects...

Q. Yes, so against what policy background plan change 7 would potential effects be considered?

A. Yes that is true.

10 Q. And from a planning perspective that gap may result in unintended outcomes if effects – if there's no framework against which to assess effects.

A. It's certainly unhelpful in determining what effects are relevant under a fully discretionary activity status, probably lead to *over* assessment rather than under assessment in my experience.

15 Q. Is there a risk that it might go the other way though in the complete absence of any policy guidance?

A. There's always a risk.

20 Q. The intention of your drafting to enable applications for new water permits for hydroelectricity generation to be sought for any duration – let's turn that into a question. Is the intention of your drafting to enable applications for new water takes or water permits for hydroelectricity generation to be able to apply for any duration of consent?

A. Yes that is my intent.

25 Q. And when you think about the efficiency and effectiveness of those provisions, do you have in mind any particular scenarios?

A. I'm not sure what your questions.

1200

30 Q. So, when you are thinking about the appropriateness of having no restriction on duration for new water permits, did you have in mind the Trust Power situation or were you thinking more generally across the region that it's simply appropriate to enable long-term permits for hydroelectricity generation full stop?

A. A bit of both at the higher level enabling the consideration to be given to appropriate duration. Foremost in my mind was my knowledge of the Trustpower proposals and thoughts around enhancements and things like that which come at substantial cost and I believe should be entitled to the conversation around what duration is appropriate on the merits of that new proposal or any new proposal that should come forward.

5

Q. Do you accept it's hard to predict what types of applications might be lodged in the future for hydroelectricity generation?

A. Yes.

10

Q. There's a risk that a water resource from an allocative perspective could be locked up by the granting of a long-term permit for hydroelectricity generation?

A. There's a risk if it's not given due consideration through the consenting regime.

15

Q. And in light of the planning framework to come, the very thing that Plan Change 7 is seeking to protect, isn't it more appropriate to ensure that activities that have the effect, or may have the effect of locking up a resource for significant periods of time are not enabled?

A. I don't think it is necessary to make that determination at this point in all cases as a blanket response to uncertainties of what might be in a future plan that we don't know anything about yet.

20

THE COURT: JUDGE BORTHWICK

Q. Sorry say that – give that answer again, so it's not necessary in all cases...

25

A. In all cases to have a blanket response to duration to protect something in an unknown future plan.

Q. Just let me think about that. What do you mean by that, it's not necessary in all cases, what do you mean by all cases?

A. So the Plan Change as currently put forward puts a blanket expectation of six years –

30

Q. Yeah, I get that.

A. – for all things, irrespective of what the activity is or the location and in this I'm thinking of what counsel have directed me to consider which is

the policy on new water takes, so that's where the questioning was, so what we don't know in the lifetime of this Plan Change is what new water take applications for hydro or otherwise will come along, but the presumption in this Plan Change is six years full stop. What I'm suggesting in the light of hydro is there's a good case to not take a blanket six-year period but to enable consideration through a consent process for more than six years if that is appropriate and can be managed through whatever the proposition is for that new water take, so it's about allowing opportunities -

5

10

Q. Yes.

A. - to consider not just...

Q. Does that answer though hang off if you like or does that presuppose or does is that answer predicated on an operative plan which is dealing appropriately with the integrated management of the water and land resource because if you had one of those even with an MPS coming down the line, you know, a review under the MPS-FM or even both the MPS's coming down the line, if you had a plan that was fit for purpose, it was a good working plan as we understood it to be prior to the 2020 MPS principle, you may have no difficulty with that but do you have one of those is my question?

15

20

A. Yeah, and that's something that is a particular issue when you get into the wider consents and because I've been considering this quite narrowly in terms of hydro...

25

Q. I'm thinking hydro so I'm not thinking everybody else – so we're just looking at hydro. Do you have - the operative plan as it currently stands, does that adopt an integrated land and water management regime which would have been appropriate under the superior documents as they stood prior to 2020?

30

A. I suspect not but what is in my mind is that the applications that hydro go through are fully discretionary activities which does enable a fairly broad consideration of all relevant aspects regardless of whether the plan is particularly good at directing the outcomes expected or the ways to get there if the implementation is enabled to get the right outcomes.

- Q. Yes, so that's almost a philosophical discussion, you know, does a fully discretionary resource consent now for any activity allow you to get to the right answer if there's no policy, empirical direction given, so it's fully discretionary, so we'll get there in the end. Is that a philosophical issue or is that a planning and legal issue?
- 5

MR MAW TO THE COURT: JUDGE BORTHWICK

A. There's a planning and legal element and I'll continue asking some questions just to explore this a little further.

Q. Yes.

10 **CROSS-EXAMINATION CONTINUES: MR MAW**

Q. So when you think about the National Policy Statement for freshwater management do you accept that that signals a paradigm shift in the way that freshwater is to be managed in New Zealand?

A. It signals an outcome that is to raise the priority in everyone's mind towards managing freshwater better than has been done in the past.

15

Q. Do you accept it's taking a water-centric approach so looking at water and its inherent health and wellbeing and the inherent values first before looking at abstractive or allocative uses?

A. In the context of the MPS-FM that is its focus but when preparing any kind of policy document there's – my understanding is that there's no governmental direction or higher order that you have to trump one thing over another. You have to consider all National Policy Statements and guidance together and figure out how to apply those in the circumstances of the policy you're writing so that within the bounds of NPS-FM of course it's water-centric but it is one of the documents that have to be considered together.

20

25

Q. And in the context of plan making functions of council those documents must be given effect to?

A. That's the direction of the RMA.

30 Q. And the operative water plan doesn't give effect to the NPS-FM currently?

A. The operative water plan in my opinion gave partial effect to the NPS-FM as it was back in the past.

THE COURT: JUDGE BORTHWICK

Q. 2011?

A. Yeah. But it's all – everything's moved. You can't expect the water cooperative water plan to give effect to current national guidance, that's why it has to catch up.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So when you're looking then at the risk of enabling a discretionary activity consent to be processed under the operative water plan, there's a risk that the paradigm shift encapsulated in the NPS-FM 2020 won't be properly considered when processing a resource consent application?

A. That's an implementation risk which I can't help but think can be mitigated through the fact that when assessing consents the consent authority is directed to take into account things like the national direction at the point in time of the consent that's being processed. So you still have to be assessing this application at the current point not the past.

Q. And when you think about the legal tests that apply with respect to national policy statements in the planning context, it's a give effect to test?

A. Give effect to in preparing that document?

Q. Yes.

A. Yes.

Q. And what's the legal test when considering a National Policy Statement when processing a resource consent application?

A. It's going to depend on your activity status but under 114...

Q. A discretionary activity then which is what you're recommending in this context?

A. Yep. So under 104 you still have to – is it have regard to?

1210

Q. It's a lesser...

A. It's not give effect to. It's have regard to or take into account. I think it's have regard to. It's less than give effect to because the presumption is that the documents you are working under give effect to the higher order documents which is, as we know, not always the case given the movement of time.

Q. And do you accept that therein lies the problem with processing a discretionary activity through the lens of the operative water plan that doesn't give effect to the 2020 NPS-FM in considering long-term permits?

5 A. I think having the operative plan out of date with the current position makes it harder for consent processing staff to tie things back to the operative plan but they still are doing that processing in the light of having regard to the national direction as it stands.

10 Q. If you think about this then from a risk perspective, there's a risk that the paradigm shift in the NPS-FM is not appropriately considered through individual resource consent decisions given the difference in legal test?

A. There's a risk. Yes.

15 Q. And when you think about that risk that's a risk of not giving effect to the National Policy Statement and what it's seeking to achieve and should that risk be borne by the environment or by the abstractor being precluded from seeking a long-term consent?

20 A. It's very hard to respond in a philosophical situation with an unknown circumstance in play. There's a risk if implementation of consenting is not done well. There are all sorts of risks to the environment in its holistic sense. People in communities are natural environment. I'm not sure if I can give more than that without...

Q. Do you accept it would be difficult to have regard to the National Policy Statement 2020 in a way that seeks to achieve its objective when the process for establishing flow and allocation regimes reflecting the hierarchy of priorities has not yet been undertaken?

25 A. Sorry can you repeat?

Q. Yeah, there were too many concepts there.

A. Yeah.

30 Q. If you think about the NPS-FM 2020 significant work is required by, in this context, the Otago Regional Council to put in place a planning framework that gives effect to the priorities set out in that document?

A. There's considerable work for the regional council to write the new water plan giving effect to all the national guidance, national direction.

Q. There's now a highly prescriptive process set out in the NPS-FM for establishing visions, environmental outcomes; values; limits?

A. There is.

Q. And that work is yet to come in the Otago region?

A. As I understand it, that's underway.

5 Q. And so an application lodged for resource consent in the absence of that information, it would be very difficult to capture the essence of the National Policy Statement through a consent application on a case by case basis?

10 A. A resource consent process in advance of that work having been done cannot pre-empt what that outcome may be for the region or any catchment within it but it can be cognisant of the National Policy Statement directions around the work that's happening and the need to prioritise water amongst other things.

Q. Thank you. No further questions.

CROSS-EXAMINATION: MS BAKER-GALLOWAY

15 Q. My first set of questions are in relation to the joint witness statement on community water supplies that you attended but I think your contribution was just in respect of the objective that was also...

A. I did not attend the community water supply one at all.

Q. Oh, your name's on it.

20 A. Not on community water. Hydro?

Q. Oh, yes, sorry, that, yes, that – I think it's entitled Community Water Supplies, but yes.

A. Good.

Q. So it's the one dated 4 to 6 May, sorry it's...

25 A. Oh, no, the 4 to 6 May was the last Planners and Technical Experts big one.

Q. Yeah, big one, yep, sorry.

A. Yes.

Q. That one, 4 to 6 May. So if you can just get that handy?

30 A. Yep.

Q. And my questions are just in respect of the objective that was conferenced on and I've just noted at paragraph 5, it's listed which of the

experts supported version A, so that records you as supporting version A of the objective?

A. Correct, yes.

Q. So if we go to the appendix where we see the two versions side by side.

5 A. Yes.

Q. In fact, my first set of questions are on words that are the same in respect of both objectives and that's the first sentence: "To provide for an efficient and timely transition to a new land and water plan", and just picking up on a theme of Mr Maw's questioning of you, you were discussing with Mr Maw that in the event a long-term consent is granted, if its required to be reviewed in order to give effect to the new land and water plan then it can go through that consent. The council could initiate that consent review process to see whether or not changes are required to the resource consent?

10 A. That is my understanding that that is an option.

Q. That is an option. But do you agree that that is less efficient than the issue of the shorter term consents now, the implementation of the new land and water plan and then the long-term consent going forwards in light of that?

20 A. I'm not sure but that's less efficient because having a two-step consenting process is fairly daunting for many applicants and comes at a cost, both in terms of time and resources so there's different implications with the two different approaches.

Q. Sorry I should have prefaced that a bit more carefully. With where things have got to now with the six-year controlled or restricted discretionary framework do you agree that that's becoming closer to being an efficient rollover with, you know, minimal assessment of affects or none if you like, required, so...

A. Yes.

30 Q. Sorry, that's the starting point. We have an efficient six-year rollover.

A. Of the existing historical use for six years under one or other of those pathways.

Q. For six years, yes.

A. Yes.

1220

Q. And then the new land and water plan framework comes into being and then all abstractors can apply for their new long-term consents so in that sense, that's the scenario I want you to compare to the first one and what
5 I'm putting to you is that that scenario is more efficient than applying for a substantive long term consent now, land and water plan being put into place and then going through a substantive review of that consent?

A. And I think it would be probably a case specific situation. The benefit of having that discretionary pathway allows applicants to consider if they feel
10 that they are in a position that they are able to go down that substantive consent process for a longer term, whether they, what the circumstances of the case are and the risks associated with seeking that, versus retaining that option to go down that controlled or restricted pathway for six years and then a reconsideration under whatever is unknown in the
15 future. So it's about options rather than necessarily directing one way or the other, those two options would remain available and it would come down to an applicant to determine whether they think they could put forward an adequate case for a longer term now with, I would expect provisions to deal with whatever effects there could be of that longer term.

20 Q. But what you're suggesting is that an applicant should be free to choose an inefficient route rather than be directed towards a more efficient process?

A. I'm s-

25 Q. You're advocating for options rather than looking at it in terms of which is more efficient?

A. Yes because efficiency will depend on what the drivers of the application may be.

Q. And you're not considering what's more efficient in terms of the Regional Council as the regulatory and decision making body either?

30 A. I don't know which would be more efficient it's going to again depend on the case. It may be that having a two stage consenting process, a simple rollover, simple rollover now and a big consent could be very costly and inefficient in the light of an unknown future plan. I simply don't know which would be more efficient.

Q. If the six year rollover comes into being, those six year rollovers would be done non-notified wouldn't they?

A. My recollection is that the non-notification clause is still remaining against both the controlled and restricted, I'd have to –

5 Q. Okay, let's assume, let's make an assumption just for the purpose of this question, that the six year rollovers are non-notified and so –

A. Yes.

10 Q. – in terms of participation in the consenting process by tangata whenua and other stake holders, it's more efficient for those participants to go through the – have the six year rollover just happen, land and water plan in place, substantive consent. That's more effective for those participants in the process than substantive consent now, land and water plan in place, substantive review of consent?

15 A. It could be, but the discretionary activity pathway for that greater term enables firstly consideration of who may be affected parties, so it would be possible, hypothetically I suppose, to involve any parties up front and whether a review is needed or the extent or scope or efficiency of a review in the future is a bit of an unknown of whether other parties may or may not need to be involved in that.

20 Q. Mr Maw was asking you questions about how the discretionary proposition that you're putting up, how it gets considered in the absence of any real policy direction, even just that proposition is less efficient than a substantive consent considered under the land and water plan that will contain, the policy direction that gives effect to the NPS?

25 A. I don't know what will be in the new plan and how it will give effect to the various NPSs, so I'm not, I don't know.

30 Q. Okay. And then if there, going back to scenario 1, so a substantive consent applied for now and it's a long term consent to say 2038, land and water plan in place and for whatever reason that consent isn't reviewed, it's not until 2038 that the implementation of the NPS could be given effect to, so it delays implementation of the National Policy Statement Fresh Water Management?

A. It would delay implementation of the effect of that in relation to those bits of renewals to if there was not seen to be for whatever reason a review in the interim and then that consideration would be done holistically.

5 Q. And in terms of these words that are in the objective at the moment, “efficient and timely”, that delay in implementation doesn’t accord with that aspect of the objective as agreed on does it?

10 A. I’m not sure that timely transition requires something to be done immediately. So this is about providing for efficient and timely transition into a new regime, even the RP NPSFM itself doesn’t say that all things will be done straight away, it’s still got transitional expectations within it. So I’m not sure that it’s necessary that all things have to be limited to six years to enable timely transition in the bigger scheme of things.

Q. So I’m just interested in what your understanding of the use of the word “timely” in this objective adds to our understanding of it?

15 A. It’s a fairly relative term given the extent of transitioning from what’s in place now to the expectations of the NPSFM. What my understanding of the intent of that wording was, was to try to make a transition to the better regime in the best most timely manner possible, so it was about doing things as well as they possibly can be done in the best timing possible.

20 Q. Okay, cool thank you that was helpful. Now my next set of questions relate to the national policy statement, objective 2.1.

A. Sorry which NPS? FM?

25 Q. FM. And it’s just arising – was just arising from one of the answers that you gave to Mr Maw with general reference to the Trust Power applications in terms of the races around Lake Mahinerangi and when I look at objective 2.11A in relation to the health and well-being of waterbodies and freshwater ecosystems, I see that that has two distinct elements to it. It’s in relation to health and well-being of the waterbody and the health and well-being of freshwater ecosystems.

30 A. Yes.

Q. Do you agree with that proposition?

A. Yes it could be read that – as two pieces they’re pretty closely linked.

Q. Well they’re linked in the sense that the freshwater ecosystem lives in the water but the waterbody itself is a distinct thing, isn’t it?

A. It is, yes.

Q. And if there's no water, there's no waterbody.

A. Correct, well no water at all, yes.

1230

5 Q. Yes, so for the parts of river that have been completely abstracted for that reach of the river that the waterbody no longer exists, it's been removed, you agree?

A. At the point of time if there was no water, I'm – my hesitation is that my understanding the context of the four Trust Power intake locations is that
10 there's no surface water but there's groundwater within the gravels, so the waterbody in itself is complex and that in a very short distance after those takes, there's pools and flowing water due to various different reasons and so yes, I'm not sure, if there was no water, there would be no waterbody but in the circumstances that I think you are referring to with
15 those cases, that's not quite that simple.

Q. I accept that but do you agree that objective 2.11A also requires us to look at the health and well-being of the waterbody? Not just, not reducing it just to the freshwater ecosystem that lives within it.

A. Yes.

20 Q. Are you familiar with Edward Ellison's evidence? Do you recall reading that?

A. I recall reading it sometime ago, I am not familiar with it.

Q. So while we're looking for that I'm just going to also read you out some paragraphs from the transcript of Mr Ellison. So, the concern that I have
25 is that without implementation of objective 2.11A, there's a risk of a reductionist approach being taken, compartmentalising assessments rather than is – looking at the, you know waterbody as an entity in and of itself. And in particular I understood from Mr Ellison on of his statements was this is on page 503 of the – so you've got Mr Ellison's evidence?

30 A. Yes, I believe.

WITNESS REFERRED TO PAGE 10 AND 11 OF MR ELLISON'S EVIDENCE

Q. So if you go to page 10 and 11 and I just want to draw you attention to a particular statements from there that relate to the waterbody exclusive of

you know, ecosystem values if you like, just to make sure we're all on the same page.

A. Mhm.

5 Q. Paragraphs 28 and 29. So taking into account Mr Ellison's evidence, even just from that perspective there are definitely elements of freshwater bodies that are distinct from freshwater ecosystems that need to be given effect to in the context of objective 2.11A, do you agree?

A. Yes.

1230

10 Q. I think that's good. That's all I was trying to get clarified. Now just going back to the joint witness statement two versions of the objective again, so version A that you support, compared to version B, version A contains no reference to any sort of environmental element of the objective does it?

A. No.

15 Q. But do you agree that there is an environmental element of Plan Change 7 being preventing further degradation associated with abstraction of water?

A. I understand one of the purposes of the plan change was to hold the current historic use as the continuation through this process.

20 Q. That's the use, but do you also agree that by holding the current use it also prevents degradation associated with additional abstraction?

A. It would –

Q. Or caused by additional abstraction?

25 A. So this plan change doesn't enable additional abstraction, it enables the continuation of historical use, so effects would continue within the parameters of that use.

Q. But the holding of the line of those effects if the environmental aspect of the objective of Plan Change 7 isn't it?

A. It has an environmental outcome, yes.

30 Q. Yes. Do you agree it would be of assistance for the objective to express that environmental outcome that's being aimed for?

A. My concern with expressing that, is that this objective in either form is about looking at a short term outcome with multiple purposes and if you tried to fit all of that within one objective, it could become rather complex

and unwieldy rather than simply focusing on that short term outcome of getting through a transition period.

5 Q. Now I just had a point of clarification about the relationship between the regional policy statement and the NPS REG, but just wasn't clear from your evidence and it's at your paragraph, well 6.12 is where you start to assess the RPS?

A. My evidence-in-chief?

Q. Yes, yes sorry.

A. Yes.

10 Q. And I just wanted to determine whether you'd turned your mind to in your opinion whether the RPS that we are now looking at whether it gives effect to the NPS REG?

A. The RPS as we currently have it, as I've quoted from and referred to and analysed, yes, gives at least partial if not reasonable effect to the
15 NPS REG.

Q. So you've qualified your answer. I mean the NPS REG's been in place for a long time?

A. Yes.

Q. I thought it was a simple question but because it wasn't in your evidence,
20 do you agree that the RPS gives effect to the NPS renewable energy generation?

A. Yes.

Q. Okay, great. Thank you Ma'am no further questions.

RE-EXAMINATION: MR WELSH

25 Q. Ms Styles, my friend Mr Maw was taking you through issues that might arise or risks as he put it, when the operative plan, I might use the words has incomplete coverage, it's not fit for purpose and the risks that might arise during the consenting in 104. What I want to ask is, in your opinion, do you believe that Part 2 has a role in 104 when dealing with a regional
30 plan that has incomplete coverage is a mechanism of avoiding or mitigating that risk?

A. Indeed I think it is very important where there's clearly inadequacies in the planning regime that do not give effect to current national direction to go back and look at the provisions of Part 2.

5 Q. And the Supreme Court decision in King Salmon, directs or at least suggests that that is a permissible use to revert back to Part 2, you're aware of that?

A. Yes.

10 Q. Mr Maw also asked you about locking up allocation and I just want to think about hydro located in the upper catchments. When a hydro operator releases the water, is that water consumed and unavailable to downstream users or the environment?

15 A. In my opinion, and that's why I tried to explain within my evidence-in-chief, there's a difference between hydro's use of water and that returned to the environment not at the point that it was taken, but at some other point and its availability to either other users or the environment after that point which is why I was trying to draw the difference between something like irrigation as a consumptive use and hydro which may be defined as consumptive but, is not the same in terms of its returning the water to become available again.

20 Q. Yes. Thank you Ma'am, that's all.

THE COURT: JUDGE BORTHWICK

All right, well we'll take the luncheon break before we get to the Court's questions. Thank you.

COURT ADJOURNS: 12.42 PM

25

COURT RESUMES: 2.07 PM

30

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. Good afternoon there. So I wonder if you've got policy 6.4.19 in front of you and that's in volume 1?

A. I do. I have it right at the top.

5 Q. You do have that, oh that's excellent. I'll just have some questions I want to work through in relation to your proposition. So we've got 6.4.19 there.

A. Yes.

Q. And that lists in (a) to (g).

A. It does.

10 Q. And then we've got one of these things that I'm always delighted by – not, that I see, that has an explanation that purports to expand on the policy and I'm looking at the first sentence and perhaps you could just read it out, so just the first sentence.

A. Of the explanation?

15 Q. Yes, so that other people understand what we're talking about.

A. Indeed. The first sentence of the explanation says: "The duration of each resource consent to take and use water should have regard to the particular circumstances of the activity and it's likely environmental effects but there needs to be a good reason for the council to reduce duration of consents from that required for the purpose of use".

20

Q. Right and so we've had a bit of evidence about how – well people coming and talking to us about what their perception of that might mean in reality and under – and the change under the current regime, so my understanding is that your proposed provisions mean that the three different situations that we're dealing with in this Plan Change would all come under 6.4.19 in terms of duration so that would be deem permits?

25

A. Mhm.

1410

Q. Yes. Take and use of surface water including groundwater whether resource consent's under the RMA expire at the end of 2025?

30

A. Within that period, yes.

Q. Yes. And then the third situation, the take and use of freshwater, new water proposals –

A. New.

Q. – if you like.

A. Yep, under those two policies which split the existing and new consents?

Q. Yes. Somewhere it's suggested perhaps the two could be rolled together, yes.

5 A. They seem to be getting closer.

Q. Yes. I'm just wanting to make sure that I understand.

A. Yes, so what I'm suggesting is that for hydro where six years is sought, that there still be some provision within – at a policy level of the considerations that the consent authority would turn their mind to in
10 considering whether a greater than six years is appropriate in the circumstances of the application.

Q. Sure, but you haven't suggested any changes to six or 19 itself have you?

A. No. It seemed a convenient place to start from without adding the same kind of concepts into the Plan Change 7 policies and making that more
15 convoluted.

Q. So we've had quite a comprehensive case presented by Trustpower and we've heard that in terms of the canals and the takes that need reconsenting, you've got your applications in.

A. Yes.

20 Q. And that, or Trustpower has and that it's seeking – I'm a little unclear, it might have been 18 years originally and now it's 17 years or something –

A. Yeah.

Q. – in order to fit into the – is it the Waipori?

A. The complexity of the Waipori consents expire in 2038 so the desire by
25 Trustpower is that these applications that are being renewed fit into that same timeframe to enable the whole thing, the whole jigsaw puzzle of consents and parts to be assessed together in the future.

Q. Sure. So I guess I'm wondering given that you've come along and you've got a number of witnesses and you've presented quite a comprehensive
30 case particularly in relation to that, whether there might be some possibility of identifying these particular things as warranting some exception within that timeframe, in other words, a specific provision in this Plan Change that might deal with that rather than raising the whole of the sort of, the hydro sector when we don't have a lot of evidence on that.

- 5 A. Yes, yes I appreciate that. One of my difficulties as you've heard is that I am not on the Trustpower team involved with those consent applications so I don't have intimate knowledge of them and of course when I help – assisted write the submission and evidence not all of those applications were lodged so they're now lodged and that changes the situation in terms of where this fits. They are in process with their activity statuses set from when they were lodged. Some were lodged prior to Plan Change 7 actually being notified so they've got discretionary activity status.
- Q. So that was the three was it?
- 10 A. Yep. Crystals, Blackrock and Shepherds.
- Q. Prior? Yes.
- A. And then Beaumont was lodged just in March this year so it sits under the Plan Change 7 regime.
- Q. So if you were being asked as to what an exception might be in terms of those four components of the scheme that you've just spoken to are, how might you do that as a planner?
- 15 A. Goodness, so I guess what you're essentially suggesting is a bespoke set of provisions.
- Q. Well we have so much stuff called bespoke. I think I'd rather label it as a specific –
- 20 A. Specific provision set.
- Q. – yes a specific approach, yes.
- A. Yes. So I guess what you'd be looking at if you were narrowing that specific approach to those seven deemed permits across four intakes, as you'd be looking for a rule but you'd also then need to have something at the policy level that directs where that rule comes from and shows that it's not out of context with what the Plan Change is trying to achieve.
- 25 Q. So just teasing that out a bit, so what might you be thinking of in terms of a policy signal?
- 30 A. It's probably not dissimilar from what I've suggested. It's that case specific consideration of whether a longer duration is appropriate and if so under what circumstances, so that's where I went back and looked at things like what 6.4.19 have in terms of – and what I've referred to before

in terms of things like that ability to have adaptive management built into that longer consent to deal with things at changeover time.

THE COURT: JUDGE BORTHWICK

5 Q. But there's no policy signalled for that is there? I mean that's what we're really struggling with here, is that there's no policy signal on outcomes, so if that's the case and the Court is minded to do something for Trustpower what might that look like?

A. So when you say in terms of outcomes, you're meaning the environmental outcomes that go with...

10 Q. Well under policy, when I talk about policies, the objectives in policy, you can either have environmental outcomes or you can have policy which isn't particularly geared to environmental outcomes but which is setting a framework for a –

A. A procedural?

15 Q. – procedural one, you know, so you can have two.

A. Yes.

Q. Here we have none and so we're asking, you know, if there is something to be done for Trustpower can it look like – what would it look like and why?

20 A. And what I'm suggesting is that the policy framework that you'd need is the consideration of the outcomes of a longer duration both in terms of why it's needed, so the nature of the activity, the investment for hydro and that kind of thing but also what the effects of that might be or how they'd be mitigated, so what kind of consideration the consent authority would
25 turn its mind to when granting a longer-term, in this case, for the deemed permit applications through to 2038. The other thing that was very much on my mind though is because that policy without the rules in Plan Change 7 applies to new takes and I know that Trustpower at least, and possibly other consent holders and hydro operators are always looking at
30 chances for other...

Q. Yeah, I want you to address the existing, not the new.

A. Right.

Q. Leave it to us with the new, okay?

A. Yep. So what I think needs to be done for the existing consent is to have a policy framework that enables consideration of effects of a longer duration on a case specific basis and how those can be managed through a consenting process for a longer duration.

5 Q. And I suppose the question is does that policy 6.4.19 in the operative plan do that, particularly with the caveats that then follow in the explanation because Trustpower I presume and here we're only looking at Trustpower will always be seeking to put into place either upgrading or maintaining existing assets for a period longer than presumably, actually, a period
10 longer than 35 years and we've heard that now across the board. Everybody across the board puts in their infrastructure assuming longer than 35 years and that's part of the problem with this operative plan is that everybody does it so everybody gets it so, there are some difficulties for the Court in just keying into that policy – well there may be difficulties for
15 the Court keying into the policy with its explanations.

A. Mhm. I guess...

1420

Q. And also the policy doesn't particularly address the environment or it doesn't comprehend simply addressing the environment. It's not even
20 seeking to.

A. It's not specifically seeking to deduce the environment, I guess what I liked about this was that it's starting to talk to some of the methodology that you could built into considering a longer duration with its point as things like adaptive management which is looking at how to make
25 changes within a consent over time to respond to changes in the – both legislative and physical environment and also particularly that point of indeed to the extent to which the risk of potentially significant adverse effects arising from the activity can be mitigated – sorry, adequately managed through a review conditions and I guess what I was looking at
30 was if there was a potential for a significant adverse effect to occur that could not be managed that could be grounds in that situa– hypothetical situation to seek more information, seek more mitigation or hypothetically decline a consent because it's asking you to question what the effects could be of a longer duration.

Q. And I think here you're touching on an important point is with a view to replacement consents which can be declined under your approach which is looking at you know, keying into that policy on duration. Where is the signal that it can be declined on its merits? And does that also need to be addressed?

5

A. Yes. I think that could be made more explicit at a policy level. And it's the nature of this current objective in policy which started off very much from a procedural regime which is not really looking at that bigger picture and I think it could be brought in more clearly.

10 Q. Otherwise it looks like a controlled activity, I think with the only matter of control, duration. Would that not be fair, is what it looks like? Has that sense of that?

A. It feels –

Q. Feels like that.

15 A. – angled that way, yes.

THE COURT: JUDGE BORTHWICK TO S STYLES

Q. So, what activity status might you be thinking of in terms of this policy signal?

20 A. I think it's reasonable that if you're bringing in consideration of effects of a longer term. So effects of a longer duration. That you have to have the ability to decline it because otherwise you're just simply saying that things can continue without considering the wider effects. So you have to have that a status that is in that – probably in that discretionary camp. That says there, you know – all issues will be taken into account, duration will be considered seriously but if it can't stack up there is the ability for the council to decline.

25

Q. Can't stack up against what though? Because at the moment, can't stack up for a discretionary activity for a replacement consent would be can't stack up, having regard to the two NPSs and some provision in the RPS for renewables, yes?

30

A. And freshwater because you're still going to be considering that under 104 as part of the matters to have regard. I didn't have look at the wording in the break.

Q. It is “have regard”, I think. But...

THE COURT: COMMISSIONER EDMONDS

I think it is too.

THE COURT: JUDGE BORTHWICK TO MS STYLES

5 Q. I'm interested in policy.

A. Yes.

Q. I'm not interested in effect because part – well I am interested in effects but it's what the policy guidance is on those effects and...

A. And it's not clear enough.

10 Q. If it's not clear enough. Yes...

A. If this plan changes to deal with effects and I have heard a lot of the discussion...

Q. And presumably they must if you want a discretionary activity looking for over, you know over six years –

15 A. A longer, that longer term.

Q. – it has to.

A. Yes and so there's not enough currently in the policy framework which was more geared towards procedure rather than procedure plus.

20 Q. So then what are to, you know looking at replacement consents what are we to do about that because you gear into you know the duration in, you know the duration policy under the operative plan so, as you just agreed that starts to feel like, oh it's just a control, it looks like a controlled activity, notwithstanding it's actually noted I was being discretionary. You know, so it's a confusing signals and so we look – ready you don't have to write us it out but you do have to give us some guidance as to what we're meant to do here because we're interested.

25

A. Yes. And I guess that 6419 is starting, whilst it reads a bit controlled, it's starting to sort of put out signals of effects and it's about making that explicit whether it be – whether the mechanism is actually then taking that duration consideration, bringing into a policy framework within PC7 that is explicit about considering the effects of the case when looking at the duration longer and incorporating those kind of issues that are in 6(4)(19)

30

and going that step further to be more explicit about effects on the environment and I guess that's where you need to decide whether you want to be general about effects, I've heard lots of the evidence you've had around different types of effects on the water bodies, cultural effects and the like or whether you keep that policy level general and the nature of the activity which I guess is also what 6(4)(19) is asking you to have regard to when you're looking at that duration, why, why is someone asking for longer?

5

Q. Yes but everybody's managed thus far, well many have managed thus far to convince the Council, especially of the activity, so it hasn't actually sent, it's not an effective policy?

10

A. It's not been strong enough to date.

Q. Yes.

A. So short of trying to draft you up something –

15

Q. Yes, yes, you don't have to do that.

A. – I think that's the kind of parameters you're looking at, is that that better consideration of both the why, the how and the what effects.

THE COURT: COMMISSIONER EDMONDS

Q. Also the time frame that you would be working within in terms of the wider consenting –

20

A. Yes.

Q. – that this is designed to catch up, if it gets through?

A. And we keep talking about longer duration and I guess it's all relative isn't it, you've got the six years and then you've got 35 out there under the Act.

25

There's quite a lot of room between 7 34. So that's got to be relevant as well to the considerations.

Q. Well yes I was going further than that, I was thinking about the date that we've been given in terms of the bigger picture –

A. Yes.

30

Q. – consenting –

A. Yes.

Q. – re-consenting that has to take place and what's specific policy you might need in connection with that as well as the rule framework –

A. Yes, yes.

Q. – that comes off that and needs to be considered. So if you're thinking about it, just in that term, and not in a very broad sense, what do you think are the really key things in your mind?

5 A. So as I said if you're thinking just about the deemed permits so that existing stuff which it's about a policy that directs consideration of the nature of the activity and the term sought and the reasons for that together with what effects a longer than six year duration could have and how those could be managed or are proposed to be managed to determine
10 whether the duration sought is acceptable or not and if not, to set a condition differently. I could have a go at drafting in, if you wanted.

THE COURT: JUDGE BORTHWICK

Q. No I think we need to think about all of this, you know, to the extent that your hydro is different from anything, well it's, I'm not sure that that's
15 globalisation, a global statement, what is important about hydro in this context is asides from the fact it's got an NPS REG, it is also an important means to address climate change?

A. Indeed.

Q. Yes. And so speaking for myself, that maybe what will get you over the
20 line, but possibly not looking like this as you proposed it because I think there are some flaws there, you never propose a rule without parent, you know, a sort of, without a parent policy, parent objective, you just, it's not good planning, so and of course the alternative is that you just don't do it here and you need to say, all hydro goes under the operative plan so that
25 might be the other easy way of dealing with it?

A. And that's where the movement of time has made this difficult because the original set of provisions that I had –

Q. Did that.

A. – were different to, they had different changes at that objective and policy
30 level to what's evolved through things like the conferencing, so it's gotten a little turned around a wee bit as things have moved on.

Q. With your –

1430

THE COURT: COMMISSIONER EDMONDS

Q. So just thinking about the water plan is there anything of any assistance in that specifically directed at hydro?

A. It doesn't – it –

5 Q. In the policy sense, objectives in policies?

A. The water plan doesn't have, no, no the water plan doesn't have hydro focus. It doesn't have that in it.

Q. At all?

A. No. Which made it even more difficult.

10 Q. Yes.

A. Which is where I'd picked up that that existing duration aspect had been attempted to be covered but not in the context of hydro.

Q. So you did answer questions about how that related to the NPS REG and I wasn't sure where you ended up with that?

15 A. So the water plan doesn't give effect to the NPS. The regional policy statement does. So you've got that intermediary step.

Q. So, oh yes. So you're going to be going upstairs for that?

A. Yes.

Q. And then –

20 A. You've –

Q. – even that –

A. So that the RPS is pretty good, it's pretty much mirroring the terminology from the NPS and then there's absence below that.

Q. Okay.

25 A. In the current framework.

Q. Current framework.

THE COURT: JUDGE BORTHWICK

Q. So to summarise, the regional plans are neither giving effect to the NPS for renewables, nor the NPS for freshwater management?

30 A. Correct.

Q. Correct, yes –

A. Particul-

Q. And then –

THE COURT: COMMISSIONER EDMONDS

Q. Or the RPS?

THE COURT: JUDGE BORTHWICK

5 Q. And the RPS and suppose it likes to mirror language in an NPS is saying something about renewables but I think about freshwater management, is that what you're saying?

A. So that the RPS was framed of course prior to the new NPS fresh water, so both tiers are absent of the current national policy statement on fresh water.

10 Q. Well it's less than ideal applying for resource consents to be assessed under NPSs directly?

A. It's difficult isn't it.

Q. Yes.

THE COURT: JUDGE BORTHWICK

15 Q. Have you got any other questions? No?

UNIDENTIFIED SPEAKER:

(Inaudible 14:33:34).

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

20 Q. One and I think just, yes. For new resource consents, new resource consents under your provisions would fall to be assessed as a discretionary activity under this for a period greater than six years, is that correct?

A. No.

25 Q. No? Okay.

A. The new consents, new takes wouldn't be under these rules because these only relate to the deemed and the ones short, soon to expire, they'd be under the rest of the water plan as is the case for all other new activities under this plan change.

30 Q. Oh okay, so it's just introducing a policy about duration?

A. Yes. Because this plan change brought in a policy that applies to everything new as well as all the existing, so that's the effect of that policy 2.

5 Q. So for new resource consents, policy 2 would have hydro being solely assessed under the operative plan?

A. Yes because what policy 2 did was basically said that for any new water takes of any type, the only policy you could consider is this one that says, only grant for six years. So irrespective of all the other policies in the water plan, good, bad or otherwise, about effects or duration or anything,
10 this became the only policy that applied.

Q. For duration?

A. Well I don't know if it even is about duration because it says: "Irrespective of any other policy only grant for six years".

Q. Yeah, I see what you mean.

15 A. So in my...

Q. So did you think this policy .2 excluded consideration or could be interpreted to exclude consideration of the operative plan for new consents?

A. It was at least ambiguous in my view whether that was irrespective of any
20 other policies on duration, only six years, or irrespective of any other policies full stop and I think that's again a difficulty with putting a policy into a Plan Change that's dealing with deem permits to bring in a policy that deals with everything outside the Plan Change in a way that does or doesn't connect to a whole other plan regime for new water takes for all
25 sorts of activities: primary; supplementary and the like with a whole, regardless of whether it's a good plan or not. At least it's a, you know, it's got all of its policies and rules theoretically talking to each other and this one's just sort of jumped in.

Q. So would a better approach have been in the case of policy two, to rather
30 than introducing that policy, would have been to amend policy 4.6.19 and say, but in the case of, and then make your exclusion there?

A. I think at least in doing that, it would have been clear that the equivalent of this was only about duration whereas it is ambiguous to me over whether this is the only policy or not.

- Q. And I think that's probably a fair comment and I think at the moment, yeah.
All right.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL

QUESTIONS ARISING ALL PARTIES – NIL

5 WITNESS EXCUSED

MR WELSH TO THE COURT: JUDGE BORTHWICK

- Q. So Ma'am notwithstanding the conversation between the Bench and Ms Styles that that is the case –
- A. Yes.
- 10 Q. – subject to the closing of Trustpower at some time in the future Ma'am.
- A. Yes.
- Q. So thank you. We'll see you later.
- A. See you later, okay. Very good.

THE COURT: JUDGE BORTHWICK TO MR PAGE

- 15 Q. All right, so probably with you Mr Page?
- A. Yes and I'm going to seek your leave to change up the order of the first two witnesses.
- Q. Yes.
- A. I'm hoping that we might be able to deal with Mr Graham relatively quickly
20 for reasons which would probably be apparent from the joint witness statement and we can then get to Ms McKeague and allow Mr Graham to get back on the road and get back to Central Otago.
- Q. Okay, nothing's apparent to me from the joint witness statement why Mr Graham wants to go prior but I don't think we've got any problems with
25 that, yes.
- A. I've discussed it with my friend Mr Maw and he understands why I'm doing this and it should become apparent as we deal with it.
- Q. Okay, so what's the reason? What is the thing about the joint witness statement that's important?

- A. Well Mr Graham's evidence is really concerned with the effect of the notified averaging provisions in the schedule on infrastructure design and the schedule has moved on rather from in the joint witness statement so I was just going to get Mr Graham to confirm that that's the case.
- 5 Q. Okay, that sounds good. I've just got to find his evidence but that sounds good. So shall we go with Mr Graham, yes.

MR PAGE CALLS**DAVID NEIL GRAHAM (AFFIRMED)**

Q. If your full name David Neil Graham?

5 A. It is.

Q. And are you a director of Irritech Otago Ltd in Cromwell?

A. Yes.

Q. And is your specialist field the design and installation of irrigation systems?

10 A. It is, yes.

Q. And did you give – did you prepare rather a brief of evidence dated the 5th of February 2021?

A. Yes.

15 Q. And do you confirm that it's true and correct to the best of your knowledge and belief?

A. It is.

1440

20 Q. Now when you prepared your evidence were you responding to the notified schedule to Plan Change 7 which sought to reallocate water for irrigation purposes based on an average of the maxima of data records for irrigation use?

A. Yes I was.

Q. And is your evidence really directed at the consequence for that averaging approach on the design and operation of irrigation systems?

25 A. Yes, it was.

Q. Now I gather you didn't participate because your name isn't on it, in the joint witness conferencing on the 2nd to the 4th of May which addressed how the experts who took part in that exercise were now recommending to the Court that the schedule should be amended?

30 A. Yes, that's correct. I wasn't there.

Q. And is it your understanding that the experts are now recommending to the Court that the schedule approach should adopt the maximum of rates of take and volumes for data records?

A. Yes.

Q. And if that approach were to find favour with the Court would that resolve your concerns?

A. Yes it would.

Q. Thank you. Nothing further.

5

FISH & GAME WITHDRAWN

CROSS-EXAMINATION: MR MAW – NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

10 Q. Well I just had one question which I was going to put to the next witness who I thought was going to go first and that's in relation to the Lindis case and the figures that are being provided in terms of previously allocated abstraction rate. You've referred to it in your paragraph 21. Now my memory of all of this, but I was on the Lindis case, is that there was a very large paper allocation that had never been exercised?

15 A. Yes there was.

Q. And that I think the figures – I did take the precaution of getting them in this decision to make sure I knew what I was talking about, is that some of consented primary allocation rates of take, that's the paper takes if you like and there was a figure of 3,777 which somewhere along the line got reduced to 3,640 and the actual maximum measured instantaneous daily mean rate of take was down at 2,255 so there's quite a difference between those two numbers.

20 A. There is. I thought the actual rate of – maximum rate of take was down to 1,639 was the final...

25 Q. Sorry that was at the end of the process.

A. Oh, okay.

Q. That that's where it headed but I was just looking at the comparisons that were being drawn by you and the witness to come between that 3,200 which isn't actually as high as the figure that was given as to what had been being taken in reality and I thought it was sensible to get it clearly on the record –

30 A. Yep.

Q. – that those figures aren't correct in that there was a paper allocation but that wasn't what was being taken.

A. I suppose the paper allocation was available to be taken if the water was available wasn't it?

5 Q. But it hadn't been taken. I just wanted to have that on the record.

A. Yep.

THE COURT: JUDGE BORTHWICK

Q. Do you agree with the Commissioner?

A. I don't actually have the ability to answer that question. I don't know.

10 Q. Okay, right, that's all you need to say.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL

QUESTIONS FROM THE COURT: JUDGE BORTHWICK – NIL

QUESTIONS FROM THE COURT ALL PARTIES – NIL

THE COURT: JUDGE BORTHWICK

15 Thank you very much for your evidence.

WITNESS EXCUSED

MR PAGE CALLS**SUSAN HELEN MCKEAGUE (AFFIRMED)**

Q. Is your full name Susan Helen McKeague?

5 A. Yes.

Q. And are you an environmental farm consultant and director of McKeague Consulting Ltd?

A. Yes.

Q. And did you prepare a brief of evidence dated the 4th of February 2021?

10 A. Yes.

Q. And do you confirm that the evidence is true and correct to the best of your knowledge and belief?

A. I do.

Q. Thank you. Now have you prepared a summary that you wish to read?

15 A. I have.

MR PAGE TO THE COURT: JUDGE BORTHWICK

Q. And the Court should have that now?

A. We do.

EXAMINATION CONTINUES: MR PAGE

20 Q. And Ms McKeague would you please read the summary?

A. Thank you. Okay, I've just captured some of the key points and I also picked up a little bit of what's in the evidence with some of the flavour that's been talked about up until now.

25 WITNESS READS EVIDENCE SUMMARY

1. Irrigators across Central Otago have been doing extensive background work preparing for deemed permit and water permit replacement for many years now.

30 2. The water permit applications are now all lodged with the ORC. The proposals in the applications utilise ORC science and information

wherever possible, with the gaps filled by additional science work contracted by the farmers.

3. The big applications that commenced years ago involved engaging with all parties early on. Just by way of example: Manuherikia: at the end of
5 2018 and in early 2019 the farmers hosted two All Parties Field Trips, one of the Upper catchment and one for the Lower. Participants included: Aukaha (lwi consultancy group that are the contact for farmers), Central Otago Environment Society, Fish and Game, DoC, ORC Councillors and farmers. *The Purpose of these sessions was to share knowledge, values
10 and understanding of the Manuherikia Catchment. To begin to establish a cohesive group working together for the wellbeing of the catchment towards and beyond minimum flow plan change and deemed permit replacement.* After the second meeting the multi stakeholder group decided that a neutral body would be better to host these and ORC took
15 them over. They became two groups: the Manuherikia Reference Group and the Technical Advisory Group. Farmers have participated in these groups ever since.
4. The development of the technical aspects of the proposals in the
20 applications started with gaining further understanding of the waterways and any adverse effects. The flows needed to protect or enhance instream values came first. If there were water quality or other impacts then those issues were also identified at this time and mitigation options discussed. The irrigators then determined if they could remain viable under that
25 regime and whether any changes in the intake, measuring or conveyance could improve the situation for the creek and/or the irrigators including water use efficiency, transport or habitat protection.
5. Alterations proposed to the abstraction systems are varied but include:
30 fish screens which are difficult and expensive, the installation or protection of perched culverts and waterfalls, merging of intakes and race alignment, surrendering of intake sites and residual flows which results in loss of the most reliable water to the irrigator.

6. These are expensive alterations. Some will take specialist technical assistance to design and install. The biggest impact that farmers will need to adjust to will be the loss of irrigation water in the middle of summer that goes towards the residual flows. As explained by other witnesses, sharing regimes are being developed but actually operating these regimes will be a result of trial and error that has an immediate impact on the farmer's business.
7. So in the driest time of the year when farmers are already worried about dwindling water availability they will be releasing further water into the creeks and rivers to uphold new residual flows.
8. In all the groups we work with there is a positive acknowledgment that this flow for the creeks and rivers and the changes proposed for the environmental improvements are important however there is also a nervousness about how much it will impact their businesses.
9. Many of the applications for replacement permits have been completed as groups or sub-catchments, as promoted by the ORC. This is a logical approach as abstractors in the same catchment may impact on each other's ability to access water during low flow periods.
10. Otago irrigators have established systems for sharing water during low flow times. In some catchments Mining Right priorities have a role in this flow sharing. Issue: I've put two examples down. The main stem of the Manuherikia. We have four large takes with the highest priority lower in the river. As flows decrease during the dry summer months the rates of take are reduced by an agreed ratio. And as flow sharing starts in the main stem Manuherikia other takes all over the catchment of lower priority are also asked to cut back.
11. Using the Manuherikia as an example the whole catchment has co-operated to produce a proposal to deliver environmental gains and manage water for the future. Then each sub-catchment group has their own proposal to deliver habitat protection and tributary residual flows.

Other witnesses have described this large body of work completed by the farmers.

- 5 12. Mrs Heckler and Mrs Gillespie talked about the Lauder sub-catchment irrigators who are a group that also sits within the overarching Manuherikia Catchment Group.
- 10 13. The development and agreement of the flow sharing agreement in just the Lauder group took a lot of effort and time. Mrs Heckler, Mrs Gillespie, Manson and Groundwater, the other farmers in the Upper Lauder group and Roger Williams, the Race Manager were in a meeting on the New Year's holiday fine tuning the last details before the application was lodged. The key element of the agreement is that the creek's residual flow comes first. The water that is left after that is shared on an agreed regime as the flows decrease. Ongoing access to water is also dependent on the proposed minimum flow that is included in the proposal at Campground being met. If the flow at Campground on the Main stem dropped below the minimum then all the irrigators are off regardless of the residual flow at the point of takes. This illustrates how interlinked all the water users are in the one catchment and the strong motivation that has kept the group functioning together.
- 20 14. The farmers prepared comprehensive applications with environmental mitigation options that will be expensive and tough to achieve but aimed to enable longer term permits to be secured that would give them the window and of time and investment security to implement the changes. The preparation for these applications commenced years ago and have sought to give effect to the various versions of the NPSFM over that time. In doing so the applicants have sought to be responsible guardians of the water resource.
- 30

EXAMINATION CONTINUES: MR PAGE

- Q. I have a few questions for you before I ask you to answer questions from my friends. First is just the context about your role in the grand scheme

of things. Can you identify for the Court the irrigation schemes where you're the lead consultant in the permit renewal process?

A. Yes, so if I just work – I work from catchments so in the Taieri catchment we represent all of the Strath Taieri irrigators. We have some irrigators
5 in the main stem of the Taieri. We've got all of the Styx irrigators so they're a little, that upper terrace, a little subset.

Q. Is that upstream of Paerau?

A. Upstream of Paerau. We have the Pigburn irrigators, we have the Ewe Burn irrigators. They are tributaries of the Taieri.

10 **THE COURT: JUDGE BORTHWICK**

Q. Is that Kidburn?

A. Pardon? Pig.

Q. Pig, oh, right, Pigburn and Eweburn, did I get that right?

A. And Eweburn, yes. Both tributaries of the Taieri. And then there are a
15 couple of little – they're not rats and mice of course but individual permits on individual farms. And then over the hill we have...

EXAMINATION CONTINUES: MR PAGE

Q. So before we leave the Taieri –

A. Yes.

20 Q. – did you – were you involved in Kyeburn?

A. Yes, so we finished Kyeburn though. They've secured their permits and now they are working to implement their consent conditions. And then over the hill we have the next catchment is the Ider Valley and the irrigators at the southern end is the Poolburn tributary of the Ider Valley
25 so we have the private right-holders in the Poolburn and then we've got the Ider Valley Irrigation Company which own the Manorburn and the Poolburn Dams. And then over the hill, the next hill, we have the main stem of the Manuherikia and our clients in the Manuherikia, the Manuherikia is a collective effort of three consultancy companies and we
30 are responsible for the Lauder Sub-Catchment Group, the Thompson's Sub-Catchment Group, the Blackstone Irrigation Company, the Manuherikia Irrigation Company and for reference the Manuherikia

Irrigation Company is the one closest to Alexandra and I think that's got the McArthur Ridge, and it's got a lot of shareholders, many hundreds of shareholders. Over the next hill into the Pyser into Lake Dunstan we have the Pyser Irrigation Company. We have all of the irrigators in the Bannockburn area which includes the Carrick Irrigation Company. We have a few of the irrigators in the Lowburn tributaries. We had the Lindis Irrigation Group. They're finished. We have a few in the Hawera area and then over the next hill going towards Wanaka we have some irrigators in the Cardrona catchment and I think that's it.

5

10 Q. And what about the Arrow?

A. We are assisting behind the scenes for the Arrow guys. They have another planning – another company that are running and we are helping behind the scenes.

15

Q. All right. So that breadth of experience has informed your evidence has it?

A. Yes, that's right.

20

Q. I want to talk about paragraph 7 of your summary where you say that: "So in the driest time of the year when farmers are already worried about dwindling water availability they will be releasing further water into the creeks and rivers". What do you mean releasing water? Where's it coming from?

25

A. And so the proposals that we've established in the applications are about understanding what residual flows is needed at the point of take and so where the water is coming from is from what would normally be abstracted so we've had – the science has determined what needs to stay in the creeks and that water goes to the creek first and historically that would have gone onto the paddocks.

Q. Okay. Thinking about Falls Dam for the moment, at the head of the Manuherikia Valley –

30

A. Yep.

Q. – what role does water release from Falls Dam play in habitat retention in the main stem of the Manuherikia?

THE COURT: JUDGE BORTHWICK TO MR PAGE

Q. What role does that currently play or is proposed to play?

A. Well my question's directed at currently play Ma'am.

Q. Okay, right, Falls Dam, currently play.

5 EXAMINATION CONTINUES: MR PAGE

A. Yeah, and so that is relevant for the takes out of the main stem and so in that instance, we – Falls Dam is storage for those takes and the more that is required in the river, whether it be a minimum or a residual, that will come from Falls Dam but it's not a massive reservoir so eventually that will also come from the takes cutting back.

10

Q. Okay.

THE COURT: JUDGE BORTHWICK

Q. Sorry I didn't follow the last bit. Eventually that will come from the takes cutting back so now you're actually talking about the future or about the current?

15

A. That could happen now as well. It does happen now. Falls Dam at only 10 million cubic metres will run out very quickly if they don't share it carefully and so already what happens is the takes reduce so that the voluntary minimum flow of 900 is maintained as the dam starts to reduce in its volume.

20

1500

Q. So voluntary minimum flow – we've heard about that as applies at the campground at Alexandra, correct?

A. That's right.

25

Q. Who are the parties to that?

A. There are four parties who are owners of Falls Dam: Omakau Irrigation Company, Manuherikia Irrigation Company, Galloway Irrigation Society and Blackstone Irrigation Company.

Q. And it's those entities that reduce their taking of water to ensure that there's more in the main stem is that what you're saying?

30

A. That's right.

Q. To hit the 900?

A. That's right.

Q. As oppose to Falls releasing water to hit the 900?

A. It's a combination.

Q. Of both?

5 A. Of both.

Q. Okay.

A. That's right, so they try and manage it so that Falls will last as long as possible through those dry summer months.

10 Q. But individual farmers on the Manuherikia they're not asked to do anything in terms of that 900 litres per second in terms of...

A. Currently on the main stem that's where some of the priorities come into play as well so in the whole catchment if they're starting to cut back and if Falls is open, then they do call those priorities and ask for some of the takes to turn – to cut back or turn off as well.

15 Q. Right and we'll get to it later in terms of how those deem permits operate. Okay.

EXAMINATION CONTINUES: MR PAGE

20 Q. So thinking about Falls Dam for the moment, we've heard from a previous witness that there's a residual of 500 litres per second that applies at the Outlet Falls Dam, are you familiar with that?

A. Yes.

Q. Does that residual frequently bite?

25 A. No. No, that's a safety net on the consent and it's rarely that low, so it's – if you have a look at the hydrology, and I don't have that, and Matt Hickey would be better to talk to you about that, it's rarely at 500 at the bottom of Falls Dam.

Q. And working our way down the main stem of the Manuherikia there's a minimum flow at Ophir in schedule 2A of the regional plan water isn't there?

30 A. That's right.

Q. Do you remember what that is?

A. 820.

Q. 820. What impact does the Manuherikia Co-op Society's priority have on how that minimum flow is met?

5 A. Yes, so again that's a flow that we rarely see: 820. As low as 820 because below that are two abstraction points of irrigators who are part of Falls Dam and part of working together in that catchment and so there is an understanding that the water for both Manuherikia and Galloway have to flow past Ophir so that flow at that site is routinely much higher than 820 to achieve the flow to the takes as downstream.

10 Q. Right. And so is the voluntary campground minimum flow lower still in the catchment below the take points of Manuherikia Irrigation Society and Galloway?

A. Yes.

Q. And does that explain why that's been adopted?

A. Yes.

15 Q. I want to talk about Taeiri for the moment. How is the schedule 2A minimum flow at Paerau maintained?

20 A. So during the middle of summer the Paerau ware sits in the middle of the Taeiri River. That is a portion of the Maniototo Irrigation Company's infrastructure and there is a residual flow on their permit for the Paerau ware of 850 litres a second so that must flow past before they can take any water at all.

Q. And is that the same as the minimum flow that's in the regional plan at Paerau?

A. Yes. Yes.

25 **THE COURT: JUDGE BORTHWICK**

Q. Is that a condition on their consent or something else?

A. It's a condition on their consent.

Q. Okay so what was that, 815 was it?

A. 850.

30 Q. 850, okay.

EXAMINATION CONTINUES: MR PAGE

Q. And what's the expiry date on the MIC consents for Loganburn?

A. Loganburn and Paerau: 2034.

Q. Working our anything down the Taieri Catchment the next minimum flow site, is it Waipiata?

A. That's right.

5 Q. And can you explain the circumstances of that?

A. So Waipiata has a 1,000 litres a second and between Paerau and Waipiata there are several tributaries but there are four permits on the main stem and so there are two deemed permits and there are two RMA permits and we heard from Mrs Sangster yesterday. Those farmers flow share to ensure that they achieve the 1,000 at Waipiata.

10

Q. Now the Loganburn Reservoir was raised in the mid 2000's or thereabouts. Does that have any role to play in maintaining the minimum flow at Waipiata?

A. Yes so when the Loganburn's Dam height is within the raised section of the dam...

15

THE COURT: JUDGE BORTHWICK

Q. Sorry say that again?

A. So if the water in the dam is higher than the old dam height, so sitting in the icing, so they applied for a permit, got a permit to raise it, so we've got a big chunk of icing on the top, so if the flow is – if the height of the dam is in that icing section and the flow at Waipiata goes below 1,000 the dam has to release more water until it gets to 1,200. So what happened is that in raising the dam, MIC asked for – basically asked to store more water and ORC said yes, but you need to help maintain the health of the Taieri should it get very dry with some of that stored water.

20

25

EXAMINATION CONTINUES: MR PAGE

Q. Okay and just so that the transcript makes sense, when you're referring to icing, you're adopting a cake analogy. You're not referring to when the dam's frozen?

30 A. No. No. It's related to food.

Q. Yes. And so moving down the Taieri Catchment still, the next minimum flow point is at Tiroiti.

A. Yep.

THE COURT: JUDGE BORTHWICK TO MR PAGE

Q. How do you spell that?

A. T-I-R-O-I-T-I.

5 EXAMINATION CONTINUES: MR PAGE

Q. And is the Tiroiti effectively the control point for the Kyeburn Irrigators?

A. Yep, 12,500 is the minimum flow at Tiroiti. It controls Kyeburn, Sowburn and two other abstract – three other abstractors in that stretch.

10 Q. Yes. And you said earlier that Kyeburn's been reconseented and that includes Sowburn does it?

A. Swinburn.

Q. Swinburn, I'm sorry.

A. Yes.

Q. And so what's the term of the permits on that?

15 A. They got 35 years.

Q. From?

A. Oh, two years ago.

Q. So moving down the catchment again from...

THE COURT: JUDGE BORTHWICK

20 Q. Just pause there for a second. Tiroiti, 12,900 litres per second.

A. Five.

Q. 12,500 litres per second is what, a minimum flow or something else? So this is...

A. Minimum flow in...

25 Q. In schedule two?

A. Yep.

Q. A? Okay and is that imposed on anybody's consent or is that...

A. Yes, it actually is on – randomly it's on a couple of the consents.

Q. Randomly on a couple? Okay.

30 A. And all the others have been – they expect it to be applied when the review clause is exercised.

1510

Q. So I wasn't sure whether you were just telling us what's in schedule two or whether you were saying that the whole of the flow of the Taieri is geared to meeting the minimum flows at the various places downstream.

5 A. So what's happened is that ORC over the years have been inconsistent on whether it's been applied or not applied. And so on some permits it has and on some it hasn't and so what's happened is the irrigators have said, "well actually we'll (inaudible 15:10:23) it", and so that has become their targets for how they flow share and they anticipate that it will be applied to those permits in the near future.

10

Q. Okay so your evidence is irrigators are managing use of water on the Taieri to ensure that the minimum flows in schedule 2 are met?

A. That's right.

EXAMINATION CONTINUES: MR PAGE

15 Q. I think we have a decimal point in the wrong place. Did you say 12,500 litres a second or 12,050?

A. One-two-five-oh.

Q. One-two-five-oh, thank you.

THE COURT: JUDGE BORTHWICK TO S MCKEAGUE

20 Q. Right and I think one of the questions that was, yes, we were – one of the questions that we've been interested in a long time is just how those schedule 2A minimum flows and allocation limits have been applied or not applied – anyway your evidence is, inconsistently.

A. From the ORC yes. From the farmers, they are numbers that need to be adhered to.

25

EXAMINATION CONTINUES: MR PAGE

Q. And so moving downstream from Tiroiti can you describe the situation between there and the next minimum flow that's at Sutton? Is that where the Strath Ta Irrigators are located?

30

A. Yes it is and I've just had a thought. I'm looking at Maheke. Sutton is twelve-fifty. That, I've got the wrong number. Tiroiti is eleven-fifty. My apologies. As soon as you said Sutton.

Q. I'm sorry this wasn't intending to be a memory game.

5 A. I know, I've – so, yes I would need to check. So yes, all the Strath Tairei Irrigators sit between Tiroiti and Sutton. They are on the main stem and they are on the tributaries, so they're a number of permits in both those locations between those two stretches – in that stretch.

Q. And are the Sutton – the Strath Tairei Irrigators applications all in?

10 A. Yes, they came in stages. A big group of them came in year and a half ago, 18 months ago and the last ones came in last year. Yes. Need to check those minimum flows now. Now that we've – now that you've said Sutton.

Q. Do you want to have the chance to do that?

15 A. No.

THE COURT: JUDGE BORTHWICK TO S MCKEAGUE

Q. You might, you actually, you might need to because this is whole picture thinking and this is evidence coming out for the first time. Okay so it's important.

20 A. Yes I'd like to get that right. I'd like to get that right. Yes.

LEGAL DISCUSSION – HOUSE KEEPING (15:13:21)

MR PAGE:

Madam Registrar could you find for the witness, volume 1 of the common
25 bundle. And we're looking for document under tab 2. And I think we're
looking for page 12 – sorry common bundle, page 364, I think.

EXAMINATION CONTINUES: MR PAGE

A. Thank you. Yes.

30 Q. And now having committed that to memory.

A. So my apologies, Waipiata, we got right at a thousand. Tiroiti one thousand, one hundred and Sutton is twelve thousand – I mean, one-two-five-oh.

5 Q. One-two-five-oh. Thank you. So, what's your understanding about how much of the primary allocation in the Tairei catchment above Sutton actually remains to be re-consented?

A. So when Plan Change 7 first came out we did some maths and we worked out that if we take out the non-consumptive takes and we're just looking at the consumptive takes, over or close to 70% of the water in the catchment has already been allocated. Now that's not 70% of the permits, there are still a lot of permits and pieces of paper, but the water, 70% of the water has been allocated.

10 Q. For a term...?

A. Of 15 years or more.

15 Q. Thank you. Those are all my questions Ma'am.

THE COURT: JUDGE BORTHWICK

Q. So I just want to check who wants to do examination, obviously ORC and Fish & Game, yes. Do you need to – do you want to think about all of that evidence because we could just take the afternoon adjournment now if you want to collect your thoughts or are you happy to press on?

20

MR MAW:

A. I might press on for a little bit.

CROSS-EXAMINATION: MR MAW

25 Q. Good Afternoon. I want to start with your evidence-in-chief and in particular, the section which starts at paragraph 15 about what you say are inconsistent messages related to data and knowledge?

A. Yes.

30 Q. And you've copied in your paragraph 15, some of Mr de Pelsemaker's evidence in relation to the current lack of data and insufficient knowledge. You go on in your paragraph 16 to note that that's inconsistent with a Council report in relation to priority catchment minimum flows presented

on the 27th of June 2018. Now that report would have been prepared prior to the NPSFM 2020 having been gazetted?

A. Yes that was when they were preparing for minimum flows.

5 Q. And, therefore, the minimum flows that had been set in that report or recommended in that report would not have had the benefit of being set through the lens of community visions having been established under the NPSFM 2020?

A. That's correct.

10 Q. And when you look at one of the reasons that Mr de Pelsemaker has given his reason B, the distribution of other values supported by ground water and surface water, in relation to other values, those values might include cultural values?

15 A. Yes they might include cultural values but you'll see on some of those drip jigsaws is that the cultural reports were coloured in, so I hear what you're saying, but ORC was still saying in 2018 that they had done some of that work. Perhaps not all of it, but they had said that they had done some of it and they were ready to roll.

20 Q. Now when I look at your drip – oh sorry, I don't think they're your drip diagrams, when I look at the drip diagrams in your evidence, I see that the piece of the jigsaw in relation to cultural values, for example, is missing from two of three?

A. Yes so Arrow is there. Manuherekia and Cardrona are still to be filled in, yes.

25 Q. And so when Mr de Pelsemaker refers to a need to better understand other values, perhaps those are some of the values he had in mind?

A. Perhaps they are, yes.

Q. Your paragraph 17, you go on to refer to the ORC having considered they had enough ecology and hydrology information in order to determine minimum flows?

30 A. Yes.

Q. As, well do you have an understanding of the NPSFM 2020?

A. I'm not a planner no, and so I do rely on the rest of the team that work with the farmers alongside me to bring that to the table.

1520

Q. Do you understand that when establishing minimum flows and residual flows, there are a range of values in addition to ecology and hydrology that need to be considered?

A. Yes I do.

5 Q. You go on in this part of your evidence at your paragraph 20 to refer to evidence from Mr Hickey which he set out in his Table 2, highlighting that ORC do indeed have the data required to understand in this context the Arrow, Upper Cardrona and Manuherehia Rivers amongst others?

A. Yes.

10 Q. And when you look at Table 2 in Mr Hickey's evidence, there's no reference to cultural values in that table?

A. Yes.

Q. Yes there's no reference or...

15 A. I agree with you. I agree if you're quoting, I haven't got the table in front of me, but I trust that that's correct.

Q. And in relation to amenity values?

A. I have to trust you, I haven't got the table in front of me.

THE COURT: JUDGE BORTHWICK

20 Q. We're happy to provide you the evidence. I know it's horrible being asked to – not that I think Mr Maw's a liar –

A. No.

Q. – because I don't think he's a liar but it probably will feel better to actually have it in front of you. So just get Mr Hickey's evidence from OWRUG which is Tab 37.

25 CROSS-EXAMINATION CONTINUES: MR MAW

Q. And it's page 13 of the Hickey brief.

A. Yes, no amenity list, no amenity there.

Q. And no cultural values?

A. Not on that list, no.

30 Q. Perhaps in fairness, with the exception of key threats to indigenous ecological values? No recreational values?

- 5 A. I would have to, to be sure, I would have to read the paragraphs ahead of that. In that table there is not, however, some of these areas build to feed information about recreation values and so I couldn't say for sure, but, for example, if you've got water quality data, then you can determine if swimming spots are suitable for swimming. If our kayaking spots are suitable for kayaking. So it's not specifically saying, tick for a recreational value, but it's got some of the information that you build up to make that assessment.
- 10 Q. You accept that it's only a subset of the information required to establish or to understand flows necessary to sustain recreational values? It says both a water quality and a water quantity component?
- A. I couldn't say for sure actually, if it's a subset, it's, it looks fairly thorough to me but it's not my area of expertise.
- 15 Q. I want to move on now to your paragraph 27 and in your paragraph 27 you are discussing some of the work that is undertaken by neighbouring businesses to work together in terms of managing the water resources?
- A. Yes.
- 20 Q. And you note that despite, this is the last sentence, despite complexities within the catchments that you have been working in, you've always been able to achieve a co-ordinated approach?
- A. Yes.
- 25 Q. Now in terms of the reaching or achieving a co-ordinated approach, is it fair to say that that's occurring in the absence of regulatory drivers, so community is working together, absent anything in the planning regime to come up with the flow sharing regime that the community considers is fair amongst the various abstractors?
- A. I'm not 100% sure what you mean, "in the absence of regulatory drivers", so could you just explain a little bit more?
- 30 Q. So when these groups are I guess looking into the future in terms of a world post priorities, the way in which the water resource is shared, the discussions in relation to that sharing are occurring as between members of the group, not to give effect to a particular planning provision?
- A. So how it works is that they first of all start with well, what do we need to leave to look after the river or the creek and then what is left, what is left

for us as a group that rely on that surface water, for us to share and how do we share what's left in a way that is fair amongst ourselves. But I don't think that's what you're asking.

5 Q. No, it does help, so let's assume there's a minimum flow and that part of the jigsaw puzzle has been understood –

A. Yes.

Q. – the basis on which then the flow above that minimum flow is to be shared is determined amongst the group according to principles that as a group they determine appropriate?

10 A. Yes, so I guess there's two cases there. If there's already a minimum flow in place such as the Taieri, then it's easy, we set a safety margin above that and I heard Mrs Sangster say yesterday that we, the minimum is 1,000 on the Taieri and flow sharing starts at 1,200 because if the minimum flow is breached, everybody is off. So you stay away from
15 minimum flow and in that instance it's a clear regulatory signal. In the other situations where we are developing the proposals that have gone into the applications, we know there will be a minimum flow at camp ground, we have worked to see, have put all of our information to see what that would be and we also determined if there is a residual flow and
20 then the sharing regime has to meet both of those, so the mechanism is what the farmers have offered as the proposed regulation in the future. They've offered it for consent conditions. Does that...?

Q. I wonder whether we might take a step perhaps back in time –

A. Yes.

25 Q. – so prior to the preparation of applications for replacement permits. My understanding from evidence given by other witnesses is that flow sharing amongst members of a community is it a reasonably common occurrence across the region?

A. Yes. Yes.

30 Q. And that flow sharing agreements have been entered into voluntarily between members of a community?

A. Yes if they are not predetermined by location or mining rights or priorities?

Q. And evidence has been given, in fact, a significant number of witnesses called during the Cromwell weeks, that the priorities themselves weren't

often being exercised, but rather the flow sharing agreements that were in place amongst communities establish the basis upon which each of them took water?

- 5 A. Generally the flow sharing agreements come after the deemed permits have been replaced, so the active flow sharing agreements like Kyeburn have got a very strong one, all of their deemed permits have been replaced and a flow sharing agreement came in after that.

THE COURT: JUDGE BORTHWICK TO MR MAW

- 10 Q. I think we might take a break there. I'm not sure that was the evidence last week, but, and I know where you're going with this but you also have to consider to what extent is the voluntary flow sharing empowered by a priority sitting there, it's the stick.

A. Yes, I'm getting to that.

Q. Yes, okay, all right. We'll take the break.

15 **COURT ADJOURNS: 3.31 PM**

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30

COURT RESUMES: 3.48 PM

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Thank you your Honour. So before the tea adjournment we were discussing flow sharing agreements and the drivers sitting in behind those
5 flow sharing agreements. I'm interested to understand in relation to flow sharing agreements that are currently in place, whether the exercise of deemed permit priorities has placed a role in underpinning those flow sharing agreements. In your experience have deemed permit priorities in the catchments that you're familiar with been exercised historically and if
10 so, in which catchments?

A. So, it's variable across all of Otago and I think that's why it's confusing.

THE COURT: JUDGE BORTHWICK TO S MCKEAGUE

Q. Sorry variable across the what?

A. All of Otago.

15 Q. Oh, of Otago. Okay

CROSS-EXAMINATION CONTINUES: MR MAW

A. Yes and so there are some catchments where it's crucial and they basically hold the catchment, I guess to account and Manuherikia main stem would be one of those catchments. So the very – but not the very,
20 but one of the lowest takes in the whole system has got highest priority. So even though they flow share in that catchment, we have still got deemed permits. They have a flow sharing agreement that is part of the Falls Dam governance and paperwork. There is still a back stop of that high priority sitting there as I guess, a bit of an incentive to everybody to show. In other catchments such as this...
25

Q. I wonder whether we just might press pause there and deal with each of the situations that you described. So, staying with the Manuherikia for now, my understanding was that the water supply agreements that are held as between abstractors and the Manuherikia Irrigation Company, the
30 operator of Falls Dam is regulating the flow sharing within the Manuherikia, is that your understanding of the current situation?

- 5 A. So Roger Williams, is this what you mean? Roger Williams is the operations manager and he is responsible for ensuring the water is delivered, he's responsible for monitoring falls and collectively with the Falls Dam Company calls the sharing ratios. So as the dam starts to drop and the river starts to drop the – Roger in – delivers the technical information and the Falls Dam Company decide, "we're on 50%, we're on 75%", however that works so it's a management governance decision. Yes.
- 10 Q. So in that sense the flow regime that is occurring is a function of the decisions being made by the Dam Company together with technical input pursuant to the flow sharing agreement?
- A. Yes, they have – yes.
- 15 Q. So in a sense that flow sharing agreement has replaced the exercise of the deemed permit priorities that may exist within the catchment?
- A. It is an agreement that stays alive for as long as the parties are in the tent. The priority sits behind and is also alive and encourages compliance to that agreement. So they work hand-in-hand. If the priority was gone then there's a vulnerability in that flow showing, in that catchment. So they just – they work together. Yes.
- 20 Q. So, looking ahead then to the point in time when the priorities will expire, is the intention to continue on the flow sharing agreement as it has historically been or is there a change being proposed in terms of the flow sharing vis-à-vis the order of previous priorities?
- 25 A. So, the intent is mostly to stay true to what has been happening. So, the irrigators you know as I explained have been working towards this comprehensive proposal of minimum flows, residual flows and the bones of it is similar to what we've got now but *more* water in the river. Because we are not – there is no green fields situation, everybody has been irrigating for quite some time. There's investments, there's decisions, 30 there's all sorts of things that have happened so, it's quite important that it doesn't get thrown up in the air and then re-landed. That we basically assist the irrigators in trying to hold it steady, similar but with more environmental gains than what previously was happening.

Q. So in that context, the absence of a priority is not precluding a flow sharing agreement or flow sharing agreements being entered into by various abstractors in the catchment?

5 A. As I have said that the – what the priority does, is means it incentivises everybody upstream to stay in the tent, otherwise there’s an element of, “well actually all the water is right beside me, there is no back stop now to stop me taking that water, too bad about the person down the stream. It’s, water, it would be like, I’ve likened it to, water is income and if you had four neighbours in a neighbourhood and you said, well actually, in 10 the middle of summer there’s one bucket and actually there’s not enough money for all your salaries, so the behaviour would be, I assume that the person closest to the bucket would take their full salary and the rest would miss out. So we’ve incentive- priorities incentivise it to go, actually, no we’re all going to take 20%, we’re all going to take 30%.

15 Q. But looking into the future, the priorities are going to fall away?

A. Yes.

Q. But the falling away of those priorities hasn’t acted as a barrier to communities working together to establish flow sharing arrangements?

20 A. So now we’re – so in the Falls Dam it’s a particular case in point and so the priority of the one downstream motivates everyone to stay in the tent. There are other elements of that catchment, so what also happens is other permits on tributaries are called off at the same time as flow sharing happens. So we will lose that leverage, if we roll over without something to hold steady on the priorities or flow sharing, we then lose that leverage 25 as well, so in some instances it’s not going to matter, in other instances it is going to be crucial.

Q. Put PC7 to one side for a moment, the priorities will have expired by the time the, any replacement permits come to bear?

A. Yes.

30 Q. And so the priorities or the absence of the priority is not in and of itself precluding community engagement to establish flow sharing arrangements?

A. That’s right, yes are dead right, however, flow sharing arrangements is a really tough job. It take a lot of time to say, everybody to say, well actually

I'm going to give up 10% of my income or 30% of my income. So it's the energy and the time required to nail those flow sharing agreements that isn't possible in a short term quick, you know, efficient permit, so it's a bit of a – we've started the energy now to make that work and I think
5 Mrs Heckler talked about the Upper Lauder, there are other catchments or other sub-catchments that we haven't quite nailed yet because it takes a lot of people in the tent to try and work it out.

Q. Right so we've touched on the Manuherekia, have you some other examples where priorities are currently being exercised?

10 A. So other examples where we've got flow sharing to minimum flows, there are sub-catchments of the Manuherekia that exercise priorities, Kyeburn has been replaced and it has got flow sharing instead of priorities. No I'm not familiar with any other, well other than the sub-catchments of the Manuherekia. It doesn't mean they don't happen, but I'm not familiar,
15 yes.

Q. Right, so just to be really clear, your evidence is that the only situation where you understand priorities to have been or being exercised is the Manuherekia?

A. Oh no, Pig Burn. Pig Burn as well, so they're in the Taieri, the Pig Burn
20 exercise priorities and I think you might have heard from Mrs Weir and Mr Herlihy.

Q. Do you have a direct understanding of the exercise of priorities in that catchment or should the Court differ to the evidence from those primary witnesses?

25 A. Yes, no I'm not familiar enough, I know the priorities are important, but I'm not familiar enough with how they call them on and off.

Q. And in my language as to whether or not the priorities are currently being exercised?

A. Yes they are. I know they're being exercised.

30 Q. Right, well let's be really specific. So which catchments, so you say the Pig Burn?

A. The Pig Burn, they are being exercised yes.

Q. And the consent holders there that you are familiar with?

A. Yes.

1600

Q. Sorry what the consent holders' names?

5 A. So, the two Mr Herlihy's, Mrs Weir is in that catchment and there are – there's other – there's Concept Farms, I don't know a Chris, has Chris and Dale Mulholland given evidence, they're in that catchment?

Q. Okay, so that's your evidence in relation to the Pig Burn. Are there any other catchments where you have direct knowledge of priorities having been exercised as between competing users?

10 A. So other than the Pig Burn and all of the Manuherikia.

Q. Now when you say, "all of the Manuherikia", is that different to the examples given on the Main Stem?

A. So, yes.

Q. Can you help me understand what you mean?

15 A. So, the – when the Falls Dam is being released and then also the flows – flow sharing has started then there are a number of lower priority permits that are on the tributaries that currently get called off because the priority is on the Main Stem.

20 Q. Now is that situation one relating to deemed permit priorities or is that a situation relating to RMA permits for which written approvals from OWRUG may have been required say a decade ago?

A. Yes, my understanding is it's both and it relates to a date on a particular permit but I would need to check that, I'm not 100% sure. It's more than just the RMA permits.

25 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Is that your question about written approvals?

A. Yes I was trying to understand whether it was the exercise of a priority or a function of the written approvals that had been required by the Dam Company for RMA permits.

30 Q. So, there was some evidence last week that up until a certain point in time but no longer is the case, that whenever there was an application for a permit that it was usually sent to somebody – who was it? Falls Dam or –

A. Yes.

5 Q. – Omakau for their – as an affected party and because of that then there was a negotiation by Omakau to have the tributaries come into the tent, if you like in terms of the flow sharing or flow agreement anyway for the Main Stem. So they exercised the need to – or the desirability of gaining Omakau’s Irrigation Company’s approval was the leverage used to bring them in the camp –

A. Yes.

10 Q. – or in the tent. And so the question is, is there – is the Tribs’ participation more as a function of that or is it a function of deemed permits? And if it is deemed permits, whose deemed permits? So it sort of got two elements.

15 A. So my understanding is that it is both. It’s those RMAs that had to you know, come into the tent and then it is the deemed permits that were issued after a certain date and I want to 1914 but I don’t know for sure. So there is a date of a deemed permits that also fall into that category. It’s actually a situation that the new regime is abandoning because a lot of those permits are on the tributaries and the new regime that’s put up in the application looks to deliver a significant residual at every – at the bottom of every one of those big tributaries and we’re acknowledging that those tributaries lose water pretty quickly and those takes an already naturally cutting back through summer dry. So that’s what happens now but it’s not what it is proposed to carry through in the future. So, it’s one of the things that is looking to be tweaked but the hydrology plan is that

20 the big – decent-sized residuals coming out of those tributaries will help support the Main Stem and it’s those Main Stem takes that then will and the Falls that will help balance the minimum flow at camp ground so that’s mostly we’re not looking to reinvent the wheel because it just makes it too complicated, but that was one of the things that did seem to be logical.

25 Q. And so in that context, the priorities themselves aren’t driving the flow sharing to come, that’s something that’s been negotiated out as between members outside of the planning process?

30 A. Yes but, that’s the idea, all of the fine tuning behind has to still happen and that’s how we would replace the priorities and be sure that the

minimum and the residuals are being adhered to and everybody signs up to the Manuherikia Catchment Groups proposal, it will go on as a consent condition and if you're in a sub-catchment, then that would be a consent condition as well that you are assisting the rest of your other abstractors on that sub-catchment to achieve that bigger, residual at the bottom, so there's – the proposal is that there are these steps all the way through to replace that.

5

Q. My understanding is there's been some testing of various scenarios?

10

A. Yes, yes there has been, mostly the one that I think might have been described to you was the Lauder Creek one because the Lauder Creek has got a substantial amount that goes to ground water and so mostly that was about if – how much do we need to leave to keep – can we keep surface water connections so we needed to understand that. Mahiki and Roger Williams were at the helm of that and NIWA, you know, helping, doing, but then also if the farmers stop taking their abstraction, let that slug of water go, where does it turn up and how long does it take? So that was the farmers trying to understand this resource and what would be the best way to measure it and manage it in the future.

15

Q. And so again, in so far as that assists understandings in relation to flow sharing agreements, that's happening outside of the confines of existing consents?

20

A. That is happening to understand the resource, so that the proposal that is put up is as strong as possible and that if surface flow is what needs to be there or is what's naturally there, then that's what needed to be delivered in the application, so it was about, that one was about understanding the resources as much as possible.

25

Q. I want to keep working through any other examples where you have direct knowledge of priorities having been exercised in catchments, if there are any others, so we've had the Manuherikia and the Pig Burn?

30

A. Yes and so I, my colleagues handled the Poolburn and Ida Valley Irrigation Company, so I am not, I could not comment on whether they are exercising their priorities. On one tributary in the Pisa, a priority is exercised.

Q. Do you – can you provide some more detail about that?

- A. It is a permit which has got two owners on it and priorities are, priorities come to the fore when we've got more than one take on a creek or in a catchment that's connected and so they're less important on tributaries that run into Lake Dunstan because it's got plentiful water supply, but there are, there's one permit, it has two owners on the Tinwald and it, there's priorities exercised to there. Just going through my head is a bit – it's a bit unreliable actually, but just off the top of my head that's as many as I could think about.
- 5
- Q. So the Pisa example, two takes from the same take point or two separate take points?
- 10
- A. Two separate take points.
- Q. And does the higher order priority have the lower in the catchment take point?
- A. Yes.
- 15 1610
- Q. And what was the name of the water body from which the water was abstracted?
- A. The Tinwald.
- Q. Tinwald. So in that situation, it's your understanding that the higher priority downstream is exercised or is it that there is some flow sharing as between the two permit holders, they work it out between themselves?
- 20
- A. There's flow sharing.
- Q. And are you familiar with the Lowburn?
- A. Only a couple of takes on the Lowburn. Little tributaries of the Lowburn, Tongue Spur, Thomas Johnson, not the main stem of the Lowburn, no.
- 25
- Q. Would it come as a surprise to you if the situation in the Lowburn was that whilst there were priorities, they hadn't been exercised, perhaps for the last 30 years?
- A. No it doesn't surprise me. It depends on, it just depends on the characters and the businesses that are being run, that's the case in the Taieri, they're, we heard from Mrs Sangster yesterday, there's deemed permits on that same stretch. They could call off the Sangsters as soon as they're not getting their maximum amount of water on their permit and they don't.
- 30

They roster off on and off with the Sangsters, it's just the characters that are in that stretch.

5 Q. It seems to be that that situation of flow sharing, sometimes by formal agreement, but often without a formal agreement, is the way in which the water resource is being managed and perhaps without reference to the deemed permit priorities, is that a – would that be your experience?

10 A. Yes and no. Like on the Taieri, it doesn't matter because of those characters and how they are with their neighbours. On the Manuherekia it is a little more fractious and the priorities help keep it in place and there are a lot of irrigators and so it's on the Taieri the example, they are four farmers doing their own abstraction for their own operation. On the Manuherekia we've got four companies and they're big companies, some of them and they are direct- there are directors and race managers who are responsible for doing the best that they can for up to 400 shareholders and they're little shareholders but it's – so they have to be a little more business-like in being sure that they've got some water that can go around all of those shareholders or if – it's not just their own business that they're making decisions for, so it's just a slightly different flavour in the different areas, yes.

20 Q. You made a comment in relation to there being no more greenfield areas for development. I have misheard that, do you recall what it was you had in mind?

25 A. I was referring to the discussion that we have with irrigators in replacing their current water that they are using and so that is, the situation is that we have got established farms and established businesses that rely on their buckets of water, we are not dealing with new buckets of water and a lot of flat dry land when we're replacing these permits, so that was my reference, yes.

30 Q. In your experience, is there a desire in the Manuherekia Catchment to expand irrigable areas on-farm or is the current irrigable area perhaps reflective of the water resource that is available?

A. So I can speak for my clients and what they say to me. No. In general, no. They're not expanding irrigable area. Right now, the feeling is one of extreme nervousness in holding steady in the water that they have

5 been using. They all know that some water has to go back to a residual and to a minimum. So water's going back to the environment, they know that. That has immediate impact on their most reliable water in the middle of summer. So, there isn't a general thought of expansion. There – it's like any business, they're always thinking, "how can I do this better?". I think that in my own business, how can I tweak this? How can it be more efficient? That's exactly what happens in all farming businesses but in general they are not expanding irrigable area. There's a few who are maybe looking at plentiful sources or you know, we've heard about people who are swapping from pasture to cherries, those sorts of things. But 10 overwhelmingly our clients are nervous about the future.

WITNESS REFERRED TO PARAGRAPH 33

15 Q. Right I want to head back to your evidence-in-chief if you still have that in front of you and at paragraph 33 you outline the steps where in relation to these applications, particular information is gathered in support of the application.

A. Yes.

20 Q. But when you've been working these applications, have you been gathering information on the types of land use occurring on each property?

A. Yes. So, if they're sheep and beef, if they are dairy, do you mean?

Q. Yes.

A. Yes.

25 Q. And does that information included in the applications for resource consent that are subsequently lodged?

30 A. Yes it is. If the application is a combination of say, 10 farming businesses then each farming business is referenced, if they've all got a point of take. If the application say for Manuherikia Irrigation Cooperative down the bottom, 400 shares holders then we've got tables and pie graphs, so it might say 20% is in vineyards and 40% is in orchards, that sort of thing. Yes.

Q. Now you've given some examples in your evidence of deemed permits already replaced.

A. Yes.

WITNESS REFERRED TO PARAGRAPH 51

Q. And you stepped through a number of the catchments including in the first instance Kyeburn? And I'm at paragraph 51.

A. Yes.

5 Q. And in relation to the permits that issued with respect to the Kyeburn were there any conditions imposed restricting the use to which land could be put?

A. No Kyeburn is all sheep and beef. So, no there wasn't any restrictions on – in the consent. That permit was replaced at the time that the regional
10 councils water quality rules were alive and the date was imminent that ORC have since taken the date out and so, in all of this – in the work for the Kyeburn that was at a time when the farmers appreciated that the leaching limit through Overseer had to be 30 kilos or less for everybody in the Kyeburn and there was a date for when that needed to be in place.
15 And the other thing that was in place at the time when the Kyeburn was being done was that the water quality leaving your farm had to be of, you know good water quality and so this group were doing quite a lot of discussion about sampling – what the next step would be to be sampling the water quality as it was leaving their properties to show that it – that all
20 the water quality was good and this group after finishing this project joined in co-operation with the ORC and did do some sampling of water as it left the farm. So there was no restrictions per se on land use but there were the permitted activity rules that the group were very aware of around what they could do as long as there were, you know, the leaching and the water
25 quality leaving the property was good.

1620

Q. And so the water permits issued don't have any controls in in relation to the land use, but rather there was reliance placed on the planning framework that was in place at the time?

30 A. That's exactly right and ORC at the time were putting a note on the bottom of every water permit that you must abide by the 6A rules at the time, yes and farmers took that seriously. They were sampling and they were understanding what their footprint was.

Q. And in relation to 6A, that's now disappeared off the planning books?

A. No. What's gone is the date.

Q. Well, the date.

A. What hasn't gone is there's still the requirement to gather all the information for overseer and the ORC could ask for that at any time. there
 5 is also – there's no dairy in this catchment, but there are still the rules around sediment movement of bare paddocks and being able to demonstrate that you've got mitigation in place if your paddocks are bare, so there are elements of 6A that are alive and mostly the clients that I've talked to, they expect, you know, 30 kilos of nitrogen leach, a leaching
 10 limit of 30 has been a rule, they do not anticipate that rule to be any easier when it turns up again in the future and the indications from the regulations are that it's on its way as part of the fresh water farm plan requirements and farmers are aware that that's the case.

THE COURT: JUDGE BORTHWICK

15 Q. What is the freshwater farm plan? What is that?

A. The certified freshwater farm plans that are being talked about in the NPSFM.

Q. All right and that 30 kilograms of nitrogen presumably per hectare per year?

20 A. Yes that's right.

Q. That is a standard for a permitted activity and that was in chapter 6A?

A. Yes that was across – that's right that was across all of Otago except the sensitive aquifers which were lower.

Q. Yes, okay. So your Kyeburn has been granted consent on the basis that
 25 indeed farmers will be achieving the standard for a permitted activity?

A. Yes it's an individual – it was an individual's responsibility but that's what's understood, yes.

Q. They're to run Overseer but they're not to provide Overseer to the ORC unless ORC requests it?

30 A. That's what's still alive, yes.

Q. Yes, okay.

A. Yes. Because they took the date out.

CROSS-EXAMINATION CONTINUES: MR MAW

- Q. So then you move on to the Lindis Catchment and the permits that were issued in relation to the Lindis, did they have any restrictions in terms of the land uses and/or any conditions relating to, for example, leaching from land?
- 5
- A. No they didn't. Again, they're in Otago, they picked up the 30 kilo permitted activity, there's again, there's no dairy in the Lindis Catchment.

THE COURT: JUDGE BORTHWICK

- Q. Is it your understanding that nutrient or contamination is only of consequence when one is undertaking dairy or perhaps dairy support?
- 10
- A. No, no, not at all. No not at all.
- Q. No. Okay, I just want to make that clear in my own mind, yes.
- A. No.
- Q. Well anyway, no land use controls on the Lindis Catchment?
- 15
- A. On their permits, on their consents to take.
- Q. Yes, permits, yes.
- A. That's right, yes.

CROSS-EXAMINATION CONTINUES: MR MAW

- Q. The next topic you discuss in your evidence is consent processing and your paragraph 58 you discuss the measurement and reporting of take regulations and there you note that you do not have any clients that not been measuring their water takes and in most cases there's good measuring in place, so when you think about the schedule 10A4 as the experts are now recommending to this Court, where there's a reliance on water metering records, based on your experience, water data is available?
- 20
- 25
- A. So part of that was in reference to Mr de Pelsemaker saying that it was poorly understood, so yes all of our clients measure their water and overwhelmingly their data can be relied on, however, we have got several.
- 30
- We've got – they've got these open channel measuring devices that are up in the woops where it freezes and it snows and they can't get there to fix them so we end up with chunks of data which are illogical and so there

are special situations where we need – I would like the flexibility to backfill with other bits of proof that they've been using their water.

5 Q. And the change is being recommended both to the schedule and the planning framework through the restricted discretionary activity seeking to provide that framework?

A. Mmm. I'm pleased to see that, yes.

10 Q. Your paragraph 62 you express an opinion that all of the information required to understand renewal applications is available. Do you accept that when you think about the NPSFM 2020, that there is additional information that now needs to be understood in order to ensure that there is sufficient information to process applications into the longer term?

15 A. Yes, so relying on my planning colleagues, I appreciate that Te Mana o te Wai has not been fully addressed in Otago. So that is a gap that we have. However, I believe that we've put in comprehensive applications which do give us some environmental gains and would be a strong step towards the future. I am particularly nervous of being in this particular space again where not just the permits that expired in October 2021 but all those other permits that have also been lodged for the last year and a half to two years, they all get six years and they all
20 come in again. This has been such a huge job and I – it's just daunting that we would be here again and that we wouldn't take an opportunity maybe to stagger this or to take some environmental gains now, in the places that we can have peace of mind, while Te Mana o te Wai and ORC get their plan in order, that's, it's just, it's scary the amount of work that
25 has hit the ORC now and for the farmers to follow through with.

Q. Might the information that's been prepared in support of some of these applications be equally useful in informing the new land and water plan and the flow and allocation regimes that it will need to establish to give effect to the NPSFM?

30 A. That's what we've telling our clients, I hope so.

Q. You mentioned or you gave some evidence in relation to the voluntary flow at the campground at Alexandra on the Manuherekia and my recollection was 900 litres per second?

A. Mhm.

Q. Are you aware what the MALF, the mean annual low flow for the Manuherekia is estimated to be at campground to put the 900 litres into perspective?

5 A. No. No. It's not – I know it's probably in the low thousands but this is not my area, so I would prefer not to comment.

Q. Thank you, those are my questions.

THE COURT: TO MR MAW

10 Q. Before we hear from Ms Baker-Galloway, in terms of evidence, I thought Mr Webb, you know, from Webbs Orchards, gave evidence on the Quarry Burn and the exercise of priorities there, he sold his permit but he was exercising his priority before he sold it about five years ago? So that's the Quarry Burn down from the Lowburn so there is evidence about priorities also from someone who used to have a permit where it was important to exercise. He now's relying on water out of the Dunstan.

15 A. That's right.

1630

Q. Yes, so just to point you in another direction you've actually got reasonably clear evidence from him.

20 A. Yes I mean – there's a range of evidence and that will be useful in terms of the getting of and understanding as whether there's a need to bring down the priorities and it's understanding the full picture of what's actually happening. Is the challenge.

25 Q. Okay, anyway. Yes, no it is a challenge and it is a challenge, anyway I just thought I'd bring that to your attention because he was actually quite clear in his own recollection. Yes.

A. Yes I'm just struggling to recall Mr Weir.

Q. Webb's Orchards.

A. Yes, I certainly remember Webb's. That was the infrastructure the sink infrastructure in the –

30 Q. Yes that was part of it.

A. – yes it was part of that yes. It was the Wednesday of that week.

Q. Okay.

A. Yes. Thank you.

CROSS-EXAMINATION: MS BAKER-GALLOWAY

Q. I wanted to go back to your answers in respect of the Kyeburn catchment and nutrient leaching. Just wanted to be clear, were you saying that it's your understanding that there's a condition of *consent* restrict, no – can you sorry, can you just re-explain how you explained the farmers' obligations in respect of nutrient leaching in that catchment?

A. Yes, so when the Kyeburn permits were being processed, the dates for the Overseer leaching elements in the plan – ORC's plan were alive and so those farmers knew at that point that – they already had to gather all the information for Overseer and they knew that that 30 kilos was on its way in. since then ORC have dropped the date.

Q. Moved the date.

A. They've still got the requirement that you got to keep all the information, so it was sitting as the permitted activity baseline while the permits were being processed, yes. Not a consent condition.

WITNESS REFERRED TO PARAGRAPH 47

Q. That's good. Thank you, just wanted to clarify that. Now, if you want to turn to paragraph 47 of your evidence and one of your statements in paragraph 47, third line from the bottom is, "if the controlled activity pathway was technically available", just wanted to understand what you meant about that statement?

A. So it wasn't available to our clients because of a number of things, but one of those things was the schedule and the averaging and some of the dates that were in there which have since been rearranged so in putting in the applications we couldn't even pursue that pathway for those clients. It would have – they would have lost water that they currently use.

Q. And have you familiarised yourself with the current version of the control activity rule?

A. Quite possibly not the latest of the rule. I am comfortable with the schedule and the maximums. I've not kept up with the planning and how that's tracking except, no, but I prefer not to actually go there.

Q. So you can't update that statement about technical – whether that controlled activity pathway would now be considered technically available?

- 5 A. Oh okay, so if the schedule is fixed and some of those dates, the illogical dates were gone, then it may be is available for the clients who were happy to rollover but the point is moot. All the applications are in and we didn't have that pathway so it doesn't matter if it's now there. What will have to happen is depending on the decision here, is what we do with those applications as farmers will have to give us some steer, do amendments, I don't know, so it wasn't available and the applications are done.
- 10 Q. If it became an option though, if that controlled activity rule became operative, it would be open for some of your clients to choose that six-year certain rollover pathway wouldn't it?
- A. We'll have to wait and see what happens. We'd have to just see how the whole thing lands really and give some guidance at that point.
- 15 Q. One of the comments you make right at the end of your evidence, paragraph 66, is an emphasis on confidence, you know, farmers make decisions based on trust and confidence. If there was a confidence that they could roll over their existing take in exactly the same form for six years wouldn't that be a material consideration?
- 20 A. So what you're saying is, would it reassure them if they got the water that they were using now for six years? No. It would not reassure them because they have worked hard to come up with solutions that are long-term solutions and they want to keep moving forward with their businesses or improvements just running their businesses better and a six-year automatic rollover of what they're doing right now will not
- 25 reassure them.
- Q. But I think Ms Dicey accepts and I think you accept that if long-term consents are granted now once the land and water plan is in place, they could be reviewed and changed?
- 30 A. That's right. We have seen review clauses work. The Waianakarua, I have got clients there. They did not have minimum flows on their permits. The Waianakarua minimum flow came in and those permits have the minimum flow applied. It was a very easy process. So we are comfortable that a review clause can work from the farmers' perspective. We also have the MPS-FM22 on the table and we've got the regulations

out. We have signals from central government. There are elements such as the certified farm plans. We know that they are on the way, so we are confident that we can make strong environmental gains. We can have a responsive and adaptive farming sector to changes and if a review clause is possible then that's a desirable outcome. Some of the changes that – and it's already been discussed. We don't know what's going to land in the new plan. If they're big changes, I anticipate, I could be wrong, but there will be transition windows anyway, if they are big changes and so I'm relatively relaxed that the farmers get a window to do environmental improvements. We have discussions and we land a new plan and then we bring in whatever is required in the future. So, yeah, review clauses, I've seen them work and they've been fine.

Q. So you don't seem them as a risk, and your clients, they're not losing confidence in the process knowing that that unknown could unwind the investment in their long-term consents?

A. The amount of risk and nervousness that the clients have got right now, yeah, they would like to see that they've got a longer-term permit to be able to make some choices on farm and that a review clause is standard on permits that are being issued anyway, so, yeah, they'll be nervous about it for sure, but they know a minimum flow is coming. They know that they'll have a voice in that consultation and be able to put their case, so I guess issue the permits and see what happens after that is where they are at.

A. Thank you. No further questions.

25 **RE-EXAMINATION: ALL COUNSEL – NIL**

1640

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. So why is that a better outcome for farmers: issue the permit, see where you're at with the land and water plan? Why is that a better outcome than rolling over the consents for six years? I'm missing something.

A. Yeah, because I guess it's where their heads are.

Q. Where their heads are?

- A. Where their heads are. We've had a lot of messages in the last 10, 15 years, that minimum flows are coming. The deem permits are going to expire and so you need to get your house in order. You need to get your efficient irrigation going. You need to have good measurements. You need to be able to prove that you're using that water really well and so that's where they're up to and all of those things are in place and then what happens is that these are expensive decisions that they have been making and so all the time, you know, is my bank on side? Am I tracking okay? So at the 11th hour, to be told, well actually no, they're six-year permits and no we don't have a minimum flow in place. We're not moving forward. You're going to be holding – you're going to tread water now for six years. It's just the opposite to where they were going.
- Q. And I understand that.
- A. Yeah.
- 15 Q. And, no, I understand how aggrieved many will feel for having responded to policy signals by the ORC and response of course with considerable investment lying behind that response and now there is – it's not even a re-direct on a policy, it's just a pause on the policy whilst waiting for the land and water plan, so I understand the grievance associated with that, immense stress well. I don't understand – I think what you are saying is that the position by your work has been taken by your clients at least, that having met their end of the bargain, if I could put it that way, in terms of responding to that policy, they are not prepared to now take the next step which is wait for a land and water plan, rather they wish their applications to be considered on the merits. Is that a fair summary?
- 20
- A. Yeah, I think that is fair but their end of the bargain has involved everything that they thought they needed to do.
- Q. Yeah, and I accept that, that that will be their view. It has involved everything that they needed to do.
- 30 A. Yeah.
- Q. And I might be wrong but it seems to me that there is that sense of grievance with where ORC has got to or perhaps where the Government's actually got to because it's called in the applications, that is informing a position on – to process the applications now as opposed to processing

the applications now and take the risk on a review as opposed to process an application in six years' time fully informed when a new land and water plan comes into being, is that correct?

5 A. Yeah, I think there's also an aspect of they're already tired because this has been going on now – ORC have been promising minimum flows for three years, four years and they didn't deliver and now they've done all this work for applications and then there is a land and water plan coming and so there's just an element of actually, can we just take the permits? Can we start doing our fresh streams, start doing our residual flows, have
10 a look at the benefits that we get and step out of this while the plan, the new plan, beds down and so there's – and then we'll come back. We're going to have to replace our permits later but can we just step out and do our thing?

15 Q. And I've forgotten whose evidence but a farmer gave evidence about being fed up with the process of being consulted because there's been so much consultation and so they want a consultant, so I do understand the need to step out of it, or the desire to step out of it. I think the Court's problem though is, well the challenge that the Court is facing is the consent now and review later, or don't consent now and get on with it
20 comprehensively in so many years' time, so that seems to be the crude choices that the Court has.

A. Yeah. Farmers have also had signals from the regional council that a lot of water could be taken off them and a lot of water, so at the moment there is on paper about – I might be getting it a bit – about 27,000 litres a
25 second allocated in the Manuherikia and there is a number sitting in 2A of about 3,500 or something like that. We're magnitudes out.

Q. Yes, but a lot of that's paper water. It was never taken anyway.

A. It is paper water and it is water that's taken in spring, not in the middle of summer and the volumes restrict so that those takes can't be taken 24/7
30 or the volume will blow out early in the season so there's all of these factors in there but the farmers have had messages from regional council that over the years that they don't understand any of that and that they're going to shrink – they've been told over and over that the allocation is wrong and it's too high so there is also...

Q. The allocation..

A. Is over allocated. It's overallocated and so the farmers are going well, how's that going to land also and so I think you would have heard if you do a six-year, what are we going to get after that?

5 Q. Yes. I don't know because I don't know what the messaging is.

A. No.

10 Q. And I don't know how that messaging is either being communicated nor translated and we've heard a lot of mistranslation as we've been sitting here listening to the evidence. So something which is schedule two which is over-allocated because of the existence of those deem permits, the majority of which is never taken anyway because it can't be taken under current infrastructural...

A. Yeah.

15 Q. Is that over-allocated? Well I mean putting aside the use, you know, the use of that word, where the MPS – if it is, it's not necessarily a cut back on the farmer to say, well take what your maximum is and so that's where this plan is going.

A. Yep.

20 Q. And so do you think there's a messaging issue or something being lost in translation in terms of the next plan or do you think, or is it your evidence ORC has been saying whatever your maximums are under PC7, whatever, they are going to chop you back, or is it just not clear?

25 A. So PC7, when there was the big farmer energy in PC7 was when it was notified so it was notified. All the submissions went in. Everyone – you know, this was really, really scary. There's this averages. There's these six years. We've been working on long-term permits for the last three years and so it was overwhelming and in it came in. It's then headed into Court and the farmers weren't in Court until last week, a week before and it's highly technical and so there has been discussion in Court but it's a lot of planning, a lot of planning (inaudible 16:49:29). Well the planners in my team do a lot of interpretation of what that means and so PC7 when it landed was really scary and it remains scary because in March all the application were lodged or the last of them and that was a huge volume of work. Farmers were reading all of this. They were thinking about

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whether they can deliver those residual flows. What's that going to do to their surety? Okay, so do we have to shift our points of take so their heads were over in the applications in March. Back to PC7 in April and May, so they've still got the, you know, those applications are this thick and we've applied for long-term permits and done our homework, so that's where their heart is and so the fact that PC7 is looking at six years and the rollovers are shaping to be a real rollover, it's a really big shift and so there's all of those elements that they've brought to the table around investments and security and reassurance. They are all alive. They're very valid.

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1650

Q. Yes, so my question was about regional council messaging after six years. Is regional council messaging that the takes as would be calculated under the schedule as it seems to be tracking, are going to be cut back or is the regional council messaging about those deem permits in that there would be a move to what farmers are using and not what's on paper?

15
A. Yeah, so there's no messaging coming from consents, no messaging.

A. From the consents team?

20 A. Because that's whose handling all of the permits.

Q. So where's your messaging coming from when you're saying that about overallocation and cutbacks, what are you talking about?

A. So that was all prior to the permits being lodged, so those messages were coming when ORC was doing all of their consultation and their tours to do with minimum flows and allocation, but originally they were going to do minimum flows without allocation. The farmers pushed back and said no you can't do a minimum flow without allocation, the two go hand in hand and the message then came from the regional council at farmer meetings, well be careful what you ask for. Allocation is going to be really scary. And so that is – what are we in now? So not very much happened in 2020 to do with the communication from the ORC – lockdown, so that would have been 2019.

30 Q. Okay. I was going to ask you another sensible question. I've forgotten it. Two other questions. You said that the consent holder on the lower

Manuherikia, by lower, I mean somewhere near the (inaudible 16:52:43) side, holds a consent with a high priority. Whose that? What consents are they?

A. Manuherikia Irrigation Cooperative Society (MICS).

5 Q. And where's their take of when to take?

A. Just as you come out of the gorge so oversets above – over its measuring sites, it's above the gorge and then the river goes through a gorgy part, so just above before Chatto Creek. You cross over Chatto Creek where the tavern is and the Donkey.

10 Q. I didn't notice the tavern and the donkey from a helicopter but I'll take your word for it.

A. The trout. Above – in there.

Q. In there.

A. Mhm.

15 Q. So is it below or above the gorge or in the middle of the gorge?

A. It's just at the bottom of the gorge.

Q. At the bottom of the gorge?

A. Yeah. So it's in a rock. It's in a real...

Q. Is this what it's called, the Hole in the Rock Take?

20 A. It's an incised.

Q. Incised, yep, I've seen that.

A. Yeah, it's very difficult to get to.

Q. I didn't see a donkey. Okay. But I did see that. We flew that twice actually. Okay. Falls Dam, whose the consent holder for Falls Dam?

25 A. Falls Dam Company hold the consents.

Q. Who are the shareholders?

A. The shareholders of Falls Dam are Omakau Irrigation Company, Blackstone Irrigation Company, MICS, so Manuherikia Irrigation and Galloway Irrigation Society.

30 Q. Now Omakau, Blackstone, MICS and Galloways, are they the four big schemes taking water off the main stem of the Manuherikia?

A. That's right.

Q. And are there any other individual consents also taking water off the main stem or is it just those big four?

A. No, there are a few individual permits.

Q. Plus a few individual permits, okay.

A. Yep.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

5 Q. You were asked some questions about water quality in relation to some of the consenting exercises that you're aware of.

A. Yep.

Q. And we'd already been advised that in terms of 6A that the date had now gone, but you drew us to Matt Hickey's table two which...

10 A. Is that the one I had before, yes.

Q. Yes. Yes. Where in terms of the data available, you've got the three catchments, the Manuherikia, the Cardona and the Arrow and that then has a heading that the SOE water quality data is available and then I moved on in terms of Matt Hickey's evidence and that talks to the information requirements that ORC are seeking in terms of the consenting processes that are underway and I note that those actually refer to quite a few – have quite a few references to water quality in terms of supporting the values such as the swimming and then what are the effects of the take on water quality and is it a few more as you go on down so I guess my question to you is in terms of these applications that have gone in, what has been done on the water quality front?

15

A. So we've got quite comprehensive water quality material in those applications. We have been particularly attentive in the areas where we know we've got some challenges so you will have already heard about the Thompson sub-catchment in the Manuherikia and quite possibly the Poolburn area, both those areas are our clients that are aware that there are water quality challenges and so not only have we, or Matt Hickey and Dean Olsen do all of our science, so that (a) includes summaries of the water quality but we have also responded with mitigation action to address any of those issues.

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Q. So does that involve addressing land use that might be creating the problems?

A. That's right it does because – so for the Thompsons Catchment they've already got a project going and they've all got environmental farm plans where they're looking at implications of business management on water quality. They're doing a series of sampling in and out of farms in the, what we call the sleuce channels. They have also been looking at galaxiids habitat and those sorts of things so, yes, we anticipated for a lot of these consents, that certified freshwater farm plans would be part of the consent conditions as would a response around the water quality, so Poolburn is another challenging area for the farmers where we've got some water quality issues and that irrigation company was sampling the water quality last year and the year before and getting an understanding of what was going on and how they would need to respond as well so farmers have – where it's required farmers have front-footed that issue and then for the full Manuherikia application, Matt Hickey and Dean Olsen did a comprehensive assessment of the whole Manuherikia and the main stem, purified and water quality, everything.

1700

Q. So is the end result of this some attempt to backfill the fact that 6A isn't live at the moment or is it just looking at hot spots rather than across the catchments?

A. No, no, no it was an assessment that these permits are to take in use and that ORC expects an assessment of use in that application and so it was about completeness for what the applications were for. We also knew that Manuherekia, again, for example, is we proposed a flow regime and we proposed a minimum flow at campground, so we also needed to be able to link those flows and water quality and responses from those proposed flows and how the river would behave and that's more than a quantity discussion, that's everything, so that's, it was about completeness.

Q. So that's the Manuherekia, but the other two, Cardrona and Arrow, do you know anything about those?

A. Yes and so for the Arrow we've been in the background for the Arrow and we are fortunate in the Arrow because the ORC did have some good numbers in preparation for their minimum flow. To be honest we're

surprised they haven't done their minimum flow because they've got good information and so we utilised the information from the Regional Council on water quality and Perry Fighton assessments in the Arrow application and then for the Cardrona, so that one, our applications for the Cardrona went in just in March and again we were fortunate that ORC had done a lot of good work and we were able to use their information and their assessments for water quality and algae and we'd also done some – all parties field walks, so we were on site with Aukaha representatives a couple of years ago as part of the minimum flow consultation and so we were able to add all that information into the application.

Q. And does that also deal with the land use side of the equation in terms of the applications?

A. Just let me think about that, the ones that we've put in for, the Cardrona are a couple of bigger land holdings, but a lot of smaller land holdings, Lucerne for horses, vineyards, so we did a water quality of the Cardrona, I can't say for sure, we did say that we addressed the current permitted activities, I can't say for sure, because we don't have any little tributaries in those, no little tributaries in those areas, I can't say for sure actually on that one.

Q. And when you answered the question about – I think it was about the Kyeburn, you said that there was some sampling being done –

A. Yes.

Q. – and that there was a condition that required good water quality –

A. No.

Q. – leaving the farm, I didn't know what you meant by that?

A. No, no there's nothing in the consent, no that was the 6A rules, the permitted activity rules that were alive in the plan at the time and ORC, there was a deadline on those rules which are about sampling any discharge on the farm and that it must be of good water quality and OR-

Q. So that wasn't a condition?

A. It's not a condition, no.

Q. But at the time that this was being done, I got the understanding from what you said –

A. No

Q. – that some sampling had been done –

A. Yes.

Q. – and did I get –

A. – yes and that's correct, a lot of farmers –

5 Q. – it's a voluntary thing presumably?

A. Yes because it – that date and that permitted activity was alive until just recently and so over the last few years a lot of farmers have done water quality sampling because that rule meant that they had to demonstrate that only good water quality left their farm and so sampling was being carried out on lots of farms and in that area, the Maniototo Irrigation Company and the race companies that are under it, led that in cooperation with ORC and did lots of sampling.

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Q. So that was to show that the permitted activity rule was being met, was that idea?

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A. Yes, they were just. That's right. They were checking that they were okay. Yes.

Q. Okay thanks for clarifying that. So the farm plans' requirements that you are talking about, the certified ones, where are we up to with that? I've lost track.

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A. Yes. And so that's coming in in the national environmental regulations. Have I got that name right? And that's at the moment is setting that farms are all going to require a freshwater farm plan and that they're going to be requiring certification as well. So and they're going to have to be audited. So, I anticipate that that would probably get rolled into the land and water plan –

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Q. The land and water plan. Yes.

A. – but it will be a clearer national direction. It's already there. What's missing is they're still – central government are still finetuning the aspects of it. The how to – how it's going to be certified and all of those backroom elements but I know that Beef & Lamb are already trying to second-guess what the fit for me and, so are Fonterra. So it's going to be a given, I think.

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Q. Okay. Thank you. I did think of the question that I wanted to ask you before. For relation to those applications that you know, you've handled

personally are you seeking, what seems to have been imposed on Kyeburn and Lindis are a period of grace if you like of five years where people – permits continue under the you know, present regime whatever that means. Update irrigation infrastructure and then go to a different minimum flow, different residual and so forth. Or is that all, you know new minimum flows, new residuals happening and new allocations happening on day one?

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A. So, no. Because – what happened in the Lindis is there was a really big change in infrastructure, the closing of those two races and a lot of work had to be done on a lot of farms. So, that was what the window was about.

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Q. Yes.

A. So no, however it really depends on how the discussion went. There is – in some catchments it's reasonably well understood how the minimum flow or the residuals is going to be achieved and therefore that whole trial and error isn't required. In other catchments it is a bit of a puzzle. We have got water that's loss to ground and water that pops up and where is it and how are we going to achieve it? And if we had to do some changes, a window for those and so in a couple of the applications where we would like to the changes of a merge of a race or a combination of an intake. In the application we've actually asked for a couple of years so...

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Q. Just two years?

A. I can't – it might have been two years on that instance. I don't know. But what we've said is that something like, "we'd like to keep these points of take alive until this date and then after date it will just be this point of take". So, we've thought of ways of how can we give some of those windows but our experience has been that once we start discussions with regional council and other parties that we can sort of nut some of that out. That this is where we'd like to go and this why it might take a little bit, how can we have that window? So, no didn't expect big windows of grace. Well the permits expire in October 2021 so...

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Q. And I only ask that because I didn't get the sense that all of the sub-catchments have trialled.

A. No they haven't.

- Q. No. So...
- A. No they haven't.
- Q. So permit holders don't know how – whether they are able to achieve what I expect is residual flows in the sub-catchments on current infrastructure. Correct?
- 5 A. That's exactly right.
- Q. May need to be investing in new infrastructure like on-farm storage in order to supplement any – in order to supplement their take? Correct?
- A. Yes. To replace the loss in summer, yes.
- 10 Q. Yes to replace the loss in summer if there's a ratcheting down –
- A. That's right.
- Q. There might need to be storage to make sure that there's enough to, you know achieve whatever you want to achieve on farm.
- A. Yes.
- 15 Q. Yes. And that storage may or may not be present for the individual farmer.
- A. That's right.
- Q. Yes.
- A. Yes.
- 20 Q. There may or may not need to be improvements to the conveyancing on-farm to and also the distribution systems on-farm. In order to achieve those outcomes for the residual flows.
- A. Yes. That's right. And even on farm, you know looking after water quality on-farm or you know.
- 25 Q. Yes.
- A. Yes, you're right.
- Q. And for the sub-catchments, by that you mean the tributaries, flowing into a main stem river.
- A. That's right.
- 30 Q. And as far as the Manuherikia goes, those are tributaries are going to be – your proposal is to control those by way of residual flow?
- A. Yes.

- Q. Yes. And on the Manuherikia the proposal is to ensure that there is a minimum flow and is it minimum at the campsite or is it a several points down the river?
- A. We've proposed just at campsite.
- 5 Q. Just at campsite. Okay.
- A. Yes.
- Q. And if there's been no trial on the tributaries, I take it that there's been no whole of catchment trial either to see whether that's tenable on current infrastructure.
- 10 A. Mmm.
- Q. Okay. And you said there's a couple of exceptions where some – a period of grace has been requested but that's not uniform across all of the applications and for where – can you tell me which of the two applications, where the period of grace was actually request? Identified and requested
- 15 as being required.
- A. So, Kyeburn.
- Q. Kyeburn.
- A. Kyeburn had a period of grace.
- Q. So that – Kyeburn's already consented so.
- 20 A. Yes they're consented and they're out and Lindis was...
- Q. And Lindis.
- A. The Lindis was the one that had the period.
- Q. Okay and so as far as the applications that you are involved in. Which are the applications I think, sitting on hold now.
- 25 A. Yes.
- Q. None of them have sought a time by which you can trial, confirm on-farm storage or conveyancing under irrigation systems. Put that into place before you know, a residual minimum flow's imposed?
- A. No.
- 30 Q. No.
- A. Not that I can remember. No.
- Q. Okay. So from day one they're going to have to meet that.
- A. And yes, you're right. And it's – is really, really daunting.
- Q. Well it is isn't it? Because they haven't done any trials.

- 5 A. Yes and so I know from – I know from only rationing four people on the Tairei, it's really hard but what I do is, as soon as it looks like it's getting low I contact the compliance department at the regional council, I tell them that we're rationing and our goal is that that minimum flow will not be breached and their role is to be sure that the data that I can see on the website is accurate and not to bounce that around too much. And then –
- 10 and in the early days I then looked for some co-operation that if I missed that – the last one I called off is actually eight hours away from and I've got an eight hour dip, below the minimum flow, I then looked for a little bit of understanding that this is what we're trying to do and that was a blip.
- Q. But talking about that blip –
- A. Yes.
- Q. – that blip – that's all as I understand it, bit of a pick and mix out there for the Tairei but farmers are if you like, have voluntarily agreed to observe
- 15 the minimum flows.
- A. Yes.
- Q. But that's not what's proposed going forward.
- A. I know.
- Q. And so you know, regional but be quite relaxed about the observance or otherwise because it can't enforce but they jolly well can enforce it on
- 20 your application going forward. Correct?
- A. Mm, oh they did enforce it in the Tairei –
- Q. In the Tairei how were they. Who would they –
- A. – they called water shortage. They called the water shortage direction
- 25 and turned them all off.
- Q. – enforce it against? Oh, well that's something they can do. Yes, okay. Is that not a fundamental difference? Is that on the Tairei, a voluntary measure but actually on your applications for resource consent it is not, that is what you're proposing going forward an untrials system.
- 30 A. Yes. So it's just the different stages of transition.
- Q. Mhm.
- A. They are two deemed permits on the Taieri right now are, those applications are in and so they could have a minimum flow soon as well, so we are just in that state of some minimums are in place, some permits

have been replaced, some haven't, some minimums aren't in place and so it will be, it's a bit of a shifting sand isn't it for a few years.

Q. Now the other word that you did use, and I've forgotten in response to whose question, but you used the word "transitional" and there I thought you were talking about the plan to come, the land and water plan to come, your best guess is that it's going to contain some transitional provisions, so that might be say transitional water quality, so it's not all off because, you're at (inaudible 17:15:54) or whatever it is, but over time, there will be a reduction –

10 A. Yes.

Q. – in variables be it pertaining to water quality and water quantity in order to achieve over time some ideal outcome, is that right?

A. Yes. That's exactly right.

Q. And that's what you're telling your clients, it's not all off on when the land and water plan comes in?

15

A. No, I, because I, how -

Q. You don't know?

A. I don't know but my instinct is that you can't turn, you can't turn this, the big business that is agriculture and, around like that -

20 Q. No.

A. - and so what farmers really value is actually where are we going? Tell us where we're going, up in bright lights, wherever it is 20 years, 30 years and then if there's steps there, that, you know, here are the signposts, what they've had is we don't know where we're going.

25 Q. Well that's actually what you've got in the operative plan isn't it? You don't know where you're going so then, therefore, you don't know what your response to be, because the outcomes are not clearly articulated or sometimes they're actually in conflict with each other as far as the objectives go?

30 A. Yes, so for water quality we haven't – our water quality in the plan hasn't been set in FMUs or, but it has been set in catchments and the standards that are already in the plan which are the Schedule 15 standards, in many catchments are really, really tight, so we have had some strong signals from the Regional Council that these areas aren't good enough and these

areas are okay, but be careful and these areas are pristine, do not muck them up.

- 5 Q. All right, well I haven't actually heard, I don't think, but I would have to say I don't have a word perfect recall of 15,000 pages worth of evidence, but I didn't think we had anything with Schedule 15 yet. So that's something to think about. Okay, so that's water quantity anyway, okay, quality.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

- 10 Q. It's pretty late. I just have one question about Falls Dam and the work you've done, where do the electricity generation permits fit in or don't they?

A. So Falls Dam are not clients of ours, but you will have some witnesses later who do know more about that.

Q. Okay.

A. So can I leave that to them?

- 15 Q. Okay, that's fine.

A. Yes.

Q. Thank you very much.

QUESTIONS ARISING – NIL

THE COURT: JUDGE BORTHWICK

- 20 Thank you very much and thank you for your time, had a fair amount of that, that's been really helpful.

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK

So we're adjourned through to 9.30 with the vague hope, faint hope that I might get a minute out tonight but that really does depend on other people being
5 around in Auckland.

MR MAW TO THE COURT: JUDGE BORTHWICK

Q. I've got one matter on which I wish to seek leave. Mr de Pelsemaker is preparing a supplementary statement of evidence or a statement of
10 evidence in reply to the Territorial Authorities –

A. Oh so he is, due tomorrow was it?

Q. Due tomorrow, but he would benefit from one extra day to finalise that?

A. It just crudely comes down to the time that the Court has to read, 20th of May, anyway this one, he's got so much to read.

15 THE COURT: COMMISSIONER EDMONDS

Yes, well he hasn't had long because he has other priorities.

THE COURT: JUDGE BORTHWICK

Yes, no he hasn't, yes, no he's been engaged in priorities as well.

20 UNIDENTIFIED SPEAKER:

Priorities.

MR MAW:

He's been tied up with the priorities as –

25 THE COURT: COMMISSIONER EDMONDS

And we didn't get that stuff till quite late, last week did we?

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Yes, okay, so, I mean we're going to grant it, but, you know –

A. I do and I don't –

30 Q. – everyone knows there's a huge surge –

A. Yes.

1720

Q. - of evidence still coming through and so there's no guarantee that the Court's going to read all of the Territorial cases, some of the Territorial case before we had it and we've done the first lot of evidence that's in the bag but not this, yes.

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A. Yes, yes and in a sense that the extra day is intended to ensure that that brief of evidence is succinct as possible in the circumstances.

Q. Yes, yes.

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A. It would just benefit from an extra day.

Q. Okay, no look there's no problems, I know that he's been working overtime. I do know that, so that's the – on the 20th of May with just a signal from the Court, it may not have had time to read the supplementary evidence or reply evidence in relation to the Territorials before we get there.

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A. Yes.

Q. That was all. Thank you your Honour.

THE COURT: JUDGE BORTHWICK

Q. Anybody else? Final last requests?

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MR PAGE TO THE COURT: JUDGE BORTHWICK

Q. We're under a direction, my friends and I to get you a memorandum about that –

THE COURT: JUDGE BORTHWICK TO MR PAGE

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Q. 9 o'clock.

A. – tomorrow, 9 o'clock tomorrow morning. We will do our best, I have a feeling that we've –

Q. I don't want to hear the Dam case unless we've got some direction on the thinking, it's really that serious.

30

A. We'll do our best with the records that we can locate Ma'am, I just have this horrible foreboding sense that by 9 o'clock tomorrow morning we might be telling you that we're not quite there yet, but –

Q. And this is both in terms of providing record evidence or is it in terms of kind of brainstorming what the issues might look like if you're to – if dams are to do something different?

5 A. Yes, well no, I've been provided with a schedule that I haven't yet interrogated of all of the deemed permit dams or the dams, the deemed permits, four deemed permit dams, so I don't think my friend's seen that yet although his client staff have provided it, so that all remains to be seen, but we haven't yet had the time to discuss in detail exactly how to frame the issues that you're being asked to consider and I just don't want
10 to go off half-cocked by 9 o'clock tomorrow morning, that's all.

Q. No. All right. I do understand the sit- you know, the problems, yes. Yes.

A. And at about the same time I have to file some submissions in the High Court too, so sleep is a rare commodity.

15 Q. Yes. Okay, so how do you want to go? Because I just, I just sense that if we just get our evidence in, oh, you know, they could, dams could fail, poor and strict, poor integrity, we're not going to be any further in terms of crafting some exceptional place to take dams?

A. Well –

20 Q. But part of the problem generally with this case is that people go, ooh, exceptions for hydros, like, what, well that's easy, you've got Trustpower in front of us but actually there's a bunch of other hydro so, or exceptions for dams and we think we have the dams, but then I think you're thinking a bunch of other dams, so it's like crafting is really again, it's having an understanding of the four corners, you know?

25 A. Yes, well there is already an exception for dams because Plan Change 7 doesn't deal with RMA consent dams.

Q. Yes.

30 A. So we're only dealing with deemed permit dams and for myself I'm not really sure why and so what we can do is at least identify those ones so you know the scope of the issue.

Q. Yes, yes, yes, well that's the scope of the issue as well and what are the issues and can they actually be sensibly carved out apart from everything else and I say that because if I ask myself well what is the activity for which, what is the proposal for it in relation to which the application for

resource consent is, would I think it's just impounding of water or would I think it's impounding of water and then the subsequent discharge of the water to an irrigation take or to hydro and then, it's the whole proposal, is it just an element of it and so again the consideration of dams, it is the whole proposal and not merely an element, then it's probably, might be a waste of time actually looking at this, so it might be better just dealt with in the OWRUG let it all go case, than trying to look for some sort of carve out?

5

A. Yes.

10 Q. So you have to be turning your minds to what is the proposal, is it just impounding of water, the storage of water?

A. Yes.

Q. And as a reservoir?

15 **UNIDENTIFIED SPEAKER:**

(Inaudible 17:24:53).

THE COURT: JUDGE BORTHWICK

Yes, okay, he's giving me the correct terms.

20 **THE COURT: COMMISSIONER BUNTING**

I suggested to her Honour reservoir was the (inaudible 17:24:56).

THE COURT: JUDGE BORTHWICK

I was listening.

THE COURT: COMMISSIONER BUNTING

25 (Inaudible 17:24:58) solve that.

MR PAGE:

Well all right, well I'm not - I can't take that any further, I just wanted to flag with you that there's a lot to do between now and 9 o'clock and I don't want to go half-cocked or provide you with something that not going to...

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- Q. But I don't really want to hear from Mr Curran until we have – and Mr Sheenan also, I don't know whether we want to hear from them next or whether we want to get the issues and then we can actually start thinking about the case.
- 5 A. Well I plan to call Mr Sheehan next because I have asked him in the light of what's been going on to take the Court through the deemed permit dams and the issues in relation to it that he's familiar with and so he has a presentation to inform you about that and so I think you might be in a better position to understand at least the issues from his point of view in
- 10 the morning.
- Q. We might have to re-call him and I know you've been waiting for a while actually. I saw you here yesterday so we might have to – if we had him in we might have to have him back.
- A. Yes, well that's a possibility.
- 15 Q. All right, so how much time do you think you need, bearing in mind all of that, yeah.
- A. I suspect longer than 9 o'clock tomorrow morning based on the discussion just now. And I'm just looking at the schedule so it's Mr Curran and Mr Sheehan are the two witnesses. I'm not sure whether Ms Scott is
- 20 dealing with damming. They're the two. Just seeing who we might bring forward in the schedule. My friend's just indicated that Fish & Game might be in a position to bring forward some witnesses and perhaps we could have the two damming witnesses on the Thursday for Ms Scott and Mr Crow tomorrow morning and Mr Dicey will be arriving about 11 o'clock
- 25 snow willing.
- Q. Whose Ms Crow?
- A. Mr Crow. Hayden Crow, the...
- Q. Matthew Curran? I don't want to hear from him until we've got the issues read, sorry Crow? How do you spell it? Oh Crow, yep, okay.
- 30 A. Yes.
- Q. Crow; Dicey, yes.
- A. And so Ms Scott is also in the Court. She can present tomorrow morning.

Q. Yes, okay, and your proposal then is to keep Mr Sheehan and Mr Curran until after we hear from Scott; Dicey and Craw is that right? Is that what you're thinking?

5 A. So are you wanting to receive the memorandum from Mr Maw and I before you hear from those witnesses, is that the...

Q. Absolutely. I'm making it crystal clear. I do not want to hear your planning until we actually hear your issues and my preference would be actually to have those issues in before we hear from Mr Sheehan otherwise we might have to re-call him.

10 A. Can I suggest an alternative? I can understand Your Honour's wish not to hear from the planner until you've sized what the issues are. That makes sense to me but I think that you might be assisted by hearing from Mr Sheehan because that will inform your understanding of the planning evidence.

15 Q. If he can be re-called and you'll have to – yep, if he can be re-called, if you still have questions coming.

A. Yes. So my suggestion is we'll hear from him first thing and re-call him if required.

Q. All right, and so we know that Mr Sheehan's available?

20 A. Yes.

Q. He's nodding away, good. Okay, so we'll go with Mr Sheehan, Mr Craw, Mr Dicey and then Ms Scott.

A. Yes.

25 Q. And then we'll hear from Mr Curran at some time after that memo comes in and then hopefully, I don't know, well hopefully we'll be up to Federated Farmers' case.

A. Fish & Game.

Q. Fish & Game? Oh, I know Federated Farmers.

30 **MR PAGE TO THE COURT: JUDGE BORTHWICK**

A. There were two witnesses held, or at least one witness, a Dr Doolan-Noble and then there's a lay witness. She would be in for tomorrow afternoon for Federated Farmers, Mr Lord.

Q. Yes, we good with that? You don't want to go too early? No you're right, okay, good, so we'll just stick with Dr Doolan-Noble and Mr Law, okay. All right, that sounds like a plan. Does that mean to say you don't even think you'll get your issues natted out by tomorrow, given how much is...

5 MR MAW TO THE COURT: JUDGE BORTHWICK

A. I rather suspect it's going to be tomorrow evening to finalise the memorandum job. So then we would have Curran on the Thursday morning having filed the memorandum.

10 MS GALLOWAY-BAKER TO THE COURT: JUDGE BORTHWICK

A. We could knock out all the Fish & Game witnesses on Thursday because they are all on their way.

Q. They're all on their way. We're going to hear the witnesses. And anyway I don't want to see that memo and see that memo and I hear from
15 Mr Curran simultaneously at the same time. It's not, you know, it would be a wasted exercise so we'll have that memo in and we will re-schedule Mr Curran at a time of Fish & Game's convenience about that. It's probably the best we can do, yep. All right, very good and Mr Cooper's noted that as well. Okay and then probably not going to get that memo
20 out – minute out because I'm waiting on people in Auckland to release it which no doubt they've gone home, so if it doesn't come it will go out tomorrow morning with those two changes included. Anything else I need to do? Nothing, okay, good. We'll have that done. Right, thank you and we're adjourned.

25 COURT ADJOURNS: 5.31 PM

COURT RESUMES ON WEDNESDAY 19 MAY 2021 AT 9.32 AM

THE COURT: JUDGE BORTHWICK

Anything arising overnight? Okay, that's good. So, I'll release that minute because I don't need to amend it again. And it should be hopefully out and on
5 the website around about 10 o'clock today, if not earlier.

MR PAGE CALLS**BRENDAN JAMES SHEEHAN (SWORN)**

Q. Is your full name Brendan James Sheehan?

A. It is.

5 Q. And are you a civil engineer and the principal of Mt Aurum Engineering Consultants Limited?

A. I am.

Q. And did you prepare a brief of evidence dated the 4th of February 2021?

A. I did.

10 Q. And is that brief of evidence true and correct to the best of your knowledge and belief?

A. Yes.

Q. Thank you. Now, I'm going to a couple of things, firstly just ask you some questions just to orient ourselves to the work that you do and secondly,
15 I'm going to ask you to take us through a PowerPoint presentation that you've prepared and was provided to the Court yesterday. So, firstly can you just give us a bit of a round up about who your clients are and what dams you work with in Otago.

A. Certainly, so I am a dam engineer. I specialise in dam safety and that
20 includes all aspects of dam design, construction, remediation etc. And I'm going to talk more about that in my presentation. My clients in Central Otago or Otago at the moment, I have formal contracts with three irrigation companies. Maniototo, Ida Valley and the Galloway Irrigation Society. I've also worked on a number of the other irrigation schemes
25 and different aspects including as part of this hearing and I also work for the hydro company, so I currently do work for Pioneer Energy looking after their dam portfolio.

Q. Thank you. In your evidence you discuss something called the NZSOLD Large Dam Guidelines, can you give us a little background about your
30 involvement or understanding of the development of those guidelines in New Zealand?

A. Sure, so I'm going to talk more about this in my presentation to the panel, but I have been part of NZSOLD since 1995 and the development of that has been central in developing the Dam Safety guidelines, how we

managed the dams from designer construction and right through the life cycle of the dam, so I'll talk more about that in my presentation.

Q. And can you just sort of tell us what your understanding is about what regulatory changes in relation to the NZSOLD Guidelines are afoot?

5 A. Sure. Again, I'm going to talk a wee bit about this, the legislation, and give you an overview, but at the moment we're in no man's land as far as dam safety legislation goes and that's because the Dam Safety Building Act in 2008 was revoked or repealed in 2015 and we've been waiting for central government to produce a new set of regulations around dam safety since that time and NZSOLD as a group, so the New Zealand Society of Large Dams has been very influential in trying to make sure that the guidelines that they put together are a part of that regulation going forward.

10 Q. And through your involvement in NZSOLD do you have any insight about when regulations are likely to be promulgated?

15 A. Yes, so currently the Ministry of Building Innovation and Employment, I think they're called are tasked with putting that together and they made an announcement in March this year that they're going to release the new regulations and later in the year is the way they've described it. There was a -

20 Q. So later this year?

A. Yes, 2021, yes.

25 Q. Thank you. And so when you prepared your evidence did you have in mind the likelihood that those regulations will apply during the PC7 six year period between now and 2026?

30 A. Yes absolutely. So the regulations are definitely coming, they should have been in place a couple of years ago but through a number of – for a number of reasons they haven't been put in place, that being we had a change of Government, we had Covid, there's a real education process that NZSOLD's been a big part of educating central government around what dams are and how we look after dams and all that sort of thing, so most definitely, the expectation is that towards the end of this year these regulations will be in place, yes.

Q. So in your advice to dam owners currently then, what's the source of obligations on dam owners that you are, your engineering advice is directed towards?

5 A. Yes well fortunately, the regulations that were released in 2008, most of the companies are working, have been working since that time under that sort of framework of dam safety, so their programmes are already set out, so we're just managing those through this period when there's no legislation in place. We're using the old regulations in fact as the guide for managing dam safety for existing structures. So it's – the new
10 structures that have been built dams, so an example is the Waimea Dam in Marlborough, that's being built at the moment, so it's operating under the consents and the consents direct them to specifically use the guidelines.

Q. Thank you, well that's all I have by way of –

15 A. Sure.

Q. – scene setting questions. So do you have a means to take us through the PowerPoint presentation which you provided to the Court? There we go. I'm in your hands Mr Sheehan, take us through it as you wish?

A. Thank you.

20 0940

MR SHEEHAN PRESENTS POWERPOINT PRESENTATION

A. So my intention today is just to give you an overview of the legislation around dams, talk about the guidelines that we use to look after the dams
25 from conception to the end of their life and talk to you about dam owner responsibility and finally talk to you about some of the concerns I guess I have about the process that you're going through at the moment and where dams actually fit into that. I've got lots of pretty pictures and –

30 UNIDENTIFIED MALE SPEAKER:

Q. So which is the dam you've got there just by the way?

MR SHEEHAN:

A. That's the Upper Manorburn Dam. That's the only known picture of that dam in that state and I'll talk a wee bit more about that, so that's part of the Ida Valley Scheme.

5 EXAMINATION CONTINUES: MR PAGE

Q. Mr Sheehan as you discuss, if you keep as close as you can to your microphone so that the recording is clear and people in the back of the Court can hear?

A. Sure.

10 Q. Thank you.

A. Just an overview for what I'm going to talk about today, to give some context to my discussion, I want to run through some of the dams in Otago just to help the panel understand where and what they're used for, the ages of the dam, the different types of dams and their different uses, so that would be the three key things that I'd like you to take out of the first part of the presentation. Then I'm going to focus on the Manuherehia Catchment. I'm here at the invitation of OWRUG and, so just talk about their dams and talk about the dam safety legislation, the guidelines and then finally the responsibilities around looking after these dams. So without further ado. Just a snapshot of some of the dams that we've got across Otago, that's not all of them, and I've taken the liberty to include Glenorchy in on this, Pioneer Energy is a bit like Trustpower and they've got dams everywhere, so part of this presentation I took out of a dam training exercise I presented to Pioneer Energy a month ago and so fortuitously I was asked to prepare something similar for the panel and this was it, so you can see that we've got a range of dams across our portfolio or our region and that they've got many uses. The other thing I haven't added in here, is most of these have got recreational uses too. So some of the more notable dams, some of these you'll know, but I'd like to start off with one that's about 10 minutes from here, this is the Ross Creek Dam, I've added a few more, a bit more information than I have on other slides, particularly for you Commissioner, this is one of the oldest dams in the country and from a dam engineering perspective, the

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things that I would look at are the age, so this is a really old dam, the period around when it was constructed and the guy that designed and built this was an Englishman, came out from the UK and I think that was, they set up the Dunedin Waterworks and he was tasked to build this dam.

5 Gabriel Gulley's gold find was in 1861 and the population in Dunedin exploded just after that time and this is one of the ways they addressed some pretty significant health concerns at the time was to build this dam. So at that time it would've been like the Clyde Dam, it was a massive structure, it's one of the few like this in the country, it's a puddle core dam

10 which is a technique we would definitely not use today but it's, what's important about it is understanding that this – the construction design standards of the day and the construction technique of the day and this was definitely shovel and wheelbarrow and horse and cart. It leaves some, I guess, some gaps in the long term integrity of this dam, so it's the

15 sort of dam that you really want to focus your dam safety programme on in terms of looking after for the life of a dam, so about 10 years ago they discovered some problems with this dam and I can't speak highly enough of the owner which is DCC in this case. The engineers are involved and regional council in supporting the upgrade of this project. It's a lovely wee

20 dam – sorry.

Q. As you go through can you tell the ones you've been involved with for context? Thank you.

A. Sure. Absolutely. I'll get to mine shortly. So, this is Onslow Dam and it's been modified three times already. In fact it's been modified four times.

25 So up in the top left-hand corner was the original masonry structure again the people that came out of the UK had that sort of knowledge. That's the way they build their structures back in the day. And it's five metres high, the top left-hand corner then they added another three metres to it and then they added what we call a hungry board on top. They put

30 another metre on top of that just to get as much as water in storage as they could. And in 1982 they – Otago Central Electric Board build this wee concrete arched dam and this one day here on the right-hand side is part of what I look after. And for those of you that have been following it in the newspaper, the Onslow pump storage project is – has been front

and centre of recent times so there is potential for Onslow to be modified again. The wee dam in the right-hand corner here is 14 metres high. The new one they're talking about is 120 metres high. So, that will be the 5th time this has been modified, this particular reservoir.

5 Q. What's the relationship between two dams, is there? Do you know?

A. The top left one, or the top two pictures are still there. That dam is still there and so they just filled up the reservoir and submerged it.

Q. Oh, it's been superseded by the one on the right?

A. Yes.

10 Q. Okay. Thank you.

A. Yes. So...

UNKNOWN MALE SPEAKER: (09:47:05)

15 Q. Mr Sheehan are you aware that there are current deemed permits in relation to these structures?

A. Yes I was made aware of that point last night. That this particular dam and it's not the one in the bottom right-hand corner, it's the old dam, has got a deem permit associated with it. Even though it's submerged.

THE COURT: JUDGE BORTHWICK

20 Q. Oh well, somebody will – is anyone representing permit holders for Onslow Dam?

A. **B Sheehan:** Pioneer Energy.

A. **Mr Page:** No, that's Pioneer Energy.

25 Q. Pioneer Energy. What did Pioneer want. Pioneer didn't (inaudible 09:47:43) much. Submission?

THE COURT: JUDGE BORTHWICK TO COMMISSIONER BUNTING

A. I read their submission. I think the only one they talked about was the Fraser Dam,

Q. Okay.

30 A. And said they wished to be heard but they haven't turned up. I don't know anything beyond what I read these.

Q. Okay.

EXAMINATION CONTINUES: MR PAGE

5 A. This is the Ayrburn Dam, a wee earth embankment dam near Naseby,
part of the Hawkduns Irrigation Scheme. Again a very old structure, again
built with horse and cart. So, why I am saying that? It's just because it's
10 so old and because of the techniques that they used, it just makes us be
more cautious around making sure the dam safety is in place and we're
monitoring the behaviour of the dam over time. Jumping through to 1931,
the Trust Power dam, back of Waipori scheme. Lovely wee structure and
then the Fraser Dam, I'm happy to talk about the Fraser Dam as we go
10 through but I know there's been some commentary around the Fraser
Dam and the integrity of the dam but I'm all over this dam so, I'm very
happy to...

THE COURT: JUDGE BORTHWICK

15 Q. Well you should talk about it because the only commentary we have was
a – that person would not have been qualified, technically to be talking
about it.

A. Sure, okay. Okay well when we get further down the track I'll talk about
this one.

EXAMINATION CONTINUES: MR PAGE

20 A. And here and what I'll be talking about is – applies to a lot of these dams
– is not a lot of information around about them so. It's about just using
your nous, using experience to make good decisions around looking after
them. Then there's big dams like this that you will know this is the
Roxburgh Dam built in 1957, great big concrete gravity dam. Very robust
25 and again the Clyde Dam and then the last dam that was built in this part
of the world belongs to Pioneer Energy again. This is what we call a roller
compacted concrete dam and yes, it's a solid wee structure, lovely wee
dam but you can see it was 22 years ago that we built the last big, what
we call a large dam in this part of the world, so and that's discounting the
30 farm structures that have been built, the farm storage ponds that have
been built which don't currently fall under the large dam sort of guidelines.
I'm going to talk about the guidelines, but potentially, under the new MB

regulations that they're introduced and I should have said this before, yes, they've got a website that you can go to, so I'm only repeating what their – have already said and –

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5 THE COURT: COMMISSIONER EDMONDS

Q. So it's not going to involve a building consent for the large, but for this dam?

A. Yes they would absolutely, yes.

Q. Yes. Under the building?

10 A. Yes.

THE COURT: JUDGE BORTHWICK

Q. And the on-farm structures and we, I don't know, it's probably, it may be in the evidence or it may not be in the evidence, what on-farm structures
15 require, whether they require resource consent or it's just building consent, are you able to talk about that?

A. Sure, yes.

Q. Yes, okay.

A. As much as I can, yes.

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MR SHEEHAN CONTINUES TALKING TO POWERPOINT PRESENTATION

We're going to jump to Central Otago Dams now. As part of this dam training exercise I did, I put together a list of dams that I know about in Central Otago and of those 32 I probably look after about 20, but they're all, some of them are
25 redundant, one or two of them and some of them now fall outside the large dam, so the Kawarau Falls Bridge there, Skippers Creek's got a wee dam on it but it's full of gravel, so, but it's still a dam but the rest of them have pretty robust dam safety systems.

THE COURT: COMMISSIONER BUNTING

30 Q. What was the criteria you used to determine the 32? Roughly?

A. Yes, yes, no, I guess anything that had been associated with hydro generation or irrigation schemes would be – and anything over a certain

size really, you know, have to be careful what I say, but, you know, six metres and above and you're starting to probably have quite a bit of storage behind it, yes.

Q. Okay, that's good, thank you.

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THE COURT: JUDGE BORTHWICK

Q. What's your hesitancy in terms of commenting?

A. Well the whole discussion around farm storage and it's not just farms, it's irrigation and horticulture have got ponds too and I've built some of them and so those that were over a certain height, so currently the regulations say greater than four metres and greater than – in height and that height is from the crest to the front toe of the dam, so if you can imagine on a gully, going down, it doesn't take much to take up four metres and you don't have a lot of storage behind you and on a flatter location and Loganburn Dam which I am going to talk about, is a perfect example. You haven't got a very big dam, but you've got a massive amount of storage behind it and that's the beauty of Onslow and I don't want to get into that debate because I know there are going to be some pretty heated ones around taking land and ecology and all that sort of thing, but if you're looking for bang for buck, that those sort of sites are ideal, so, yes.

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Q. So you're hesitancy in commenting what is a dam is to do with Onslow and future aspirations for Onslow or is to do with more generally about perceptions around regulation?

A. Well part of the regulations that MB have announced, they, well what the dam engineering fraternity were hoping is that there would be some relaxation around the heights and storage and I guess that they would take more of a – there would be more recognition for us as dam engineers that we would be able to make good decisions around what ones should come under the dam safety guidelines and what ones shouldn't or didn't need to because it's a lot of money associated with putting consents together, you know, it's not just this designs, it's the regulatory parties don't have that in-house experience so they use consultants and we're a very small gene pool so we all know each other and while I mightn't always agree with their consultants and we have some pretty robust

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debates, you know, they're in good hands having those, that sort of arrangement but back to my point about the size of the dam, it really does come down to, they're so unique, they're so individual that we were kind of hoping that we would get more of the same but what has happened is they've announced and these are only draft announcement and that's there is no change to the four metre high and the 20,000 storage, that what they have added in is one metre high and 40,000 cubic stored, so that just about –

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Q. Takes in every farm?

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A. Yes it does.

Q. Yes, okay, yes.

A. So it's not saying that every farm has to have the guidelines applied to them, what they're going to do is they're going to say and we're going to talk about this, they're going to say, well what's the risk of failure, and so somebody's on-farm ones, they'll just flow into existing rivers and it doesn't really matter, but what's an example? The cherries industry has just exploded in Central Otago and so there's lots of wee ponds and bigger ponds and they're getting bigger and bigger because the hectares that they're putting into grapes and horticulture and cherries and whatever are getting bigger, so they need more water and so all of a sudden these structures are sitting above main roads and lifestyle blocks and they're just everywhere and to give you an example of numbers, because I haven't, I've been too scared to do the numbers for Otago, but for Marlborough, one of the dam engineers that I know that works predominantly in Marlborough, he's under these new guideline rules, he's looking at 160 dams, it's like, it's just a nightmare and we are a small gene pool and I guess my fear is that the industry's not big enough to have the right people doing the right assessments and that's just my personal opinion, it's, yes.

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Q. All right.

A. So there are lots of challenges ahead.

Q. Is that right? Very good.

MR SHEEHAN CONTINUES TALKING TO POWERPOINT PRESENTATION

And we're still got to look after these ones and I'm going to show you those now, but my point being here is that a lot of these dams are really old and they're like your grandmother, they're like your great grandmother in terms of how we would look after them so you can, if you look at the numbers down the bottom and between 1880 and 1940, we built 20 dams and then we built, what did we build after that, 12. So a massive building programme through the depression years when central government did its thing and supported growth and helped get communities through those periods, the farming community were very proactive in lobbying the Government because farming was the backbone of the country and I've spent a lot of time in recent times trying to get my head round some of these older dams trying to find the information around them, so I've been reading all this documentation and it's fantastic how they lobbied for what and what they got because of their lobbying and nothing was quick, you caught a train from here to Wellington, took you a week, so these were, yes, they'd send someone a delegate away from here to talk to Wellington and they'd be away for a month and it's like, oh my gosh, now we fax and it's like, or email or whatever we do, but, yes, massive challenges. So a huge building programme through the depression years and then I kind of thought well why did they do all this building and in Central Otago or Otago in particular, we started out with gold mining, that leading the charge and then we went into irrigation and a sprinkling of town water and but then big emphasis on hydroelectricity and again if you look at the dates you can see where all those activities occurred. I'm going to jump into the Manuherekia Catchment now and talk about the dams there, but, well I'll carry on. So the catchment, my understanding is the catchment's made up of two parts and the Ida Valley which I look after on the right-hand side there and the Manuherekia Valley itself, which only has one dam in it, at the head of it and that's the Falls Dam, so here's the dams here and what they're used for, so they're predominantly irrigation and Falls Dam was built for irrigation and was retrofitted subsequently and they put a wee hydro scheme in which is a great use of a resource that was going out of the dam anyway, so it's hard to stack up economically but once they're there, they're a fantastic asset and they should be doing this a bit more probably, not particularly on these sites but on other sites around the country.

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And as you can see that the date's 1902 to 1955. The majority were actually built between 1902 and 1935. There's just this one outlier there. This is the first one in that portfolio, Spiergrass Creek. It's in behind Alexandra. It's a rock masonry dam and you can see from the attire that the ladies are wearing, it was a major social outing in the day. These were phenomenal structures and when you read the Press articles and that, they were written up as great engineering fetes and so everyone wanted to go and see them and they did so on Sunday they'd all rock up and have a look at the dams which is – it's not something we probably, you know, do now. The Upper Manorburn built in 1914. It's the second biggest irrigation catchment in Central Otago. The Loganburn has got 110 million cubic metres. This one's got 55 million cubic metres. Extremely important to the Ider Valley Irrigation Scheme. We've got another one, another big one, the Poolburn Dam which might even be next. Oh, no, it will be Weir. This is just a diversion Weir which drops it into, they've got about 110 kilometres of races I think and this is the start of picking the water up out of the Manorburn Stream and diverting it into the...

Q. How do you distinguish between a weir and a damn?

A. I just think a weir as smaller structures. Anything under about, for me, anything under about six metres is probably a weir. I think that one's about seven. They have got a very small reservoir capacity. They're just there as a training exercise so they train the water into the canal, into the feeding race, yeah.

Q. So the two factors for a dam are the height and the storage is that what you said, or is it...

A. Yeah, because the storage equates to risk too. You know, it's a lot of water sitting back there. Water's just waiting to do its thing, you know, it's waiting to be released. You tip a bucket over it full of water, it's not waiting there, it's falling out and that's why we need to be all over these structures. Again if you look at the age of these things, you know, we've got some dental concrete issues here. It's not a major. Is this wee weir going to collapse? No, but in terms of looking after the dam we've all addressed that over time and they've already done some work on this before my time so it's more about aesthetics we're probably looking at here, but you

know, it's one of these things that is an ongoing – its like painting your house. Every 10 years you paint your house so these things, you can't wait 10 years. When these sort of things happen you need to be addressing them. It's not a dam safety issue, it's more of a maintenance issue of when we look at something like that. So then we jump into Poolburn Dam and I might say that the engineering design of these things change quite radically through this period. So we lent heavily on the Americans. They're kind of about 10, 20 years ahead of us in everything we seem to do and so lots of learnings came out of America which was a good thing because they had a few issues in the early dams and so if we look at Manorburn Dam which was built in 1914 and we look at this one here which is built in 1931, it's poles apart in terms of design, design understanding, it really is and quality of cement and quality control as they were building it, so they really started to understand that and they put an emphasis on that so for this wee structure here, you know, it's one of mine and I have real confidence about the structural integrity of this dam whereas the one before that you just saw, Upper Manorburn, that's got a few teething problems and so for me I need to focus my energies on making sure I'm happy that that one's being looked after properly, so how do I do that? Well most of these old dams don't have any instrumentation. If you go to Clyde Dam you could spend all day looking at the instrumentation. Well this one here for example has got a couple of sepos, so monitoring water seepage around the dams, it's got deformation surveys which measure movement in three directions: upstream, downstream and vertically. It really – the best surveillance on a dam like this is the race manager, the operations manager so the most important thing for me to do is have a good relationship with those guys so you met Roger Williams. They're all peas in a pod these guys you know, they're fantastic, dedicated people and so I speak to my guys every week. In fact, I speak to them every other day if something's happening, so I've been here three days and in those three days I've talked to them four times and just because I know that they're going up there and I'll say to them, listen, you know, what's happening and they'll say, oh I'm going up to shut this valve down here. So while you're there, remember that wet

spell on the other side of this dam. Make sure you have a look at that and just send me a text: everything's the same. Now once a month they do – they have a formal programme they go through and they write out a check sheet and I look at that and we talk about it but the most important thing is the eyes on the site.

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Q. Mr Sheehan before you move from Poolburn, is that also a deemed permit dam?

A. Ah, no. Sorry, the one before it was though, Poolburn Weir.

Q. Ah, I see.

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A. Yep. So Poolburn Dam is not for some reason. This is the Poolburn Weir downstream and again it's a diversion. It streams the way there – their irrigation network is set up, they're manipulating water all around the place and this has a feeder out of the Poolburn Dam. It drops into the creek and then it runs down into here and it has a race. If we're looking downstream on the left-hand side, that also flows into this weir and then on the right-hand side it runs down the right-hand side of the valley and distributes down into the farm network. Now although this is only a small dam and although we've called it a weir but a small structure, you know, we still look after it as if it were the main Poolburn Dam and that's because of its age and because of who lives downstream and I know that if we nip things in the bud early these things will last, you know, the longevity of these structures is going to be fine going forward. There's another structure. There's a couple of structures in this Manuherikia Catchment that are not under my sort of overseeing. The Iderburn Dam and the Falls Dam and just to acknowledge one of the Dam engineers, he's based here in Dunedin and his name is Ian Walsh. Now I don't know about the dam safety programmes for Fords Dam and this one here, the Idaburn Dam but I do know Ian Walsh very well. He's one of our premier dam engineers so any advice he gives and I know he will be giving advice, will be sound around those dams. So in that Manuherikia catchment I am excluding those on-farm ponds that we talked about previously. I'm very happy with the dam's safety programmes for these structures.

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Q. Correct me with the Falls Dam. Did you say Ian Walsh was responsible or you?

A. Ian Walsh.

Q. Yes, okay.

A. Yes, so do you know Ian Commissioner?

Q. Yes.

5 A. Yes. Lower Manorburn Dam is another one of mine – Galloway, Ian, so it's got a couple of niggling dental problems and we're addressing those over the next little while so a lovely wee dam, yeah, really an idyllic location and I know a lot of people use this one recreationally too and then there's Falls Dam and top left-hand corner for your benefit
10 Commissioner is the hydro scheme being put in place by Pioneer Energy. At that time I think they were pioneer generation and this is the glory hole here in the right-hand picture which is the spillway that they use for any excess water that builds up behind the dam.

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15 A. So every dam is different and every dam has it's challenges and this one it will have its challenges. I don't know in detail what they are but throughout the life of these structures we're just continually working through problems on them or reviewing and upskilling our knowledge but the big ones that we apply to these structures relate to floods and
20 earthquakes so if we think, or if we believe flood hydrology is changing and there could be a bearing on that from climate change, for example, then every so often those sorts of numbers need to be reviewed to make sure that the spillway capacity on these structures is adequate and if they are we need to increase that capacity. Likewise the earthquakes we've
25 had some pretty major earthquakes in this country in recent years and there've been some massive learnings out of those and it's about making some of these structures still meet those sort of criteria that the guidelines set out for us around earthquakes and making sure that the structures are safe, so periodically we go back and look at those.

30 Q. Did earthquakes feature back in the 1800's when the English came?

A. Yeah, absolutely, nowhere, yeah.

Q. Eh?

A. Nowhere. There was no, yeah, I mean they just didn't have earthquakes in England or the UK and so it was really low on their priority list. In fact,

I don't think it featured at all and even their understanding about spillways and things, we've just advanced so much, they're light years away. It doesn't mean that they're unsafe structures, it just means that we need to constantly keep an eye on them, just as you would with your grandmother, if I can use that term. I apologise for that but grandmothers are definitely going to have some health issues and these older dams are definitely going to have some health issues. Legislation, so I've alluded to some of the things before when Mr Page was asking me questions but I just want to give the Court some confidence, I guess, that the dam safety programmes that we've got are well considered and we've adopted international best practice around what we do so that the way the legislation came about was that – and I had to go back a few years. I started my dam engineering world with ECNZ, The Electricity Corporation and at that time the dams were not – there was no legislation around dams and this was quite concerning to the people in NZSOLD who were the leading dam engineers in the country and they had had – they were heavily influenced, would be a better way of describing it, heavily influenced by what had gone on in America, so like I said before, that they were 10, 20, 30 years ahead of our building programme so they were starting to see the effects, or they were developing programmes for looking after these structures going forward. So the ECNZ was split up by the government in the late '90's was it?

Q. Late eighties, yeah.

A. Sorry the late '80's and at that time ECNZ and I was part of the technical specialist group there that looked after all the dams, so just to give this some context, we looked after – ECNZ produced 97% of the electricity in the country and so you can imagine how many dams were associated with that and I was part of that and we looked after - I thought every dam in the country was absolutely fantastic and so ECNZ had a major influence on dams throughout the country so ECNZ was split up we had a really robust dam safety programme. Part of the sales agreement to the big four, so Contact, Meridian, Genesis and it was Mighty River and now it's Mercury, part of the sales agreement was they had to have a dam safety programme which is great, you know, they look after all the big

dams and as part of their policy statements dams shall be safe and all those things. All great stuff and they took our model, our monitoring model and they have developed that and they have got a wee company that three of them actually own and it's called Dam Safety Intelligence, I think it is and that they're responsible for looking after all their dam safety programmes and Contact Energy, they decided not to buy into that so they have got their own programme but I know the guys in Contact Energy and I know the consultants that work for them and they've got a really robust system too. And so because ECNZ was owned by the government all of a sudden government became aware that all these dams were outside the legislation so that's what initiated the 2008 – it took a while to get going, the 2008 legislation and from the dam engineering perspective we were delighted and the senior people above me were really delighted because they knew that the gene pool was shrinking because were not building dams and that they had to have the Bible in place and they were really happy so you can imagine in 2015 when we had a symposium and Minister Nick Smith rocked up and gave his talk and announced that they were revoking them, it's like oh my gosh.

THE COURT:

20 Q. What was the reason for that?

A. Well I've never got to the bottom of it but one of the things that was driving according to those that I've talked about in recent times was that it was under the Building Act and now they're going to put it under the RMA.

Q. Oh okay.

25 A. So not building new dams or refurbishing, major refurbishments on dams, it's still the Building Act. You still need to apply for that, so Ross Creek, that's what they had to do but the dam safety part of it will sit under the RMA somehow and back when we had the 2008 legislation they put together a register of people that could – were dam engineers so I think there was about 33 or something and I probably knew 99% of them and they're proposing to do something like that under the new regulations and that's probably important and like I said the gene pool is shrinking and it's just a matter of making sure we get the right people there.

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Q. So your hope or indication anyway is that you'll get new regulations sometime this year –

A. Yes.

Q. – sitting under which Act or don't they need to sit under any Act, so they're
5 under the Building Act, under the RMA or?

A. Under the RMA. And I'm not sure if they're going to put it into three branches is my understanding.

Q. Three branches of the RMA?

A. Yeah. Isn't the RMA going to be...

10 **THE COURT: COMMISSIONER EDMONDS**

Oh you're talking about the review of the RMA. There are three pieces of legislation.

THE COURT: JUDGE BORTHWICK

Q. The new RMA?

15 A. Yeah, which has complicated it again and I'm just hoping that they're not going to defer it again do you know what I mean?

A. Well that's a question – are they going to defer it? Do they have the three new pieces of legislation? Don't know, but you're hoping that...

THE COURT: COMMISSIONER EDMONDS

20 So that's unlike this year if they do that.

THE COURT: JUDGE BORTHWICK

A. Yeah, so what's happened from a regulatory thing is you know, what we've noticed is that the consents that have been issued for on-farm ponds or dams, etc, are starting to reference this and it's kind of forcing
25 the hand of people that are building these things to comply with the guidelines.

Q. And you're holding up – what's the title of the document you're holding up?

A. This is the New Zealand Dam Safety Guidelines, the 2015 edition which
30 I had to flog off a client before I came here.

EXAMINATION CONTINUES: MR PAGE

Q. This is the ENSOL one?

A. Yes it is, yeah. And it's been put together by regulatory people: dam engineer consultants, dam owners, so it's a fantastic document. Can't
5 speak highly enough of it and...

THE COURT: JUDGE BORTHWICK

Q. Was this document put in place to fill the gap with the revocation of the Building Dam Safety Regulations, is that what happened – 2015 those regulations are revoked?

10 A. Yep.

Q. And there's nothing put in place by the government of that time.

A. Yep.

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Q. And so are those guidelines what the industry have put in place?

15 A. The industry put in place – the first guidelines came out in about '90 or '91 but again if I can just talk to you a wee bit about the history, so I talked to the guy who actually put them together and again you have to understand that the dam engineering industry back in that time was very engineering focussed. It was all about the dams. We were the top of the totem pole until the RMA came in and I've got a newfound respect for my
20 environmental consultant – colleagues here because of this but definitely they are driving the ship now and we are doing our thing down here, but back in the day (1991)...

Q. When engineers were king.

25 A. Thank you Your Honour.

Q. They still are.

A. Yeah. So the guidelines came out in 1991 and the gentleman I spoke to who put them all together, who was asked to put them together, he had a fantastic understanding about the Acts and he'd done work with MAF and
30 Water & Soil and at that time the guidelines were prepared and the whole focus was on lifetime management of the dams.

THE COURT: COMMISSIONER EDMONDS

Q. Sorry who was that?

A. Who wrote it?

Q. Yes.

5 A. His name was Derek Wiltshire.

Q. Oh right, Derek Wiltshire, okay.

A. Yeah, he's a fantastic man. He was out fishing when I rang him up and, yeah. Put the fish on hold like – and he's obviously a very passionate man about this and it was just lovely to talk to him but he had a fantastic understanding about as he said, it was about the rights to use the water; setting it up so conditions under which the water would be supplied would be really well understood and that there would be a dam safety programme that would be followed and at that time we were following the USA model which was called the Safety Evaluation of Existing Dams so an acronym was SEED and it was all about the dams and like I said I worked for ECNZ and around the mid-'90's my boss at the time, a gentleman by the name of Murray Gillan, whose just recently retired, an extremely good engineer, he had been doing some international work and some of the work that we'd been doing in New Zealand required international people to come in and he recognised that there was sort of a disconnect between how we were managing our dams in New Zealand and how others, including America had sort of advanced their programmes and so he got a gentleman out of Bestie Hydro in Canada to come and talk and have a look at our systems and make recommendations and fundamental change now so when we start out looking at the dams we focus on they call it consequence of risk but risk and it's not about the dam, it's about the risk downstream so forget about the dam. The dam goes. What happens if all that water goes? It doesn't matter what dam it is and so it's about people. It's about environment and it's about economics. Those are the three things and the guideline really sets that out and so that's what determines the risk categorisation of the dams so we've got really simple: low, medium and high and the medium and high they have to have dam safety programmes. What we normally

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do is capture the low ones in there anyway because it's just easier to do that.

THE COURT: JUDGE BORTHWICK

5 Q. And the regulations are – no, yes, they're guidelines rather, they describe what is your high, medium and low risk dams?

A. They do.

Q. Yes, okay.

10 A. So you follow through a bit of a process and it's called a guideline because they're so unique these dams, you can't be a cookbook. You can't apply Clyde to Poolburn. It just doesn't work like that. Now ENSOL has evolved too and it has developed into an organisation that it crosses so many spectrums now. There's a big influence from regulatory people and they have been on the board which is fantastic: academia. That's fantastic too. They really have a big push on making sure that they're on top of the Acts and so any regulation things and stuff that happen. They have legal people come and talk to them. They have ministers come and talk to them. They're just trying to stay abreast of what they think is really important for the industry. And I should have mentioned that again central government – it started out the Ministry of Building: was tasked with looking after this then it was the Ministry of Environment and now it's the MBIE who have been tasked with and like I said before, I'm not sure how the RMA's going to all fit into this but somehow we're all going to come together which is good. And the last point of course is the regulatory people are tasked with looking after that, so just to explain that around dams, the regulatory organisations up and down the country have agreed that in the North Island/Waikato, looks after all the dams in the North Island and in the South Island currently ECAN looks after Marlborough, West Coast and Canterbury and Otago looks after Otago and Southland.

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30 Q. And you're talking about the regional council for Otago?

A. Yes, sorry. So Environment Southland has been given that responsibility or agreed that Otago will look after that and Otago's currently working

through with ECAN to hand that up to them too, so we'll just have a central one for the South Island.

Q. How are they looking after things, like ORC is a present absence of regulation so how are they tasked, or by what authority do they have to look after anything? Is that under the Building Act possibly? Which piece of legislation confers them the power to be doing anything?

A. Yes, so with the regulation revoked the way it is, we're just rocking and rolling and I think they are too, the way we were always so there's an expectation that we'll send them in reports monthly, sorry not monthly, annually and then five-yearly inspections. We follow that up and that will give them progress reports. I'm going to talk about Loganburn and they have been part of that all the way through so if we need to control releases out of a reservoir so that can do maintenance, they need to know so we're communicating that sort of thing but really there's no regulations. They don't have a lot of power but they're going to get it soon hopefully.

THE COURT: COMMISSIONER BUNTING

Q. So what are the criteria? Do RFC apply in terms of the size of the dam?

A. They're four-metre high and the 20,000 stored. Greater than both.

Q. Okay, thank you.

A. There's a bit of a grey area around some of the maintenance work that's coming up on some of these dams. Do they need to be a party for that? I probably will just because it keeps everybody happy but really they probably don't need to be. Like I said before, they're really just – they put everything out to consultants anyway so they've been handed a bit of a grenade really. It's difficult to manage something when you don't have that in-house knowledge. So they're doing the best they can and the system seems to work. We all seem to be working together. We don't always agree but we get there.

Q. Who handed the grenade?

THE COURT: COMMISSIONER EDMONDS

Q. Can you just remind me of those figures that you're suggesting? I'm just looking at the permitted activity for the damming in Otago and that talks

about water immediately upstream of the dam is no more than three metres deep. Did you say four metres?

A. Yep.

5 Q. And the volume of water's stored by the dam is no more than 20,000 cubic metres?

A. My understanding is it's four metres. Three metres, I mean, you just couldn't get enough water behind it to warrant.

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10 Q. Sure, I'm just thinking about it in resource management terms and the volume of water stored, what did you say that was?

A. Greater than 20,000 yes. So if you have a look on the – sorry.

Q. No, I'm just looking at what you can do under the Resource Management Act without getting any consent.

A. Right.

15 Q. As a permitted activity and then you can't have your catchment upstream more than 50 hectares in the area, that's another constraint on a permitted activity, no resource consent required.

A. Sure. Thank you.

20 Q. So, what you're saying is, what you're doing is not quite aligned with that.

THE COURT: JUDGE BORTHWICK

Q. No, I think it is.

A. Well yes, if you have a look on the...

25 Q. Because you've got four metres and 20,000 cubic metres – no, well 20,000, what is the measurement?

A. 20,000 cubic metres stored. Yes.

Q. Yes in storage and so that – the regulations is three metres so that's below for permitted and 20,000 in storage. So, yes.

30 A. If you have a look in ORC's website you've – I think you're find its four metres and 20,000 so that's what we all operate to. So what's happened is that the contractors who are working for the farmers without the engineers are, they build them to 3.9 metres all right? So, and I don't have a problem with that because I know most of the contractors and the

ones that are cowboys, they soon get found out and all that sort of thing. But where we have a problem is if MBIE introduces this new regulation about one-metre high and 40,000. So all these dams that these guys have built, no information. It's like, "well where to you start?". And so
 5 supposedly and it's the engineers who are meant to sign off on these things. Well I'm not going to put my credibility on the line for somebody that – so just...

THE COURT: COMMISSIONER BUNTING

Q. Some of the regulations require retrospective res– consents.

10 A. They – potentially, yes. Just because they may, they may trigger, the medium to high PIC, the potential impact risk. So if they do trigger that then yes, you're right Commissioner, absolutely. So how, and then how do you do that? Well, you need to – the only way you can do that is to understand what you've done and the only way you can do that is start
 15 digging holes and testing material and sort of –, some of the contractors I would, I'd put my house on it. Their dams are perfect, they really understand the industry and that's fantastic. Some of the others are...

THE COURT: COMMISSIONER EDMONDS

Q. So if you're wanting to do a dam that's over this three metres deep and
 20 you go for a resource consent for that. Do the guidelines sometimes play a part in the consideration of a resource consent?

A. For a resource consent?

Q. Yes.

A. Well, I think they would – this is outside my world.

25 Q. Well, if you don't know, don't – yes. I just I think I'm aware of situations where the guidelines have come under consideration under a resource consenting process in terms of thinking about risk to people downstream and those kinds of things.

A. Sure.

30 Q. But anyway that's outside your experience so I'll leave it at that.

A. You've got Mr Curran coming to talk to you so he can nail that one for you when he comes...

THE COURT: COMMISSIONER BUNTING

Q. Is it your experience more on the building consent side, is it?

A. It is Commissioner. Yes. So with that building consent goes a producer's statement. So I sign off on that and it's a life commitment, I'm responsible
5 for that dam for ever. So I have real ownership of these things as far as looking after them. And I think everyone else in the industry thinks like that too. Carry on?

CROSS-EXAMINATION CONTINUES: MR PAGE**CONTINUES SPEAKING TO POWERPOINT PRESENTATION**

10 I guess just a couple of points here really. I talked about the PIC and it all comes back to the owner of the dam – or the responsibility, that's the owners. Dam deficiencies – it's not like a bald tyre on your car that you can wait a couple of months while you save up to buy a new one. If there's a deficiency, you need to respond. And you need to keep ORC
15 informed. So, Ross Creek was a great example. All the parties worked together to get the outcome that they got. And that last statement I actually, I took that off the MBIE website the other day, this is what their focus is around and the entire life cycle of the structure.

20 I talked a wee bit about this already but, actually I've talked about it a lot really, we have been – we are well represented in the world in terms of our design experience and are recognised internationally and we've got great representation on the international committee of large dams which is terrific for a little country like ours. So that's in the dam safety sector, the
25 environmental sector in relation to dams, just trying to think what other panels the men and women are on, but we are well represented which is, yes, like I say it's brilliant, so the guidelines are being reviewed as we speak even though they were put out in 2015 and I think that's a reflection of some of the earthquake sort of stuff that's happened of recent times
30 and just aligning themselves with the new regulations. So it really is a fantastic document in terms of where people on the south are sitting. Again, the guidelines point the finger all the way through at the owners and part of, a big part of what we do is around educating the owners and

the opportunity to speak today is all about educating the panel and making the owners aware of the responsibilities that they have. So this is a typical dam safety programme for a large dam, this is something that I, they would manage for a client, so surveillance and reporting is really

5 simple, there's instrumentation in some of these dams, so that gets recorded, it's all on a programme so it's annual or biannual or five yearly or whatever it is, monthly reporting and that gets incorporated into an annual inspection by someone like myself or another independent. The thing about dams is that everything on a dam is expected to work and

10 that's a really important message I guess I want you to sort of take it away, so part of the inspection is to make sure the testing of everything that they've got is working and then every five years these dams get a major inspection and again by an independent and what they're doing, is they're assessing the dam against current practices, so if we were to build a dam

15 today, how does that stack up against Ross Creek, and then they make recommendations, so three weeks ago we had one of these at Loganburn. I'm going to talk about Loganburn and then there's a whole lot of documentation that goes around these dams, operations, maintenance, surveillance, then there's training that's got to go in to make

20 sure the people actually know how to use all this stuff, emergency action, what if in the worst case scenario something happened and then about working through a process of, if there is a problem, working through a programme to investigate and coming up with the right solution. So Ross Creek, they found the problem but they didn't fix it the next day, they

25 actually immediately drew the reservoir down and in a dam like that, you've got to be really careful because you can damage the dam just because of the nature of how it's been built and stuff, so they didn't empty the reservoir, they pulled it down and then they covered the dam up to stop it cracking and then they went through an investigation programme,

30 came up with an agreed plan so that was submitted to Regional Council who put it out to their consultants, all parties agreed that this is the fix, this is an appropriate fix and then they went ahead and did the build and then they applied for a Code of Compliance to say that, hey, what we

designed, or what we said we were going to build, is what we built, so if

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THE COURT: JUDGE BORTHWICK

Q. All Building Act stuff?

5 A. Yes.

Q. Yes, okay.

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MR SHEEHAN CONTINUES SPEAKING TO POWERPOINT PRESENTATION

10 So I just want to quickly talk about Loganburn and give that, use that as an example of some of the stuff we do. So we've got the Manuherekia Catchment in the light green and then to the right, as we look at it, and it sits the Maniototo Catchment and at the head of that is the Loganburn reservoir. There's a joint part to this, Trustpower and Maniototo Irrigation Company own some of the

15 infrastructure jointly and then Trustpower into a couple of little power stations and so they had – the way this works is the Taieri River is a free flowing catchment and depending on the water that comes down Loganburn release is augmented to provide water for irrigation and hydro power. This is the Loganburn Dam which is a concrete face rock fall dam, so you can imagine a

20 great big sort of concrete slab down the front at a 45 degree angle, it's not quite that but we'll say it is, and then it's got carefully engineered fill, gravel fill in behind it which that concrete impermeable layer sits on, so that's what holds that water back and then what we're looking there is an overflow spillway so when the reservoir gets up to a certain height, it just emptied itself and it, the

25 idea that it doesn't damage the dam. And then –

UNIDENTIFIED SPEAKER:

Q. How's the dam drained if you need to lower it? You're coming to that, sorry.

A. Yes. No, no, good question. There is a tunnel and – so this is the tunnel

30 here, here's the intake structure, there's a wee bridge there that sits out over the water and I'm going to show you this in a wee bit more detail, so the intake's there, it flows through here, 86 metres and there's a wee gate

house there with a wee radial gate in it and can be controlled remotely or locally to release irrigation flows and in an emergency draw the reservoir down. Now it's only designed for eight cumecs and there's 110,000,000 cumec metres of water in there, so it would take a long time to pull that reservoir down under those conditions, months and months and months, but it's still capable of doing that and if they, for whatever reason, say there was a massive earthquake and that reservoir had to be lowered, you would explore other options and you'd probably cut a hole in the spillway to let it down, so that you could do whatever you needed to do, but..

MR SHEEHAN CONTINUES SPEAKING TO POWERPOINT PRESENTATION

Just a wee bit of background so that you can understand what happened, it's built in 1984 so really it's a new dam in our eyes, it's had 37 years of use since that time and the water in the reservoir is very acidic which leads me to my next slide, but they had a five yearly in 2016 and it was actually Ian Walsh that did this assessment and all he said was, "Hey, the stuff under water, how's it looking? Is it working? Show me that it's working, so I came along" and, when did I come along, 2018 I think it was and was given the list that Ian had put together or things that he, I won't say he wasn't happy about that he, but he wanted answers to, so I was tasked with working through that list of and genuine concern so again here's our intake structure, our wee tunnel through the hill here, so this is our hill, here's our wee tunnel and at one end you've got a fish screen that stops the fish flowing into the tunnel when they open up the gate and that's a consent condition and then when you want to have a look in the tunnel you drop a bulkhead which is a stop log which is just a big steel plate, drop it in there and you open up the radial gate and a few other valves and you drain it and so that we can go in and have a look at, and that's just good Dam safety practice to keep an eye on things, so when I got involved, the fish screen, they pulled the fish screen out and this was it here on the road, it was absolutely knackered and I, for the life of me I just couldn't work out what the hell had happened until, so I rang Ian up and I said, "What's going on here", and he said, "Oh well did you think about the acidic nature of the water?" "No I didn't Ian,

but I do now.” And so this is it refurbished and so these are these wee panels that sit in here and it’s the same fish screen that used to look like that, and just to give you an idea, that thing there weighs about two average cars, so it’s a massive structure for, I don’t know how big the fish are in there but this is a massive structure, even Loch Ness would struggle with this one. So, we replaced all that and not only did we replace it but nobody had ever pulled it out in the life of this stand. So, we figured out if we put some systems in place for pulling it out and then we put a maintenance schedule in place. So every year it gets pulled out, water-blast and they touch it up with this special paint.

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10 And so, hand on heart now we’ve addressed three things. So we’ve addressed the consent condition which helps my environmental colleagues sleep at night, knowing that there’s no fish that can go down the tunnel. Operationally I don’t know how they got water through those screens but it works perfect when they want the water, when the farmers need the water and from a dam safety perspective, I know that when they that gate it will work. It needs to work when I tell them to, “open the gate” and so we tick all the boxes. So that’s what it looked like three weeks ago after being in the wat – so we’ve had it out every year and next year we’ll probably water-blast it again and give it another paint. Paint’s cheap compared to what had to happen here, all right? So at the other

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20 end of the (inaudible 10:46:30) was the wee gatehouse and this is the wee gate that come out. And the tunnel’s 1.5 diameter, so you’ve got to be quite short to walk up it. And this wee radial gate which is built like a Sherman tank has a 20 mil plate on the front of it and when they pulled it out, I thought it was stuck. And it was a real mission to get it out but when they sand blasted it, this is what they saw on the right-hand sit which is just a section of one corner but 20 mil plate had 20 more holes through it and so (inaudible 10:47:07) and the acidity of the water had really, in just a short time, 37 years is nothing and had nearly trashed this radial gate. Now we got Far Engineering from Dunedin in to – and they’re the guys that look after the big Clyde Dam, spillway gates, they’re

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30 amazing people. “Oh no we can put that back together”, and they did and that’s the refurbished one. They did an absolutely brilliant job and same thing, so we had them up there as part of this five-yearly inspection. What I’ve also done is put the maintenance programme into a five-yearly inspection, so even though we fixed this in 2018, I got them back this year and it will cycle in five years and

it still looks exactly like that. So, when we did the inspection we had nine different companies up there, we had divers and we had electrical, mechanical, control system people. We had everyone doing their thing so that, we've got hand on heart we know that Loganburn's in great shape and that's the sort of thing that we need to do right across the dam world – and we're slowly going to work through that on these other older dams, so I just wanted to give you an example of the sort of thing that we're doing.

THE COURT: COMMISSIONER BUNTING

Q. So engaged Ian Walsh to do the survey?

10 A. Yes the irrigation themselves.

Q. And then the relationship to you?

A. Independently, they had a new chairperson at that time, she rang me up and said could you come and help us with our obligations, so they understood their obligations around the dam safety.

15 Q. So there was a distinct role that each of you played?

A. Yes, yes.

Q. Yes.

A. I didn't know until I got Ian's report, I didn't know that Ian had been up there or had written a report or whatever, I didn't know anything about the scheme to be honest, yes. And that's kind of important too, you need to have independent eyes and we might, we look at things differently and, yes. So it's in great shape. It would be fair to say that the discussions around the board table were pretty robust about the need to do this, but at the end of the day they came on board and I guess that's the other point I wanted to make about, I got involved say early two thousand –
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 March 2018 or something and in that time I probably spent about a half a million dollars' worth of their money. This is outside normal operations, normal business operations, maintaining their irrigation scheme, all that sort of thing, so yes, I'm an expensive guy to have around.

Q. Do the owners budget for this? Do you know?

A. Had they budgeted for it?

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Q. Do they normally budget for this sort of maintenance?

A. No, no. Like, well they haven't because, yes again it's about the education process and that's part of it, so we're – these guys are in good shape now, but their shareholder payments need to have a wee buffer in the background, they need to be saving up for these types of events, because they're non-negotiable come the time, but when these things need to be done, and that was part of trying to educate them around, there's an e-, they, I guess I think of it as a legal responsibility to have these things working properly. Payment's not my problem, it's theirs but I need to help them understand why they need to get the funds together for it, so, yes. Yes, and I guess educating them around dam safety is one aspect of it, but they all live in their own communities and I guess one of the strong things that comes through for me is they're very community focused and they're not going to let anything happen upstream of their community, so that's a big selling point when we have our discussions, so the Poolburn Dam, worst case scenario, if it failed, it would flow down through their valley and they've got a primary school that's just smack in that valley so there's no way that board is going to let anything happen to those children.

20 **THE COURT: JUDGE BORTHWICK**

Q. Which dam is that?

A. The Poolburn Dam.

Q. Poolburn.

A. Yes, it's part of the Ida Valley, no it sits outside of the flat part, but it's close enough that that's a real focus for them and so it should be.

THE COURT: COMMISSIONER BUNTING

Q. So do you do the studies that show what, if the dam broke, where it would go?

A. I can do, but it's normally I would manage something like that Commissioner, yes, because there's all the modelling and stuff, you know, Michael Evan and stuff like that that they use which is fantastic and there's some great people that produce those things, so in terms of the

5 Ida Valley Dams, Tonkin & Taylor put together the dam break studies and so the Poolburn and the Upper Manorburn and where that goes and who might be affected by that and then the emergency action plans fall out of that, so in that is the list of all the people that need to be contacted or that need to be made aware and, yes, my plan in the future for these guys is to be involved or get Civil Defence involved and we'll collectively talk to the communities around, what potentially could happen. Worst case.

Q. Are these in place now for all the dams?

A. Emergency action plans, most definitely.

10 Q. Yes.

A. But I want to take it a wee bit further than that and talk to the communities if we can.

THE COURT: JUDGE BORTHWICK

15 Q. For all dams, is the operation, maintenance and surveillance procedures and plans in place?

A. Yes. Yes.

Q. So you haven't gone anyone sitting outside those guidelines with not monitor- without having engaged appropriate advice from engineers and others?

20 A. Sure.

Q. So they're all in the tent if you like and...

A. Yes so I can't, like I said before, Idaburn and Falls, I can't comment about that but I'm quietly confident that if they haven't got them, they'll be getting them because Ian's involved.

25 Q. Yes.

A. And he's that sort of guy. In terms of the hydro dams and the hydro company, sorry, Trustpower got a really solid dam safety programme, Pioneer Energy I'm heavily involved in that and I know where they're at, so that's why I can talk about Fraser and certainly Contact Energy, they're
30 all over their stuff too so the hydro companies are in great shape and the irrigation companies are getting there, yes.

- Q. How do you define a dam owner? Is, yes and I know you mentioned, it might have been Loganburn, the dam owners being an irrigation company and Trustpower I think you said, what is a dam owner?
- 5 A. Well, so it's a wee bit unique in that particular relationship and this is my understanding, okay? But Loganburn Dam, Maniototo Irrigation Company own that outright, okay with that? Yes.
- Q. Don't look at him.
- A. No I'm pretty sure they do, 100%.
- Q. It's all right, I'm just trying to get it out from you what is a dam owner?
- 10 A. Yes so the-
- Q. Anyway Loganburn, the Maniototo Irrigation Company owns the structure –
- A. Yes.
- Q. Or owns the permits or has both?
- 15 A. I, yes, I probably should not say.
- Q. Yes, okay.
- A. Because that's not my area, but Matt will say tomorrow or today whenever he gets to speak.
- Q. Who's Matt?
- 20 A. Matt Curran.
- Q. Curran, all right, Mr Curran, yes.
- A. Mr Curran, sorry.
- Q. Yes, all right.
- A. Yes and so –
- 25 Q. So there's no definition of owner or dam owner in your guidelines?
- A. It just refers to the dam owner.
- Q. Okay.
- A. So yes, good point.
- Q. Yes because that's actually ultimate responsibility isn't it?
- 30 A. Yes it is, yes.
- Q. Yes and so I was just sitting there thinking, oh, is it somebody who owns the permits, who holds the permits –
- A. Yes.

Q. - or somebody who owns land upon which this structure's sitting? Yes, who is a dam owner, yes. Okay. They probably all know themselves unless it's a catastrophic failure then they might not know.

A. Yes.

5 Q. So it's just a question.

A. Yes, so the Ida Valley, they've got six structures which were all handed over to them, was it 1989 I think –

Q. Yes.

A. – so they are dam owners.

10 Q. The Ida Burn, the Ida Valley Irrigation Co?

A. Yes the Ida Valley Irrigation Company yes. Is my understanding. Is there anything else I want to say? Oh yes.

MR SHEEHAN CONTINUES SPEAKING TO POWERPOINT PRESENTATION

15

I think the other thing that I, or the other thing I wanted to really make clear to you is that I think of these things as intergenerational, Ross Creek Dam, you can look at the length of duration there, the irrigation dams, the three or four generations of people have been through these now, benefitted and all that sort

20

of thing. I see my own role as just a short, short part of the cycle and the idea is that under my reign I'll get it as best I can but the next people will be, be able to pick up and run with it so, if I use Ida Valley again as an example, they've set up an electronic database and then I've fed everything into it and it's all there, if I got run over by a bus tomorrow it's all there. And the next people can look

25

after it like I've been looking after them, I guess. And likewise, there's some really interesting things to discuss in terms of bores and irrigation schemes and whether you're just in looking after it for your period or whether you're putting money away for long term sort of (inaudible 10:57:40) of things. So, yes –

30

nothing lasts forever so, at what stage would the structures have to be replaced for example, if Ross Creek is 150 years old, could it be 300 years old? And likewise with these other ones. So, and there's no reason to think unless there's a catastrophic event that they – if they looked after properly that they couldn't be there because, yes – so I think we've got to start thinking a wee bit more about the age of these structures and how we manage it and the need for

money in the budget to look after them, not better but I guess if she was my mother, she's a very capable woman. My mother has passed away by the way but she's a very capable woman and I wouldn't be too worried it. If she was my grandmother I would, I'd be a bit more concerned about her and I'd take much better care of her and if she was my grandmother I'd be all over her. So, I'm trying to put the words around that but you just need be – you need to be holding their hands all the time.

THE COURT: JUDGE BORTHWICK

Q. But yes, so that's your great grandmother, you're talking about the likelihood of an event occurring and then consequences of that event. So if it's your grandmother in (inaudible 10:59:25) terms the likelihood of an event increased, is that what you're saying or not necessarily increased but the maintenance, surveillance and investigation has to –

A. Reflect that.

Q. – has to reflect the age of the dam.

A. Yes.

Q. So you're not necessarily saying an increased risk or probability of an event occurring necessarily increases but your surveillance, maintenance and investigation must reflect the age of the dam? So, yes.

A. Thank you, that's what I'll put.

Q. Okay, no that's all right because that's critical because I think we heard a lot about how old some of these dams are and you know, a lot of them seem to be Depression projects.

A. Yes.

1100

Q. But that one should not infer from that therefore there is an increased likelihood of failure or catastrophic failure however you know, you measure your high, your medium events but rather what is, yes – but that your surveillance programmes and maintenance is reflective of the age and I guess the construction. Yes, okay.

A. Thank you.

THE COURT: COMMISSIONER BUNTING

Q. Just on that front, the five years you know with the (inaudible 11:00:38) is that built into the consul– guidelines is it?

5 A. Yes it is Commissioner, yes. It's great, I'm a big fan of it. So, I'm just finishing similar studies for two dams in Tasmania, yes and they've got similar programmes and we work closely with them. The only difference with them and us is they don't have earthquakes like we do and it's – they get rather excited about magnitude 4 whereas most Kiwis don't get out bed for magnitude 4. So interesting.

10

WITNESS CONTINUES SPEAKING TO POWERPOINT PRESENTATION

And finally we've covered of this already but – and just building on what you said your Honour, the cost are going to increase. Just because we do need to be all over these things. And that's for the boards to work through, the dams
15 are getting older. I dropped the small earth dam out of the next statement here about the Manuherikia catchment, the little one was built in 1955 because it's only gone a very small reservoir behind it, I think it's 15,000 cubic metres. It's absolutely nothing. Doesn't mean I won't be looking after it because I will but the rest of them range between 90 and 118 years old. So, they are such an
20 important integral part of the communities and the economics for these areas, they are – yes.

THE COURT: COMMISSIONER BUNTING

Q. Do you just want to talk the first one about safety being comprised by a 60 year-old rollover. I thought you said somewhere earlier, there are
25 problems identified, it needs to be fixed now. It can't be delayed.

A. That's right, Commissioner. So my, I guess in your deliberations what I'm saying to here is that I'm really concerned that if you roll it over, if you follow their water permits for six years, like there's been discussion about. That it compromises the dam owners' ability to do what I need to do for
30 them.

THE COURT: JUDGE BORTHWICK

Q. Now we don't understand in what way, given that that obligation exists independently from any decision as to duration. So...

5 A. So, let me explain further. It's all about finance. I need money to do – to run these plans. Now what I'm hearing is that their financiers are saying to them already that six year term and they're going to struggle with approving funding for their on-farm produce, whatever they might be. So, this is not their on-farm produce, they may be able to park stuff up for six years and I'm talking out of school here because I don't know what their...

10 Q. This is the financiers being the banks –

A. Yes.

Q. – and so you're reflecting back, what you heard anecdotally –

A. Yes.

15 Q. – that banks won't lend for operations, maintenance or surveillance of these dams unless they know the dams, whatever that means because we don't know what that means yet, are permitted for a longer period of time and but you haven't seen any evidence of that?

A. No I haven't, no.

20 Q. And the obligation at the moment is resting with the dam owner, whoever that is.

A. Yes.

Q. Yes.

25 A. So, you're right. But what I want to say to you is that I can't afford to happen in that position that they can't allow the programmes to continue on. Do you know what I mean?

30 Q. So, if they don't allow programmes to continue on, okay, so they – quite apart from jeopardising the use of the water, downstream use of the water, what then if down owner is not maintaining a dam appropriately? What are the regulatory tools if anything available to presumably a regional council?

A. Right, so with the legislation the way it is at the moment, there are a wee bit – it's in a very grey zone. I'm not sure how it would play out if event happened where a dam was compromised in some way and that they had

to do something. Like the worst-case scenario from the owner's perspective is that the regulatory people would step in.

Q. And lower their water?

5 A. That would be one way of doing yeah or step in and do something about the dam.

Q. And charge back?

A. Yes.

Q. So looking at enforcement mechanisms under the Resource Management Act.

10 A. Yeah.

THE COURT: COMMISSIONER BUNTING

Q. How would the regulatory people know there was a problem?

A. Pretty small world we live in. Most people knows.

Q. So there is no reporting regime to the council?

15 A. Yes, there is. If there's an incident I'm obligated to tell them, most definitely but word of mouth goes faster than my emails anyway. We had an incident in Maniototo in the March, a wee dam blew out and everybody, everyman's dog rang me. It wasn't one of mine thankfully. It's amazing how word gets around so I guess I wanted to bring it to your attention that
20 you're talking about the six year thing and there may be something else here going on that puts them in a pretty awkward position in terms of dam owners. The bottom line too, of course, around health and safety and (inaudible 11:07:22) and I said it before but they do have a massive community focus too so it's not all about the law, they are – Saturday
25 night they go to the pub and they're talking to the neighbours and the neighbours are saying they would be into them if they weren't happy with how the board was behaving so.

THE COURT: JUDGE BORTHWICK

Q. I understand that. Is that end of your slides?

30 A. Yes, it is, thank, your Honour.

Q. That's excellent. We're gonna take a copy of those slides as well because that's actually been really helpful and we're going to take morning tea so

you can have some rest before any questions come from the lawyers.
How does that sound?

A. Yeah.

Q. So you're still on your oath and no doubt Mr Page will bring you a cuppa.

5 A. Thank you.

MR PAGE:

Before I forget, not about the cuppa, I wonder whether we should have that produced as an exhibit.

10 **THE COURT: JUDGE BORTHWICK TO MR PAGE**

Q. So we're up to OWRUG 3, aren't we?

A. I have no idea.

Q. So exhibit OWRUG 3, PowerPoint slideshow. I forgot what the title page is.

15 **EXHIBIT OWRUG 3 PRODUCED – POWERPOINT SLIDE SHOW (DAMS)**

COURT ADJOURNS: 11.09 AM

COURT RESUMES: 11.29 AM

THE COURT: JUDGE BORTHWICK

Q. I see you got a cup of coffee so that's good.

20 A. Yeah, thanks. Very nice.

Q. Alright so have you got any final questions?

EXAMINATION CONTINUES: MR PAGE

Q. Mr Sheehan, are you aware that plan change 7 doesn't capture Resource Management Act permits to dam water but does capture deemed permits to dam water?

25

A. Yes.

Q. Would you be able to identify relatively quickly which of the medium and high PIC dams in Otago are subject to – I'm not asking you to do it now. Are you able to identify which ones are the deemed permit dams?

A. Assuming based on this list, is it or?

Q. Yeah, have you got access to information that would allow you to do that.

A. Yes.

Q. Thank you.

5 THE COURT: JUDGE BORTHWICK

Q. So that's capturing medium to high PIC and I forgot what PIC meant but.

A. Potential impact classification.

Q. Potential impact classification.

A. Yeah.

10 EXAMINATION CONTINUES: MR PAGE

Q. That are deemed permit dams?

A. Yeah.

THE COURT: JUDGE BORTHWICK

15 Q. Because if you're medium to high Potential impact classification then what then captured by the guidelines and captured by Building Act or Resource Management Act? Can you remind me again?

A. So it's not just the low ones come under the guidelines too so low medium or high all are covered in the insole guidelines.

20 Q. So what would you exclude low impact classification from the deemed permit suite?

A. Just looking at this list here, none of these are low so doesn't really come into it. These are all medium and high that I will be talking to.

Q. This is your list of 23?

A. No, this is.

25 Q. I don't know what that list is. The list that you had up there on the screen. You had a list of 23 or in the 30s, 32 23.

A. Correct, your Honour. So that was just Central Otago ones and I've had a few outliers in there too.

30 Q. There's a fair few more than that okay. In those list of dams you saw in the screen, are they all medium to high potential impact classification?

A. No, there's some lows in there too.

Q. Some lows in there too. Okay.

THE COURT: COMMISSIONER EDMONDS

Q. And those are just large dams?

A. Yes, they are.

5 Q. That threshold.

A. Yes.

MR PAGE:

So what I propose to do Ma'am is to winnow out from the evidence that you've
got which ones are deemed permit structures because that's the ones of
10 relevance to PC7 and the witness says he can do that for us so I'm simply
going to offer to have him produce a table of those once he's left the
witness box.

THE COURT: JUDGE BORTHWICK

Q. What do you think?

15

MR MAW:

That information would be useful and it's something we were working jointly on
putting together in any event. I suspect the question is how we have that
information produced and whether this witness can produce that information
20 now. Are you in a position to produce that information now or is that work that
you will need to go away and do and come back to the court with that table?

WITNESS:

If we're just talking to the list that yourself and Mr Page have, we can do that
25 today.

THE COURT: JUDGE BORTHWICK

Q. So it's the lawyer's evidence, is it? You know, it's your evidence. What
dams which have a medium to high PIC are also subject to deemed
permits? Now, I do know what deemed permits are but I don't know
30 whether that's taking use or impounding or what that is so I suspect you

may know or you may have to work in with the ORC, perhaps in terms of its databases. I'm not happy that you confirm a list produced by lawyers because they're not giving evidence and we wanna know what's in, what's out.

5 A. Sure.

Q. So, that's fair enough isn't it otherwise it's your evidence. You might as well swear yourselves in.

A. Well what deemed permits exists a matter of public record and what I was attempting to do was to refine that because this is their engineering works
10 but if you can tell us which ones?

Q. Yes, that's still your evidence and we, you know, if it's important to know then it has to be verified that these are the deem permits, whatever that means and these are the haier medium PIC structures, not your evidence. It is your planner working in with your engineer.

15 A. Yes. All right, well perhaps I'll discuss with Mr Maw about what's the best way to advance it.

Q. It's still not his evidence either. I'm really, you know, we're going to be firm on this. It has to come from your witnesses, yeah.

A. Yes, I understand that but between us we might be able to devise a way
20 which the regional council is happy about how the evidence is produced and by whom and so that we...

Q. You actually have to make me happy. The Bench happy. That's how this works so you need to think about this, yeah. You need to think about this.

A. Yes. Well it's really about identifying what the scope of Plan Change 7 is
25 because that's what we're trying to do is to identify which dams are Plan Change 7 dams and which ones aren't.

Q. Well I've said all I'm going to say.

A. Well I've got no further questions for the witness Ma'am.

Q. Thank you.

30 **CROSS-EXAMINATION: MR MAW**

Q. Good morning. You gave some evidence this morning in relation to the transfer of functions under the Building Act with respect to Otago and Southland. Are you aware that both Otago Regional Council and

Southland Regional Council have recently transferred those functions to the Canterbury Regional Council?

5 A. No. I knew they were doing that Mr Maw so I think I mentioned that to Your Honour, yes I knew that was coming up in discussions with OIC, they've raised that with me.

10 Q. Now when you think about the dams that you have a working knowledge of within the Otago region and the dams that you are involved with in terms of the maintenance and dam safety programmes, have I understood your evidence correctly that there's no imminent threat of dam failure in the short-term and short-term I mean the next six years?

15 A. With the dams that I look after, today there is no imminent danger but if something were to change in that period then – so I can't say that nothing's going to happen in six years. There is every likelihood that there will be indicators that post flood or post-earthquake that may indicate that or may trigger a response in that period.

Q. So there's no current deferred maintenance that is not being carried out on these structures at present that might compromise their safety and integrity?

20 A. Again what I've done for all of the dam owners, hydro and irrigation is prepare in a spreadsheet of listing the work activities that perhaps I've identified or previous engineers have identified and then I've prioritised them and I've tried to put dollars around them and working with the owners so working with the irrigation boards, talk them through what it is and why we're doing things and put them in a position to – because they need to release those funds to do the work, you know, to give them some sort of sense of understanding about what is going to be done and why it needs to be done so there's some items of work that have higher priority and I would say over the next 24 months we would definitely want to address those issues and then the others over – it would be a five-year rolling programme as most of them that I put together.

30 Q. So putting to one side the resource management permits, is it your experience that the dam safety and the maintenance obligations are existing outside of the Resource Management Act process?

A. I can't comment about the Resource Management Act process really, no, yeah, no, I'm sorry I can't talk.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Was your question more geared towards Building Act?

5 A. Yes.

1140

THE COURT: JUDGE BORTHWICK

Q. Can you comment about the Building Act process?

A. Okay, so the five-yearly inspections are documents that are prepared.
10 They're public documents so in the case of the local agreement if we use that as an example, where there might have been at least 40 items of work and some of those are quite major items that Mr Walsh, a dam engineer I referenced before, identified as needing, so I took those and I prioritised those and because they are a public document, that when he
15 submitted that to the Maniototo Irrigation Company it was also submitted to the Regional Council and so they were aware that this outstanding work had to be managed. Now the process actually allows me to push back on behalf of the irrigators or the generators. I can say that I think he's been pedantic or that he's been too conservative or we'll manage an issue differently from how he may see it. In the case of what Mr Walsh put
20 together we diligently followed that through and there's only one item that we're outstanding on and it's been addressed as we speak and the five-yearly inspection, the engineers involved in that I want them to comment on the information that's been a bit late coming in but that will
25 be part of the next five-yearly, or the five-yearly investigation that's just been done. It will be reported on. So even if we – they may say well you haven't done it and why not and my answer probably would be if it was a low impact item it's really not a concern but in this case it actually is a point of significance and so I'm not embarrassed but I'm a bit concerned
30 that we haven't got that information to them because I really do want them to comment on it. Yeah, sorry, being a wee bit long-winded there but

there is a process and OIC are part of that process all the way through and they need to be part of it.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. So as issues arise with these dams do you follow a process of identifying swiftly what the risk profile of an issue is to determine how quickly it might need to be responded to?

A. Yeah, that would be part of the investigation phase for sure and so under the guidelines and under the old regulation actually, if it's an emergency because you've got an awful lot of water sitting back there, you've got carte blanche. You know, you can just rock in there with diggers and bulldozers and whatever you need. You'd have to justify that afterwards of course but other than that, there's a process that needs to be followed and inevitably it's going to be peer-reviewed and potentially it's going to end up in a legal stouch because who's going to pay all that sort of thing and so it needs to be really rigorous that type of thing so Ross Creek was a great example, yeah. There was some head banging went on over that job but they've come up with a great solution and everyone's happy.

10

15

Q. Now in your written evidence-in-chief – do you have a copy of that with you?

20 **WITNESS REFERRED TO EVIDENCE-IN-CHIEF**

A. Yes I have.

Q. I want to take you to your paragraph 8 and the last sentence of that paragraph.

A. Yes.

25 Q. And here you refer to the evidence you give relates to the permits for the dam structures. I'm interested to know which permits you had in mind when you wrote this part of your evidence so what are you referring to in this context?

A. Well I knew about the dam permits but I didn't know about the details behind those dam permits. So probably more in relation to the Building Act as Your Honour said before.

30

Q. Your paragraph 15, you refer to module seven of the NZSOLD guidelines.

A. Yep.

Q. And you make reference there that those guidelines are operating regardless of consenting processes under the RMA?

A. Correct.

5 Q. So is it fair to say it's the guidelines that are driving the maintenance and the management programmes in relation to these dams not any permits issued under the RMA?

10 A. Again I can't comment on the deem permits because I don't have that background but remembering that the guidelines used to sit under the regulations and I know we're floating in the wind at the moment but the industry, and when I say "industry" I'm including the OIC are supportive of what the NZSOLD guidelines bring in terms of the ongoing stability or ongoing safety of these structures, remembering that the regulatory people, in particular OIC has had representation and NZSOLD were very much a part of putting those NZSOLD guidelines together which is great.

15 Q. Thank you. No further questions.

CROSS-EXAMINATION: MS BAKER-GALLOWAY – NIL

RE-EXAMINATION: ALL PARTIES – NIL

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

20 Q. So counsel have asked you to put together a list of dams with the high to medium PIC, which dams are subject to deem permits. My expectation if you do this, is that that will be for the whole of Otago, not just Central Otago, that you've done a clean sweep of the whole region so that we actually know what infrastructure's in or out, or in as the case might be.

A. Yes.

25 Q. And that there'll be identification of deemed – of the deemed permits as well and I don't know what's yet meant by the deemed permits. We have yet to get to the evidence as to what that might look like, but it could well be is that for any dam structure, there are a combination of deem permits and RMA permits.

30 A. Yes.

Q. And we're particularly interested if a bundle of permits constitute a dam, we're also interested to know whether any of the RMA permits are subject to conditions which import the guidelines into them.

A. Sure, okay.

5 Q. So the whole story might not be told, in fact, very little of any story is told in the deem permits so we'll be looking to understand the whole of the consenting story if I could put it that way for a dam. I'm specifically interested in any RMA permits which also include reference back or a tie back into the guidelines as conditions. For that I think you need to be, possibly I would think, unless you've got access to the OIC database, you will need to be working with one of their planners.

10

A. Yes, okay, yes. When would you like that?

Q. We still want that actually before or by Mr Curran I would have thought. Yes.

15

MR MAW TO THE COURT: JUDGE BORTHWICK

A. What I can say without giving any evidence is that the work is well underway in terms of having identified the deemed permits from the council's database and there is dialogue between our respective planners and experts in relation to that so that part of the exercise is fairly well advanced.

20

Q. But it may not just be deemed permits and I can't think which structure it was now but I thought we heard evidence about a structure which was reference holding to – a dam structure holding two deems and two RMAs. I'm really curious to know what conditions are sitting on those RMAs.

25

A. Yes. The other thing just to put into the mix, my understanding is that the structures may well be permitted activities under the plan in terms of the section 13 works or structures in the bed of the river so I'm still trying to get my head around what the bundle of consents looks like when we hear about damming permits and we're not there yet on that.

30

Q. No, no. And I suppose you could look at the most – I don't know whether the Loganburn 1980 structure is the most recent relevant structure but that could be under a different plan.

A. Yes, and my recollection is that's not actually captured by Plan Change 7.

Q. Because it's got no deems?

5 **UNIDENTIFIED FEMALE SPEAKER: (11:49:53)**

It hasn't got any.

THE COURT: JUDGE BORTHWICK TO MR MAW:

10 Q. Anyway to answer the question we are trying to get that list ready in the next day or so, so the idea is to have the information ready before Mr Curran appears and he's likely to be scheduled next week at some point. Yes, that's right. So I think he's now put off, yes. All right. No, you're looking a bit downcast. How does that sound?

A. No problem. So have I got this right? Every dam in Otago?

15 Q. Yes.

A. Which is okay. Yeah, that's okay.

20 Q. Yes well I think so because you've got to understand what the problem is that you're asking for the Court either to carve out and I guess put under the operative plan because that's one way to go or to carve out with some sort of provision of this plan then, you know, I don't know where your thinking is, or anybody's thinking as I haven't seen the issues. I'm not sure where you may be going, yes.

25 A. The task may not quite be that big, if you think about Plan Change 7 as capturing only the dam permits that are deemed permits and I don't understand any party seeking relief that would bring all dam permits as in RMA dam permits within the remit of Plan Change 7.

Q. No.

30 A. So as I'd understood it the process would be identifying in the list those dams that have deemed permits associated with them which is – it's not an extensive list as I understand it. The next ask would be Mr Sheehan adding his classification in relation to each of those dams as to whether they are a high-risk or a medium-risk and then that would be the information perhaps together with the underlying permits that would be

provided because those are the permits being captured potentially by Plan Change 7.

5 Q. Okay, so that sounds right. I mean I don't know whether that's a huge task and you know, because we obviously know three catchments where we have a lot of deemed permits but there are other deemed permits in other catchments as well and I'm not sure what the link up there is with dams. Yes, just to be clear, we're not just looking at Cardona, Arrow and Manuherikia. It's a claim for the region.

A. Sure.

10 Q. Very good. All right, so anyway you – counsel are quite happy, witnesses from both sides working in together, yes.

A. We'll figure it out.

Q. Good.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

15 Q. The dams your responsibility for –

A. Yes.

Q. – do any of them have consents under the Building Act that you know of?

A. Good question. Well they must do. Horseshoe Ben was built in 1999 so that must be under the RMA Building Act. So anything post-'91 I guess
20 will be captured there although there aren't many if I remember rightly. In fact, I can tell you but I guess Mr Curran's going to address some of these things too. Oh well, actually going down the list that I've got and it's not complete, ones like Horseshoe Ben and Clyde were the only ones built since 1991 really so they're likely to be the only ones that have been
25 captured under that framework.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

Q. So the previous Building Act didn't capture dams is that what you're saying?

A. Correct, that's my understanding.

30 Q. So it only came in in the 1991 Building Act?

A. Yes, I guess so, yes. Yeah, I think they were...

Q. Was there some other regulatory regime prior to 1991 that you know of?

A. Not that I know of, no.

Q. Okay.

A. I'm not sure how these deem permits tie into it but maybe that covers some of it, I'm not sure.

5 QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER BUNTING

Q. And my second question, the five-year reviews –

A. Yes.

Q. – of the dams you're responsible for, where are they at at the moment?

A. Right.

10 Q. So in other words do you do them all in one year or are they stand over, or overshadowed?

A. It would just be too much to manage.

Q. To do it all?

A. Yeah. So I know Loganburn sits outside this but we've just done Loganburn so that's done and dusted for another five years which is great. The Ider Valleys' dams were done in 2019 so now we've just got involved in the last sort of 18 months but we're working through a programme with them of what we need to do and the Pioneer Energy ones that I'm involved in, they're staggered all over the place but the most recent ones were done in 2019. I think they were deferred through Covid-19 but, yeah...

20 Q. I guess my interest really was if some hadn't been done, and they'd been done in the next couple of years, could they highlight things that get into this concern about the six-year programme, in other words, works identified that needs to be funded?

25 A. Sure. Well I'm pretty sure that Falls dam and Iderburn Dam which Ian Walsh has – I'm pretty sure he did those last year as the five-yearly thing so most definitely there'll be some issues there that need to be addressed and I'm sorry I'm not privy to that but, yeah, there is some quite significant works coming up over the next few years cost wise.

30 Q. I just wondered if you had some idea.

A. Yes, and we're talking millions here. We're not, you know, it's serious money so just to put you in the picture really.

QUESTIONS ARISING ALL PARTIES – NIL

THE COURT: JUDGE BORTHWICK TO THE WITNESS

Q. Well thank you very much. That was really helpful, so thank you.

A. My pleasure. Thank you Your Honour.

5 WITNESS EXCUSED

MR PAGE CALLS**HAYDEN TEMPLETON CRAW (SWORN)**

Q. Is your full name Hayden Templeton Craw?

A. Yes.

5 Q. And are you an agribusiness specialist with Compass Agribusiness Management Ltd?

A. Yes I am.

Q. And did you prepare a brief of evidence dated the 4th of February 2021?

A. Correct.

10 Q. And do you confirm that it's true and correct to the best of your knowledge and belief?

A. Yes.

Q. Now on page 1 of your evidence you prepared an eight-paragraph summary of your key points. Did you wish to read that or simply have it taken as read?

15

A. I'd like to read it please.

Q. You would okay. Well would you please do that now?

WITNESS READS SUMMARY OF KEY POINTS

20 1. Water, in a broad context, is the most important resource in Otago to derive production out of land, regardless of its classification.

2. The resultant productivity is the key driver of the value of the asset. If there is any uncertainty around the current or future productivity, this uncertainty is directly reflected in value people are prepared to pay for the asset.

25

3. Banks undertake a comprehensive risk review when looking at a financing request. Many factors are taken into consideration, but assuming qualitative risk factors such as management, markets and compliance are met, approval and loan terms become dependent on key quantitative criteria being cashflow, security and equity.

30

4. Productivity drives cashflow. Under normal circumstances the first five years post development of gradual productivity increases provide limited ability for business to undertake the required principal reduction.

5. The primary industry land market has seen a significant shift from a capital-based market to a returns-based market. When uncertainty exists, a higher return is required to offset this risk, reducing asset value and therefore available lending security.

5 1200

6. The higher the perceived risk, the higher the external equity the bank requires to reduce the likelihood of loss from a bank perspective. The appropriate level of debt and therefore equity for a business is intrinsically linked to cashflow.

10

7. The impact of a short consent period of six years is that it creates uncertainty around productivity and this uncertainty requires anyone investing, to seek additional comfort.

8. Put simply, banks have to account for the risk that at the end of year six of a water permit renewal, that access to irrigation water could cease entirely. Given that irrigation development generally takes five years to start showing a return on capital, that is highly problematic. I would expect new irrigation investment to cease for farmers in that position.

15

EXAMINATION CONTINUES: MR PAGE

Q. Mr Craw I just have a couple of questions for you. You've addressed your evidence towards the effect of uncertainty. The Court's heard from a number of farmers about how they've invested significantly in infrastructure in the last half decade or so prior to this year.

20

A. Yep.

Q. And they've done that knowing that their permits expire at the end of this year in October. Can you explain, well is there a distinction between the risk that those farmers faced this year and what you perceive is the risk in the next six years and if there is a distinction can you explain it?

25

A. Yes I can. Just to provide a wee bit more relativity so I was banking between 2007 and 2012. Had two years away and then was banking from 2014 until the middle of 2019. I guess from in my opinion the rhetoric changed over that period so the development that was going in in 2016 and in that period there, a lot of it was driven by the fact that obviously you had to know how much water you were actually using and a lot of

30

people back then actually couldn't quantify that. You were being told you had to use your water efficiently which drove that development and that efficient use was driven by the fact that okay we've got these consents expiring in 2021 to have ongoing access to that water you need to be showing that you're already using it efficiently so that was driving some of the behaviours there and then we also had Plan Change 6A which talked about the 30 units event and then that was driving development away from border dyke irrigation into spray irrigation at that time as well so people could get under that 30 units and then essentially retain that right to farm so that there was going on at the same time which was forcing people's hands that some of the border dyke farms were well over 150 units of N on the Waitaki Plain so they had to make significant changes to know that they still had the right to farm so there was different pressures going on then and so I guess versus now and I guess at 2021 the risk wasn't seen around losing water. I guess the rhetoric that we heard on the roadshows were that if you can show that you're efficiently using your water, that risk wasn't really apparent and whereas now it feels like the risk is more on the quantity of water in going forwards.

Q. Okay. My second question relates to the going forwards. Are you aware that a regional council can review the conditions of a resource consent after it's granted despite it's term and that review might reduce the allocation of water or impose flow minima that might make water less reliable?

A. Mhm.

Q. Do you see that presenting the same investment risk as a short-term permit?

A. As I am aware that the opportunity to review any consent is there. I think in my mind it is a reduced risk of the term of water availability is longer and the reason for that is it gives farmers time to react and respond to what's been given to them if there is a review during that process so they can invest.

Q. Thank you.

THE COURT: JUDGE BORTHWICK

Q. So they can, what was that, digest or invest?

A. Invest. Okay.

EXAMINATION CONTINUES: MR PAGE

5 Q. So what sort of thing might they be investing in to address the risk of less reliable water on a review?

A. Look it is specific to each business but I guess an example would be if we've got restriction of water during periods an irrigation dam might be – an on-farm irrigation dam might be an example of what someone would
10 choose to invest in to I guess get better surety of their water.

Q. Thank you. I have no further questions.

CROSS-EXAMINATION: MR MAW

Q. I did have some questions but they may have been answered. Just bear with me. In paragraph 9 of your evidence you refer to water in the broad
15 context and you note: "It's the most important resource in Central Otago to drive production out of land regardless of it's classification". What do you mean when you're referring to "regardless of it's classification". Are you referring to the water or the land or?

A. I'm talking about the classification, the underlying soils' classification.

20 Q. In terms of your paragraph 21 you were addressing previous investment made in the context of cherry farms. Our cherry orchards I should say and now my friend Mr Page asked you some questions about what the risk profile looked like at the time that those changes were made. In your experience and thinking back at the date ranges that you had in mind
25 when you were referring to those developments, when were those developments undertaken?

A. Look in terms of those cherry developments we've seen a recent push in the last two or three years, something like that but probably from 2000. Like I say I've only been banking down here from 2014 onwards.
30 Probably 2017 we started to see increased investment into cherry orchards.

Q. So were you involved in obtaining financing in relation to those expansions?

A. Personally no. My major – I was aware of what they'd invested but personally my focus was mainly pastoral based farmers.

5 Q. So you weren't involved in the risk assessments that were undertaken at the time in relation to the shift to cherry orchards?

A. Not directly no.

Q. From a financing perspective, when you're thinking about managing risk isn't it better to know prior to significant capital investment that there may be insufficient water resource available to fully utilise that capital resource?

10

A. Can you please repeat the question?

15

Q. So when you're thinking about risk and perhaps think about two options: the first option is one where there is investment, and let's say it's investment into a new centre pivot and that investment could occur say now with a potential short-term period where water is available –

A. Mhm.

20

Q. – I want you to compare in your mind to a situation say in six years' time when there's greater certainty as to the actual availability of water. When you're thinking about risk in terms of that level of capital investment –

A. Yes.

1210

Q. – isn't it better to have certainty over the water supply that is available into the longer-term?

25

A. I guess the point to note, so from a brand new irrigation development, I think you're right but a lot of what we're talking about, they already have existing water and they've been – there's other drivers that are driving, telling them to drive efficiency, so they're having to invest into irrigation block, spray irrigation, so in a way they're kind of, they're tied, they're stuck in no man's land so it's w- do they make a call now and because there is, if you do develop with irrigation you do get a – with spray irrigation you do get a productivity lift out of that so there is the immediate benefit, it is staggered, it does take time to achieve that, so there is the productivity lift that can be garnered and yes okay you may have to deal

30

with change in reliability, but that at the end of the day if you're going to have to make an investment into pivot irrigation or fixed grid or something in terms of an efficient irrigation source at some time, the thing that we're debating is whether the – it's how much of that water is available and then you've got to decide at that time knowing what you need to fill that gap. Is it just increased feed brought in or is it storage or...?

5

Q. So knowledge about certainty of supply is perhaps the most important factor when looking at risk?

A. You can never, like it, you can never be 100% certain in the supply with water, so look I think, knowledge is power. I, yes I don't debate that, but is it that, the other factors I think in terms of having to efficiently use that water and know what you're using, is important.

10

Q. If one of the purposes of Plan Change 7 was to discourage investment in new irrigation infrastructure over the short term until such time as there was a greater level of certainty in terms of how much water was available, in your experience, has Plan Change 7 then achieved that purpose, so has Plan Change 7 put a handbrake on investment into new capital?

15

A. It has certainly muddied the waters in terms of investment options. Like I think the, when I'm sitting down with my clients now and we're looking at do we look at doing spray irrigation or look there's obviously other rules in terms of what you can do, in terms of increased irrigated area now anyway that we've got to take into consideration, but what we're now talking about is, is it worth the investment, is it, do we put, is it worth putting pivots on or even can we get away with a cheaper alternative such as K-Line but K-Line still it doesn't, okay it takes away from border dyke irrigation and potentially increases the productivity but what it doesn't do is it still isn't as efficient use of water and it requires significant labour input, so people will make different investment decisions based on the term of, well the term of the water known, if they don't have confidence around it.

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Q. So in that regard, Plan Change 7 is discouraging investment in new irrigation infrastructure in the short term?

A. Yes or updating existing.

Q. Thank you, those are my questions.

CROSS-EXAMINATION: MS BAKER-GALLOWAY – NIL**RE-EXAMINATION: MR PAGE – NIL****QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

5 Q. So based on the questions both from Mr Page and Mr Maw, the key investment decision is a move towards greater efficiency in the use of water. Is that the investment decision that is the principal and most important investment decision being made currently?

A. Mmm.

Q. That's a generalisation I know, but ...

10 A. Look I think so, look everyone's aware that longer term the availability of water is going to be, it's not what it was and so people are going, well how do I maximise my output and I talk about production, how do I maximise output from the water I have available, so that's efficient irrigation that drives that. So then essentially more efficient irrigation, more productivity and whether it be grass or yield and what's that converted into and what that then underpins is the value of the property, so what I mean by that essentially, just take a sheep and beef property, for example, one sheep and beef if property's essentially sold on a per stock unit basis, one stock unit is considered to consume 560 kilograms of dry matter per year and

15 that's all relative to how much the farm grows on that per hectare, so, for example, if it grew 5,600 kilograms of dry matter which was available for consumption, that would be considered a 10 stock unit to the hectare property and the no stock units are then what creates the end value.

20

Q. So your clients are generally aware that water availability is uncertain both now and going into the future?

25

A. Mhm.

Q. And that uncertainty, and you're indicating, I think you're nodding yes, for the transcript, so just so we, just say yes or no so we actually get it captured?

30 A. Yes.

Q. So there is uncertainty and that is a not only a consequence of the Regional Council reviewing its – it's a consequence of both the legislation

and higher planning documents such as the NPS for Fresh Water? And that's a yes I think?

A. Yes, yes.

5 Q. And as well as it is knowing that the Regional Council's going to have a new regional policy statement and a new land and water plan coming up?

A. Yes.

Q. And then added to that is flux or flux caused by climate change and that's a big unknown as to where we're heading in the short to medium term, would that be fair?

10 A. I think –

Q. Or are farmers not bothered about climate change?

A. Well yes they are, but I guess farmers generally, they, there's a lot of things that farmers can't control.

Q. Yes.

15 A. And so they try to focus on the –

Q. What they can?

A. – on the, what they can or the controllables and add in elements of control wherever they can to do that and essentially that's the root cause of irrigation or why they want it because it essentially, irrigation is an insurance policy and that they know what they can grow within, with reliable water, within, I don't know, 5% variance or something like that, they can be very accurate with that and run a business to that.

20

Q. So the driver in the primary sector at the moment is a drive towards increased efficiencies both now and into the future, is that right?

25 A. From a reli-

Q. Yes.

A. Yes to counteract a reliability of water.

Q. Yes. And in seeking and in terms of what they can control, what they can control at least in the context of this hearing is seeking an outcome which would have them have long term consents?

30

A. Correct.

Q. What they can't control, because again it's a function of those higher order documents, the NPSs, the Regional Policy statements and the land and

water statements is the eventual outcome in terms of regulation and how that then might impact on any long term consent which is granted?

A. Yes.

5 Q. Yes. And when I say they can't control it, that is not to say they can't seek to influence it and influence it quite considerably through the public hearing process and through the Courts?

A. Yes, yes, they can influence that process.

10 Q. And you've acknowledge that a consequence of a review may be to change the flow in allocation regime in such a way that it impacts upon the reliability of any grant of water to an individual farmer?

A. Yes.

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Q. Yes. And that is so whether they have got the consent long term, short term, that could be the impact of a review?

15 A. Yes, correct.

Q. And the consequence of that is that you think that farmers will be given time to respond to the review by putting in place structures, say it's like a dam structure which will store water to be able to taken and used by, you know, by farmers in a way to make up any shortfall which has taken, you know, shortfall in or any reduction in the reliability of water as a consequence of that review?

20

A. Yes, yeah, I've provided an example of a long farm storage which there is – the water in like the Manuherikia for example, isn't 100% reliable now. They've already talked about where it comes under certain restrictions, so there is farms who have modelled out based on historical flow data, what is the likely term of when they would come under restrictions and trying to – there's always a level you're not going to 100% provide for the one in 50 year event in terms of a drought, but trying to put a storage facility in place that balanced out some of those risk of a shortfall of the water not being able for a period of time. So depending on how much water you needed, it might be the storage dam that covered two weeks' worth of water or something like that to allow you to continue on.

25

30

Q. What you are banking on or if the risk that you say your clients are willing to accept is a risk that you will be given – your clients will be given time

to retrofit storage facilities on farm in order to meet any reduction in reliability and supply, is that what you are saying?

A. Storage facilities won't fit everyone's –

Q. No.

5 A. – everyone's business, but I think there is going to be an impact and whether its storage facilities around increasing or about having water available for that period of shortfall or is it a system change and that system change is a complete. For example, if you don't have storage and you've got a – say you've got an existing stocking rate, so you've got 700
10 cows and you go into a period where there's no water for a period of time, you're not sure how that period's going to be, if that – those cows still need to be fed whether it's on your farm or not, so you can bring feed in to supplement them and keep them milking and to keep earning that income and so you can fill that gap with supplementary feed, but if you've
15 done your homework, so your existing used to carry 700 cows and you've identified that based on the minimum flow that that – the potential hole in our *feed curve* what we call it is too great to fill with feed, it just from a financial perspective it does not make sense, then you have to completely peel back your whole business and start for scratch at around something
20 – you're creating a business that can actually react to these potential shortfalls.

Q. So that's a possibility, a new business model is a consequence of a review of consent conditions and that's what you're talking about there?

A. Yes, yeah.

25 Q. And you also touched upon you might in addition to storage have a look at the means of conveyance and do you mean both the on-farm irrigation systems, whatever they are, together with the irrigation conveyancing systems, such as open races, for example?

A. Yes.

30 Q. Are you looking at both of those?

A. Look, I think you need to.

Q. Yes.

A. Like at the end of the day –

Q. To meet that reliability change if you like?

A. Yes, yes and I think – look at the end of the day the – I’ve talked about so the water and the reliability of that water underpins the value of the farm and the value of the farm is essentially what – that’s the bank’s security mechanism is the value of that farm. So if the water or the water that’s provided to those farms in a roundabout way they need to keep investing in those schemes to make sure that the value in the farms is retained.

5

Q. When you say “keep investing in schemes”...

A. Like conveyancing of the water to the –

Q. The conveyancing of the water so some people might be taking off the large schemes and heard about large schemes like the Maniototo irrigation race, they’re the large schemes and then other people might themselves just be doing taking from a waterbody.

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A. Yes.

Q. And so with potential for a review coming up under a Land and Water plan, there is whatever that results in maybe quite significant change and ongoing change to irrigation systems.

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A. Yes.

Q. And to see that’s what the Court has to weigh up. It’s part of the case. There is this huge desire to have security of supply through a long-term consent which supply seems only secures until the first port of the first review and then it becomes insecure unless farmers can invest in irrigation systems, conveyancing systems, storage systems to meet a review so those are the two cases. That would be a fair summary?

20

A. People have been – I talk to my clients now and they are kind of stuck in no man’s land like they can’t, they’ve got people who, like they’ve got no surety around – there is always risk with farming and even I will take a step out to the side at the moment. There’s all these other things being thrown them around synthetic end and nutrient loss and that type of thing so this is one small part of what everything else that’s being chucked at us but they – with this uncertainty around water they’re just stuck. It’s really hard to sell farms. It’s hard to get people to put a fair value on their farms. Like, there’s been very few sales and then valuers are going: “I can’t really understand the implication of plan change 7 yet I’m gonna put a massive disclaimer on the front of my valuation” and then what banks

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then do is go: “Okay, our loan to lending value ratio has to reduce because there is this whipping big disclaimer here of the uncertainty.” And it just creates a whole heap of intenseness and people are wanting to move forward so I guess if the longer term consents are granted and they show intent, farmers are resilient bunch and they will adapt and develop and we talked about dams being intergenerational. Farmers are intergenerational too so they know the importance of making sure that they invest in the farms and keeping them relevant and so if they’ve already made some investment now we’re in a good pay out time, particularly from a dairy perspective and things like that so they have the ability to do it and so when 2023 comes on or 24 whenever the land in plan comes in they’re not having to do as drastic changes because there’s always gonna have to be that – there’s gonna be a drive from border dyke, uncontrolled water use to spray irrigation anyway so there’s gonna be changes going forward that need to be made anyway. So the change isn’t gonna be as big and if you’ve got a consent that expires in three years, if I’m sitting in the bank’s shoes, they’re going: “How do we actually support these people if we don’t know we’ve got at least that way, say if it’s – you provide a 15 – you consent, for example. We’ve got 10 years to enable them to work through the process so we can provide funding over that period. Whereas if it’s two years, everyone’s just gonna be stuck in limbo until we get to 2026 before we can then extend out and so in that period there how are people gonna sell their farms? How are they gonna get confidence around moving forward? How do we do family succession? It just becomes really difficult in that period.

Q. And that’s the difficulty, isn’t it? There’s an event horizon which people are planning for or unable to plan for which looks like a five to six year period which is a very short period.

A. Yeah.

30 1230

Q. And then you’ve got the wider event horizon anywhere up to 35 years in terms of where people are wanting their consents to go?

A. Yes.

Q. But where there is a possibility of review of a consent thus reducing reliability of supply, reducing productivity, reducing the, I don't know, a criteria perhaps about which banks were lending money?

A. Yep.

5 Q. All of that. So that sort of – the broader, the wider event horizon?

A. Yes.

Q. And so the questions what should you be managing for and whether the security that farms think they have in gaining a long term consent is much – is that secure, you know, and that's what the case is all about?

10 A. Yes.

Q. Yes.

A. And look I guess you look at picture we're in 2016 and the biggest thing in the headlight is Plan Change 6A and the 30 units of I mean and that everyone that was going to completely change everything and this has now come along, but it wasn't – we didn't know this was going to come along in terms of this Plan Change 7 and the implications it was going to have. So in my mind, there's always going to be these changes thrown at us and we can't be living in fear of those forever, so it's just around maximising the ability for farmers to be able to react in a positive way and allowing people to support them in a positive way, and I think if we get longer term consents now, it's going to allow people to do some investments, it's going to drive good behaviours because they're going to be – people farmers are going to be thinking I need to get as many I's dotted and T's crossed and show what I can do and what I can manage at that time, and then they're also going to have be able to continue to get as much information about their own business. So when these changes do come, they'll then know around how they actually can react.

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25
30 Q. But the thing is they may not. I mean we've heard from others that farmer expectation was driving a lot of the investment, you know, prior to October of this year, the expectation being nothing will change, get your long term consents. You start to invest on the assumption that there is a reliability of supply and yet, you know, people are saying: "Well, we know that could change" but so could permits not being re-consented in '91, you know, at the end of this year also not change?

A. Yes.

Q. And yet, you know, to the extent that it actually informs peoples' expectations and peoples' behaviours it's questionable, the expectation was nothing with change?

5 A. I guess it depends to who you're talking to.

Q. It does depend on who you're talking to doesn't it, yes.

A. I think the rhetoric that was coming from council before looks it's changed in the last 18 months in my opinion that and we had live examples that longer term consents were being granted, like 15, 25 year consents and

10 I guess we're not sitting in the bank's shoes. You're looking at all of the risks here from an ongoing basis and you're looking at a whole heap of different factors, but it essentially comes back to I guess, yes, consent rollovers and compliance right to farm, all those sort of things get thrown into that bucket, and when we're in the roadshows and the focus that has been forced is, you've got to use your water efficiently, you've got to know how much water you're using otherwise you might not get in 2021, so that's what drove all that, that other behaviour and then probably some of the – we've seen a few false starts as well, so perhaps some of the lax days are cool approaches by some of the people you may have spoken to, they're probably underlying –

20 Q. But it is fair to say that behaviours also been - is in response to council policy which is to improve efficiencies which people have been doing?

A. Yes.

Q. Yes. Anyway, as a matter of interest you said talking about the input of -
25 I think it was you, you were talking about the input of end in the Waitaki Plans, did you talk about that?

A. Oh, I talked about the end loss on some of the border dyke properties.

Q. End loss is 150 kg per hectare per year in the Waitaki Plains?

A. Yes.

30 Q. Is that on this side of Otago or that side of the Canterbury Regional Council?

A. That property's in Otago.

Q. That's in Otago.

A. Yes.

Q. And you mentioned border dyking?

A. Correct.

Q. And what's on that land? What's that...

A. Dairy cows.

5 Q. Dairy cows, yes. Okay.

A. Yes.

Q. All right.

A. But so, just to carry on on that, so what you then did was did a model
10 around the cost of converting to spray irrigation and you could model out
what was going to change through Overseer and that, knowing that
people had to be under that level between 21 it drove some investment
but also what it did it stopped saleability on those farms. So, for a period
there when people were – I know that 30 units of (inaudible 12:35:50) are
still – well it's out here now instead here but there was farms, border dyke
15 farms, people will think, "I don't want anything to do with these farms
now". And why that's irrelevant, it's around the same sort of thing, fits
and some of the ones we've got here, with all this uncertainty in terms of
the six years, people are going well I don't want to then do all these farms
so the people are trapped, not being able to sell and people don't want to
20 buy them.

Q. So, that's...

THE COURT: COMMISSIONER EDMONDS

Q. (Inaudible 12:36:19) 6A, were there disclaimers on the valuations at that
time?

25 A. Well they was – yes, so they're saying they have to – this is what drivers
or this is what levers they can pull to achieve 30 units of ENA and in some
cases on, it wasn't possible.

Q. No.

A. The economic viability fell of a cliff at about excuse the terminology but at
30 about 40 ounce of EN on some of those lighter (inaudible 12:36:48) in
North Otago.

THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS

All right. I haven't got any questions, do have any questions?

THE COURT: COMMISSIONER EDMONDS

5 Q. No I just had one. I mean we've been talking about plan changes but there's the bigger picture with I mean, water plan coming down the pipe and there's the government, national policy statements and new regulations –

A. Yes.

10 Q. – as well. So how does that get factored into this question of investment –

A. I'm reliant...

Q. – in terms of the banks and the kinds of advice that you would giving.

15 A. Yes. Look, that is outside my scope so we – when we come, we're forming a team of people who can provide the answers for all those and we need to take them into consideration so we'd get, we'd employ someone else to provide from a – what this could be the potential implications of this. So, look at the moment for example, when, we'll bring in someone for, like an environmental planner or something like that in terms of some of the regulations that we're facing there.

20 Q. Right so you're still getting on top of this but this is, what you see will be the next step potentially.

A. Very much so, look and so we need to be – we need to be “eyes wide open” going into any investment. What are the potential risks here? And if that risk comes fruition how do we manage it?

25 Q. So would it be fair to say that people would perhaps a bit, I don't know, the banking community and the advisory community were a bit – have been a bit blind-sighted by some of the tings that have happened in the past on the regulatory front?

30 Q. **Judge Borthwick:** Or naive might be a better word to think that nothing would change in terms of contam– regulation or water quantity regulation?

A. I think they knew there was a – there's always a risk there but probably the extent of the potential change, just become more apparent.

Q. So, that would be assessed as low risk but now, looking forward –

A. Yes.

Q. – what sort of risk factor would you put on it now?

5 A. Yes, look if – so in 2017/'18 when the messaging that we were receiving
was, it was around, “okay support your farmers to use their water
efficiently and they'll get longer-term consents”, so that you were
comfortable with that because if you supported the irrigation development
you knew the productivity that was going to come off the back of it so you
10 did – you could do longer term modelling and be comfortable with that
and stress-test that modelling and now you think, well that longer term
water reliability's not there, there's obviously potentially a change in 2024
when that land and water plan comes in. So our modelling has to take in
more, shorter term, is looking a lot shorter but it's around how do you
15 manage the risk within that term so, like I said before it potentially drives
different investment decisions which at the end of the day might not be
the best outcome long term, but they've been forced to do that short term.

Q. Okay, thank you.

1240

QUESTIONS ARISING – NIL

20 THE COURT: JUDGE BORTHWICK

Thank you very much for your evidence.

WITNESS EXCUSED

MR PAGE TO THE COURT: JUDGE BORTHWICK

Q. Ma'am, do you want to proceed to have Mr Dicey sworn in or would you prefer to take the luncheon adjournment at this point?

A. Oh we might as well just box on with Mr Dicey.

5

MR PAGE CALLS**JAMES DICEY (AFFIRMED)**

Q. Is your full name James Dicey?

A. Yes.

10 Q. And are you the owner of Great Vision Limited?

A. Yes.

Q. And did you prepare a brief of evidence dated the 4th of February 2021?

A. Yes.

15 Q. And do you confirm that it's true and correct to the best of your knowledge and belief?

A. Yes.

Q. Now at the start of your brief of evidence you prepared a summary of some seven paragraphs, did you wish to read that?

A. No.

20 Q. And do you wish simply to take your evidence to be taken as read?

A. I do.

Q. Thank you. Well I've got no further questions for you Mr Dicey, so please remain where you are.

A. Thank you Mr Page.

25 **CROSS-EXAMINATION: MR MAW**

Q. Good Afternoon.

A. Good Afternoon.

30 Q. I'd just like to start at paragraph 29 of your statement of evidence and in this paragraph you indicate that their previous survey indicated approximately 40,000 hectares of land suitable for production of summer fruit?

A. Correct.

- Q. And then you go on to note in your last sentence, “A key determinant of this is the availability of sufficient water to enable the growth of the grape vines.” Now was the 40,000 hectares correlated to availability of water at the time or is the availability of water the determining factor as to how, what proportion of the 40,000 hectares of land could be used?
- 5
- A. There were a range of factors that were considered in the assessment of the 40,000 hectares. The reason for the survey being done in the first place was to understand the impact that Lake Dunstan would have on the Cromwell Basin and one of the sales pitches that was made to the farmers at the time was the availability of water, so one of the factors that was included within that beyond aspect, altitude, soil type, was certainly water as a key determinant for being able to grow stone fruit, pick fruits, cherries etc in Central Otago.
- 10
- Q. Let me just reflect if I’ve understood what you’re saying, so that at that point in time, there was sufficient water available for 40,000 hectares?
- 15
- A. So if water was made available, then 40,000 hectares could be used to grow stone fruit or pip fruit or summer fruit.
- Q. Right, so the 40,000 hectares of land was purely the land available or perhaps well suited for grapes, but its utilisation would be dependent on water being available?
- 20
- A. Correct, but the point with the dam particularly and the other permits that were around at the time, was that it was the assumption that water would be made available as part of the upsell with the dam back to the community given the land that they were losing as a consequence of it being buried.
- 25
- Q. And did that happen or has that happened in practice in terms of water being made available from the dam?
- A. Yes.
- Q. And in terms of future production or future water availability, what’s your understanding in terms of future water availability?
- 30
- A. Well that’s I guess one of the purposes of this hearing and the consents and the terms associated with those consents but I am aware that Contact Energy who has the operating easement over the dam has relatively released a water statement where they have indicated they’re

gonna fight a little bit more strongly to retain more access of water in the dam, a bit of a death of by a thousand cuts from their perspective. I will however say that the Clutha River on the flows I've done at the Clyde Dam or the Clyde area for NIWA, the whole grape industry which is some
5 2000 or 1930 hectares take equivalent at an average minimum flow of eight hours of water out of the entire dam so the total water used particularly by grape which is my area of expertise does not compromise the flow that's required out of that river.

Q. I want to move forward to your paragraph 34. Towards the end of that
10 paragraph you provide some comparisons between the efficiencies of different farming systems and you note that a conversion of pasture to grapes might yield a 75 per cent irrigation water saving. Now when you've done your calculations in relation to the water savings there, have you taken into account the water that's used for frost fighting or are you
15 looking at the irrigation demand?

A. Just the irrigation demand.

Q. Do you have any working knowledge of the water volumes that are required for frost fighting or is that outside of your expertise?

A. No, it's actually within my area of expertise and I'm sorry, Mr Page. I've
20 made a bit of an omission here. I should've actually included the fact that I have omitted to include within my evidence, evidence on frost fighting and its potential impact in the air in Central Otago. I have read Dr Jordan's evidence which I understand the court's already heard previously and agree with the information that he's got in that. I have
25 designed and worked on designing frost fighting systems previously as well and 25,000 litres per hectare per day is a figure solely relating to irrigation usage and not frost fighting.

Q. What would the comparable frost fighting number be?

A. That's a very difficult question to answer, counsel, I'm afraid. If I was to
30 look at the total number of frosts we would typically budget for it would be 30 nights if you then assumed eight hours of frost fighting per night for each one of those which I think is probably on the conservative or high side. Every planted hectare of grapes in Central Otago using a four to five millimetre an hour sprinkler use between 40 and 50,000 litres per

hour. I've actually done some analysis prior to coming here and based on the number of hectares that I manage, out of some 300 hectares that I manage, currently 52 hectares of that or some 17 per cent uses water frost fighting. We don't have accurate data in Central Otago as to the exact area that uses water for frost fighting but assuming my vineyards are representative of Central Otago and it is an assumption, I will stress, then that means some 328 hectares would have water frost fighting in Central Otago, being 17 per cent of the 1930 hectares. You can gross that number up, 328 times 30 days times eight hours times 50,000 and arrive at a number. Sorry, if I had a calculator I'd be able to do that calculation for you right now but that would be the calculation I'd undertake. That will give you the total quantum of water that would be used and that's both for Spring and Autumn frosts.

Q. I wonder whether we might give you some homework over the lunch break to provide the frost fighting number. I can't quite do the maths.

A. If I grab my phone it's got a calculator on it. I could do it for you right now.

Q. Very good.

COURT ADJOURNS: 12.50 PM

COURT RESUMES: 2.02 PM

**MR CRAW ADDRESSES THE COURT – PRESENT MY MATHS
5 HOMEWORKINGS (14:02:48)**

THE COURT ADDRESSES MR CRAW - YES (14:02:52)

MR CRAW READS TO EVIDENCE-IN-CHIEF

So on the assumptions that I articulated before with the 17% over the 1,930
10 hectares 5 millimetre an hour drippers delivering 15,000 litres per hour,
assuming 30 days of frost a year, 17% of the 1,930 being 328 hectares with a
very conservative eight hours per event, it equates to some four million cubic
metres during the irrigation or frost floating season which begins in mid-October
and ends in mid-April which is a period of six months. I calculated that both the
15 irrigation water plus over that 1,930 hectares plus the frost biting water delivered
12.6 million metres cubed and compared it to the pastoral farming which their
irrigation season tends to run in from September to April, so seven months at
100,000 litres per part of hectare or per hectare per day. I quoted that over the
1,930 hectares is if the grapes were planted or weren't planted and were still in
20 pastoral land and came up with 40.5 million cubic metres per irrigation season
or a factor of 3.2 times as much water rather than four times as much water if
my assumptions are correct through that process. So it's still three times more
efficient compared to pastoral farming. Sorry, to qualify that, yes, I'll just you
give a chance to write those numbers down, that is based on the aqualink
25 numbers and that is just a gross generalisation assuming full water utilisation
each day. The aqualink modelling does stage that irrigation over the irrigation
season, so it's not assumed to be 100% the whole way through the season, but
just for the purpose of comparison assuming this in the growth curve between
pasture and viticulture, during the growing season, as a gross generalisation,
30 that's how the numbers roll.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. I was looking at the 25,000 litres per planted hectare and I was wondering what that number became when you incorporated the frost-fighting litres per hectare. Now I am not sure that I can reconcile the mathematics in relation to the 25,000 other than does that become something like 32,000 litres compared to the 100,000?

A. Give me two seconds with my magic calculator please? 36,269 litres.

Q. 36 two hundred and ...?

A. 69.

10 Q. 69. Very good, thank you.

A. My pleasure.

Q. Those are my questions.

CROSS-EXAMINATION: MS BAKER-GALLOWAY – NIL**RE-EXAMINATION: MR PAGE – NIL****15 QUESTIONS FROM THE COURT – NIL****WITNESS EXCUSED****MR PAGE TO THE COURT: JUDGE BORTHWICK**

And now we come to my last witness for the day, Kate Scott.

20

MR PAGE CALLS**KATE LOUISE SCOTT (AFFIRMED)**

Q. Is your full name Kate Louise Scott?

A. Yes.

5 Q. And are you a director of Landpro Limited?

A. Yes I am.

Q. And did you prepare a brief of evidence dated the 5th of February 2021?

A. Yes I did.

10 Q. Now I understand there may be some corrections you wish to make to that brief before you confirm it's correctness?

A. That's correct, just two very minor points I'd like to change. The first is at paragraph 13. In the point where I talk about my experience as a trustee of Why Wanaka, I'd just to change where it says, "Farm environmental plans", that should actually say, "Environment projects", so the correct sentence should read, "Environment projects, riparian planting, biodiversity and freshwater monitoring and pest control." And then the second very minor change is at paragraph 31 which the sentence starting, "However in 2019 the work of MRL was placed on hold", I'd like to just add, "until such time as deemed permits were replaced." And then add, "This was", and then the sentence continues as written.

15 Q. So, "until such time as deemed permits...."?

A. "were replaced."

20 Q. "were replaced"?

A. Full stop, and then, "This was", and then it continues on to, "due to being unable to raise sufficient capital."

25 1410

Q. Thank you. Now I also understand that you may now have a different interest that you wish to declare to the Court?

A. That's correct. I'd just like to declare that since the preparation of my brief of evidence I have purchased a property that receives water from the Carrick Irrigation Scheme. In my body of evidence I'm actually talking predominantly about the Manuherekia Catchment, but I'd like to raise it for the record about that actual or potential conflict.

30

Q. Thank you. Now with those changes made, do you confirm that your evidence is true and correct to the best of your knowledge and belief?

A. Yes I do.

Q. And do you now have a written summary of your evidence that you wish to read to the Court?

A. Yes I do. Thank you.

MS SCOTT READS SUMMARY OF EVIDENCE

Kia ora I'd like to start with my brief with my Pepeha.

10

Ko Te Ahu Pātiki Te Maunga

Ko Te Arawhānui a Makawhiu Te Moana

Ko Te Koukourārata Te Awa

Ko Ngai Tahu Te Iwi

15 Ko Te Tūtehuarewa Te Marae

Ko Scott töku whānau

Ko Kate töku ingoa

And then there's a little whakatauki there about...

20

Whatungarongaro te tangata toitu te whenua

Which is about giving our blessings and our respects to Papatūānuku.

25 My Evidence in Chief set out to address the issue raised by the ORC that there was insufficient information to assess applications for a duration of longer than 6 years, and to provide background context to irrigation within the Manuherekia Catchment. I provided this evidence based on my experience as project manager for the Manuherekia Water Strategy Group (MCWSG).

30

Specifically, I set out to detail that in respect to the Manuherekia Catchment that there are large volumes of information that has been gathered over a number of years. Much of this information has been gathered and commissioned during the past 10 years as irrigators have worked towards both

the replacement of deemed permits and the investigation of options to replace or refurbish Falls Dam.

5 Whilst I am a planner, I have not provided a planning brief of evidence and nor have I participated in expert conferencing related to planning matters.

I wish to acknowledge however that since the preparation of my evidence-in-chief things have moved considerably, and the matters raised in my evidence-in-chief are largely now only relevant as background context.

10

It is my understanding that there is now agreement that an interim plan change is required to provide for a simple, efficient and timely process-based approach to transitioning to a new water management regime in Otago as set out in the Joint Witness Statement.

15

In accepting this position, my thoughts turn to what an appropriate duration of consent might be under a short-term planning framework. I have approached this from a position of practicality rather than from a planning perspective given I have not provided a planning brief of evidence, and nor have I participated in expert conferencing.

20

Based on the current proposed provisions, and by that I am referring to those attached to the joint witness statement, we have a clear policy direction that the maximum duration of any consents shall be for a period of 6 years irrespective of the activity status.

25

30 From a practical perspective I have some reservations around the implementation of a wholesale consent duration of 6 years. My concerns arise from the position of being able to practically manage the re consenting (where applicants will likely be seeking a longer duration of consent than six years) if they are all to fall due on the same date.

I am concerned that this perpetuates the issues that have arisen with respect to the replacement of deemed permits, and their common expiry date of

October 2021. The current situation is one where the ORC, applicants and planning consultants do not have the resources to address this volume of consenting work, and associated practice change that goes with complex consenting processes.

5

This is likely to be heightened in the future given the complexity of the planning framework is likely to increase under the Water & Land Plan, and when we consider the interim framework that arises under the (National Environmental Standards NES as well as the obligations that arise in relation to the National Policy Statement for Freshwater.

10

By way of example, from a Landpro perspective, our team of approximately 15 planners are currently involved in over 35 current applications, (of which many are for the replacement of more than one permit). Alongside this, we carry a significant rural planning workload that arises from the NES, and not withstanding various plan change processes that our team are involved with in both Otago and Southland in particular.

15

This complexity of workload is compounded with the likely timing of the new Water & Land Plan which I expect will coincide with the need to start preparing applications for replacement permits.

20

If we consider, for example, that the new water and land plan will not likely be operational until 2021 applicants will need to file applications the same year to ensure section 124 of the RMA is triggered and yet they would not have had the opportunity to consider how the water and land plan should be implemented or how they might address the information requirements set out in the new plan. The risk arises that we end up with poor quality applications and ultimately poor outcomes. It may, therefore, be appropriate to consider from a practical perspective whether it is possible to implement an approach based on a phased consent expiry dates either at a catchment, sub-catchment or on an FMU basis so as to ensure that not all permits fall to be due on the same day or perhaps even in the same year. This approach would still allow for the provision of short term consents while also reducing the planning bottleneck that I anticipate will

25

30

arise if we have one common expiry date. This is an approach which I consider would be consistent with the MPSFM which anticipates both the phasing out of over-allocation under Policy 11 as well as under the Knot framework, a phase approach to achieving environmental outcomes at section 3.15(b) and a phased approach when it comes to setting environmental flows and levels at section 5 3.16. In this scenario it would be appropriate to consider a maximum term of consent which is greater than six years. Working backwards from the notification of a new regional policy statement which I understand is imminent, the RPS will set out long term visions for freshwater and timeframes for achieving the visions which would then guide an appropriate maximum term of 10 consent for an interim planning framework. This would allow for phased expiry of permits based on an FMU, part of an FMU or a catchment and would avoid the likely planning bottleneck that would otherwise arise if deemed permits are to expire at the same time. A phased approach to duration of consent under 15 an interim planning framework would provide a clearer and more certain pathway for consent holders because by the time they come to renew at the end of the transitional period there should be certainty in terms of vision, timeframes, implementation and clear environmental flows which is unlikely to be the case after a six year interim term of consent. This approach would also 20 remain consistent with the objectives and policies of the national policy statement.

CROSS-EXAMINATION CONTINUES: MR SCOTT

Q. Now Ms Scott, in order to place your concerns about workflow in some context, perhaps it might help the court to understand the breadth of your 25 involvement in water reconsenting in Otago on a catchment basis. So can you describe the main clients that you're working for in the different catchments?

A. Yes, we work for a variety of clients from individual farmers who are seeking to replace their permits or seeking to obtain any other consents 30 under the RMA or other frameworks such as the NES. We also work for irrigation companies and irrigation schemes to assist them in the same. We are also acting on behalf of the likes of Pioneer Energy to assist them in the replacement of some of their permits as well.

Q. Okay, so just taking Manuherikia, for example –

A. Yes.

Q. – does that include Falls Dam and its largest shareholder, the Omakau area irrigation?

5 A. Yes, it does.

Q. Yes. And do you act for clients in the Cardrona and Arrow Catchment?

A. Yes, we do, we have three clients that we're representing in that catchment.

Q. And in the upper Taieri Catchment?

10 A. There is one applicant in the upper Taieri.

Q. In the Styx?

A. One client in the Styx.

Q. In Low Burn?

A. Two in Low Burn. I note that we have acted for a number of parties in
15 Low Burn who have recently also received consents for their new takes.

Q. Yes. And in the Lake Dunstan area?

A. Most of the *takes* that we're acting for in the Lake Dunstan area are not deemed to permits, so they're not captured by Plan Change 7.

Q. Okay. In the Gibbston Valley, are their clients there?

20 A. One in the Gibbston Valley.

Q. And what about in the lower Clutha?

A. Yes, there's three in the lower Clutha, there's also two in the Pisa and one in Wanaka, and then on top of that there are the two that I mentioned for Pioneer Energy.

25 Q. Okay. Now –

A. Including Onslow.

Q. Yes. Now you sat at the back of the court listening to the evidence this morning and you studied the form of Plan Change 7 set out in the I think it's the 4 to 6 May joint witness statement?

30 A. Yes.

Q. To your knowledge is there any policy machinery in Plan Change 7 that would guide the granting of replacement consents for dams?

A. No.

Q. Thank you.

1420

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Mr Maw?

A. I wonder whether I might just take a moment in light of where things have
5 moved on to.

Q. Yes, fair enough.

THE COURT: JUDGE BORTHWICK

Q. Okay and before you take moment I just have a question for you. So, it's
10 not that the Court is insensitive or unaware of the potential for a bottle-
neck at six year – you know, in six years' time hence, yes, so with that in
mind, if your suggestion about a staged-approach or a sequencing I
guess of resource consents for replacement, you know, so they're
granted short-term and then they, I think they come in in a sequenced
way, is that you were proposing?

15 A. Yes that's what I was suggesting and look I'm – haven't had the ability to
sit through all of the Court proceedings so I wasn't aware whether that
had been raised by any other witnesses. So...

Q. It's been raised, not that way but it's been raised by at least one, if not
20 more witnesses that rather than six years, you need a bit of an overshoot
like 10 years and the overshoot allows for the settling in of the RPS –

A. Of course.

Q. – and the new land and water management plan and presumably that's
so that applications for replacement consents can be filed, not mid-way
through a court hearing process for things you know, things are going to
25 change...

A. When we get the fun job of trying to assess actual plans – proposed plans
and...

Q. Yes preferably operative –

A. Yes, correct.

30 Q. Not influx and therefore not the inefficiencies to the inevitable.

A. Yes.

Q. I recognise that they're inevitable, you know in terms of where we are at the moment. That's not to necessarily criticise the regional council, it's just a function of how these plans come into existence.

A. That's right and that wasn't my intent to criticise.

5 Q. No, so. No, I understand that so I think, I certainly have seen suggestions for, if you like an overshoot of 10 years to and, you know that's to allow this planning instruments to work their way through and to become operative, ideally. So my question for you though with paragraph 16 is, to what extent is your sequencing of consents either my catchment or
10 sub-catchment for replacement driven by something which is appearing in the new RPS which we haven't seen or is it independent of any initiatives in the new RPS?

A. At this point I'd say it was independent of that because I haven't seen a new RPS, all I was highlighting really that we have one imminent and I
15 can only presume that if it's been prepared in accordance with the MPS that they would set out long-term visions and timeframes for implementation.

Q. I don't know, so.

A. I don't know, so that was a presumption on my behalf that that would be
20 the case.

Q. I think through your counsel, we've heard that there may be a maximum time limit of – permit limit of 20 years but we haven't seen it –

A. I haven't seen that.

Q. – nor have we heard anything about timing sequencing of any initiatives
25 which appear under that. Okay, so when your thinking – so it's not dependent or contingent on anything in the RPS and so you haven't done anymore thinking around though, what that staging might look like.

A. No I haven't and look to be fair, the reason I prepared this written summary was after having sat through, particular yesterday's
30 proceedings and hearing some of the conversations it became apparent that I'd like to raise that issue but I hadn't given any further consideration as to how you might actually roll that out.

Q. That's OWRUG. And in terms of yesterday's conversations, who in particular are you referring to?

A. I think there was some – some of the questions first came up, I think with Ms Styles I didn't hear her evidence the day before but when there was just some questions around the duration with respect to dams and I'm not giving evidence on dams but Mr Curran is. And then just when I was listening to some of the evidence from Ms McKeague just talking about you know the process that the farmers have been through there. So all of these things have kind of been fermenting I guess and sitting here I was able to gain a little bit of clarity around, "well maybe this is a potential solution to a perceived challenge", that is a practitioner from a day-to-day point of view, I can see on the horizon and I'm concerned about do we actually work our way through that without creating the same issues and the same challenges that we have all faced in trying to meet our various deadlines to file under the current replacement of permits.

Q. Okay. And with that in mind I take it that you have not spoken to your lawyer about scope for this?

A. No, I haven't spoken.

Q. So that's a conversation that's to come if you like?

A. Yes.

Q. And you hadn't thought about timing and sequencing with catchment, sub-catchments and strategy around that?

A. No, I have not.

Q. How about we take 10 minutes to think about it or yeah?

MR MAW:

It's possible I won't have any questions but I just need a moment to go back and look at the underlying brief and I appreciate the witness has said things have moved on from that point in time so.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. The underlying brief being the underlying submissions from OWRUG or something else?

A. No, the statement of evidence in chief. That's what I understood in your summary from paragraph 4.

Q. Yeah. Oh well. Okay, we will give you five and if you need more than five just let us know.

A. Very good.

COURT ADJOURNS: 2.26 PM

5 **COURT RESUMES: 2.39 PM**

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. Good afternoon, I just want to explore with you the concerns that you've expressed in your summary statement today in relation to the potential option of staging of consents and in order to understand what the future consenting environment from a timing perspective might look like as a result of plan change 7. When you think about the six years, the six years is going to run from the date on which consents were granted and when you think about the consent applications that are in the system at the moment in relation to the deemed permits it is highly unlikely that those

15 will all be processed and granted on the same date.

A. That's correct. I don't imagine that they'd all have the exact same expiry date but if we look at the Manuherikia as an example, all of the deemed permits in that catchment were filed as one application so that's the large chunk of them that effectively would be granted with the same date but I

20 think the point being that even they are within a few months of each other the amount of time and work that has to go in terms of preparing what are large applications which are complex, my point being that, even if they are only a few months apart, it's a question of, from a resourcing point of view, how do we simply do that and are we setting ourselves up for the same challenges and issues that we've had to contend with the common

25 expiry date of October 21. So it may well not eventuate but it may well eventuate too.

Q. But isn't the reality that if you were to put in place a staged process where it might be – and I'm picking numbers out of thin air, five, six, seven, eight

30 years et cetera across the region to try and stage the consent applications, isn't it likely that you would still stage it so that the

Manuherikia, for example, that those consents are coming in at the same time?

5 A. Yes, you would. In terms of an outcome from a staged approach, what it means is that there are a very small pool of consultants who work in the replacement of deemed permits. I think Ms McKee alluded to the fact yesterday that there was effectively three firms that have done the majority of the work in that space. So I guess the point being certainly with a Landpro hat on when we have multiple applications across multiple catchments, it becomes logistically challenging if they're all due at the same time.

10 Q. So those concerns relate perhaps to the renewal or the subsequent replacement of the deemed permits that are all expiring this year.

A. Yep.

15 Q. When you think about PC7 also capturing other Resource Management Act permits that expire between now and 2025, those permits are already going to be staggered, aren't they?

20 A. Those ones are yes. But I don't have the exact numbers of how many of those permits that are not currently deemed permits expire between now and 2025. I don't have those numbers to hand but it's fair to say that those permits are probably slightly less complex. I'd suggest in their nature. They may well be smaller, individual type takes rather than the complex scheme takes.

25 Q. Might it be that the land and water plan to come sets out a really clear planning framework such that the time and effort required to prepare consent applications is much reduced compared to the current situation where there simply isn't the planning guidance?

30 A. Look, that is possible and I guess I have not seen a version of the future water and land plan to be able to provide any meaningful comment on that point but what I would say, based on my experience, is that when we look at the requirements set out in the new NPS and the NES and the paths and the process that counsels have to follow to implement that, I would suggest that I reflect back on the last 18 years I've been acting as a planner that the planning framework gets more complex, not less complex. So using my judgement and my experience I would suggest

that even with an exceptionally good framework there will still be a much greater and more complex process than we've probably had to deal with in the past and that perhaps touches on some of those points that Mr Craw alluded to this morning around when we look at the degree of change that's on our tables and on our plates, we actually are not just having conversations about consents. These conversations are actually far broader than that so when we weigh up all of those things when we're working alongside our clients there's a lot going on. It's not a case of "I need a consent. Can you prepare it and lodge it next week?" Those days have long gone.

5
10
15
Q. Doesn't having an operative planning framework reduce the need to go up and look at superior documents? So thinking of the NPSFM to start with that document will need to be given full effect to in the new land and water plan to come so that's not going to be consideration then in terms of consenting in the way that perhaps it has been going into this point in time?

20
25
A. Look, that's correct to a degree but I think my point about this potential conflict in timeline is that if the new water and land plan is notified but is not yet operative and that date coincides with when we need to start preparing our applications for the six year replacement that we have a perfect storm so to speak in the middle where we have to consider all of these things and when we look at the NESFM there are some aspects that expire in 2025 that will then obviously be captured in the new water and land planning framework but in the interim, if people are granted consents under the NES today some of those consents can be granted for a maximum term of 10 years so there will be some crossover for some time. It won't just be a case of, in my opinion, that water and land plan is notified and now we don't need to consider anything else. Again, it's kinds of a transitional period.

30
Q. When you think about the time for the new land and water plan, my understanding is that that's to be notified no later than December 2023? That will go through a one stop shop in terms of the new freshwater planning commission and so when you think about the expiry of permits issued under plan change 7 if plan change 7 is approved, being six years

after they were granted those permits are going to get pushed out or the dates are going to be perhaps at the earliest, late 2027, in all likelihood 2028.

THE COURT: JUDGE BORTHWICK TO MR MAW

5 Q. What was going to be pushed out?

A. The six year date from which renewed deemed permits are granted so plan change 7 says six years from date of grant. Those permits –

Q. Expire.

A. –They will expire therefore in six years after they're granted and they
10 haven't been granted yet, applications are in the system so if those permits are granted later this year, say early next year, that puts the future renewal date of the expiry date out to 2027, 2028.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So when you think about the new land and water plan, there will have
15 already been time for that plan to bed in ahead of that next round of consenting.

A. Yes, that is possible. I guess my understanding is that the NPS dropped their dates and notification is 2024. I'm not wholly across the direction for the ORC to notify one year earlier but I guess when we consider what the
20 NPS directs which is 2024 there is still a potential for crossover, in my opinion.

Q. Are you aware that there is a ministerial direction in place in relation to the Otago Regional Council and the requirement to produce its land and water plan and notify no later than December 2023?

25 A. Yes, I'm broadly aware of that.

CROSS-EXAMINATION: MS BAKER-GALLOWAY

Q. Just on the same concept of staging the consenting going forwards. Another way of perhaps picking up that matter of principle is rather than it being dealt with in plan change 7, the land and water plan could put in
30 place a framework that mitigated the risk of a consenting bottleneck. For example, for some catchments or sub-catchments allow for an additional

tiny rollover in other catchments implementation of the land and water plan framework becoming in effect on its notification so if that concept as matter of principle becomes obvious as being necessary to reduce the adverse effect of a bottleneck, do you agree that that could be picked up on in the land and water plan as well?

5

A. Yes, that could equally be a method that could achieve that. I think I would point out, however, that we also have a whole bunch of irrigators and water users who have been working towards 2021 are now facing a short-term rollover and I suggest that their appetite or patience for another short-term rollover if it was to come through in a water and land plan might be not well received would be my view.

10

RE-EXAMINATION: MR PAGE – NIL

1450

QUESTIONS FROM THE COURT – COMMISSIONER EDMONDS – NIL

15 No, Mr Maw asked my questions, thank you.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. And if there was an appetite by the Regional Council to do staging and sequencing of catchments or sub-catchments, for consent, is there capacity still to pick that up in the proposed RPS?

20 A. I'm not sure I feel capable of commenting on that because I haven't really been involved with the RPS and haven't seen what that document would entail.

Q. Okay. Well those are our quest- or my question anyway.

QUESTIONS ARISING – NIL

25 **THE COURT: JUDGE BORTHWICK**

Thank you very much for your evidence.

MS SCOTT:

I just had one point of clarification that came up through Ms McKeague's evidence yesterday, she indicated that the permit for Falls Dam was held by the Falls Dam company, it's actually held by the Omakau Irrigation Company so I may want to know that or correct that for the record.

THE COURT: JUDGE BORTHWICK

Q. No it's okay, somebody at some stage will produce the Falls Dam consents and –

A. Yes.

10 Q. – answer the illusive question of who is the dam owner?

A. Yes.

Q. And who are the obligations to maintain and those dam structures, but I think that's the witness to come, Mr Curran, yes, all right, thank you very much.

15 A. Thank you.

WITNESS EXCUSED**THE COURT: JUDGE BORTHWICK TO MR PAGE**

Q. And so that's your last witness for today?

A. It is Ma'am.

20 Q. Very good. Where are we going? Oh, actually are we going to Federated Farmers –

MR MAW:

Yes we are.

25 THE COURT: JUDGE BORTHWICK TO MR MAW

Q. But Ms Riley's not here?

A. She is but she's asked –

Q. Oh she is here?

A. – me to introduce her witnesses.

THE COURT: JUDGE BORTHWICK TO MS REILLY

Sorry, I didn't think you were here, I didn't see you at the back.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Sorry, what were you going to say?

5 A. Ms Riley's asked whether I would have the witnesses or assist with swearing in the witnesses?

Q. Yes, sure.

A. So I'm happy to do that.

THE COURT: JUDGE BORTHWICK TO MS REILLY

10 Q. Do you want to come forward? Yes.

MS BAKER-GALLOWAY TO THE COURT: JUDGE BORTHWICK

15 Q. In terms of timing Ma'am, we now seem to be nearly ahead of schedule, do you want me to see if one of my easier Fish & Game witnesses is available or shall we just leave it till tomorrow?

A. Just plug it I think. I think everybody's been working extraordinary hours and should have the day off, well you know. What's left of the day off, anyway.

20 Q. Yes. Very good.

MS REILLY TO THE COURT: JUDGE BORTHWICK

I have Dr Fiona Doolan-Noble who I think is all ready to zoom in onto the screen.

THE COURT: JUDGE BORTHWICK

25 Q. That sounds good, so we could bring up the AVL witness? She's not online? Okay. So what we'll do is we'll just go to your next witness and when, yes –

UNIDENTIFIED FEMALE SPEAKER:

She did (inaudible 14:54:08) may have some issues with broadband but –

THE COURT: JUDGE BORTHWICK

Yes, shouldn't be, although we've been told that we have to speak up loudly into the – we'll just try and give her a call.

THE COURT: JUDGE BORTHWICK TO MR MAW

5 Q. Did you have questions for Dr Doolan-Noble?

A. I had one question but it's possible I don't need to go there if we can't get her.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

Q. Ms Baker-Galloway, have you got questions?

10 A. No Ma'am.

QUESTIONS FROM THE COURT – COMMISSIONERS – NIL**THE COURT: JUDGE BORTHWICK**

Now we might do a clean sweep and say, admit by consent and for the Court to place whatever weight it sees fit, rather than trying to get her on-line.

15 I know that we've tested this morning and that was successful. So how about we do that instead? We won't need the witness, we're going to admit her evidence by consent. And so we don't need the witness to come to the line.

LEGAL DISCUSSION – HOUSEKEEPING – WITNESS NOT NEEDED

20 (14:56:36)

THE COURT: JUDGE BORTHWICK TO MS REILLY

A. Your Honour with the Court's agreement Dr Doolan-Noble would like to have one last chance just to try and get in because she has prepared a little presentation.

25 Q. That's fine.

LEGAL DISCUSSION – WITNESS TO DIAL IN (14:58:24)

THE COURT: JUDGE BORTHWICK

I'll take that order back. I'll recall my order.

MR MAW CALS**FIONA DOOLAN-NOBLE (AFFIRMED) (VIA AVL)**

5 1500

Q. Good afternoon Dr Doolan-Noble, can you hear us?

A. Good afternoon, yes, I can. Thank you.

Q. Do you confirm that your full name is Fiona Doolan-Noble?

A. I do.

10 Q. And you have produced a statement of evidence-in-chief in relation to Plan Change 7 dated February 2021?

A. I have.

Q. And in that statement of evidence you have set out your qualifications and experience at paragraphs 1 to 7?

15 A. I did, yes.

Q. Are there any corrections that you wish to make to your statement of evidence?

A. There are no corrections. There are some topics I would like to emphasise.

20 Q. What I would perhaps have you do, if you would first confirm that the evidence that you have produced and the evidence you're about to give today is true and correct to the best of your knowledge and belief?

A. I state that it is true and correct to the best of my knowledge and my belief.

25 Q. Now I understand you have some key points that you wish to highlight for the court with respect to the matters covered in your evidence. If you could please highlight those key points now and then remain for any questions that may follow?

30 A. I will, thank you. So the points I really want to highlight is that the changes to water rights add an additional level of adversity of farmers to deal with and a recent Australia paper has actually highlighted the significant unintended consequences that changes to water rights can have on farmers. I have the paper and I'm happy to provide it to the court should you wish to read it. The adversity related to changes in water rights is strongly linked to uncertainty and constraints and having read some of

the evidence from others, and from farmers who have already been before the court, I'm sure you are familiar with the significance of uncertainty and constrains to these farmers. This heightened personal adversity is then layered with experience of community adversity. So community adversity, for example, are floods, the Otago drought 2020 and the Ambovus Microplasm Bovus situation which is still ongoing and hasn't been resolved. On top of that, we have another layer. We have global uncertainty with the COVID Pandemic and for many farms unfilled vacancies. So it's not hard to see and I really want to emphasise that this layering of adversity can leave a farmer in a very dark place. As I'm sure you appreciate PC7 if it goes ahead unmodified, any agriculture adjustment will be initially internalised by the farmer and his family or her family. It would have to be hoped that these changes were not going to be associated with any unintended consequences within the Otago region. And I personally would like to suggest that further work is required in order to explore more fully the implications of the changes and the magnitude of the social cost that maybe borne by the farmer, his family or her family and the associated rural communities. There needs to be a defining of the limits of acceptable change in terms of social impact, that this Court is willing to support and endorse and finally, I'd also like to take a moment to formally acknowledge the emotional labour that farming women do and the excellent job they have done in coming and communicating with you all in the Court. Thank you.

CROSS-EXAMINATION: MR MAW

25 Q. Do you have your statement of evidence-in-chief with you?

A. I do, yes.

Q. If you could turn to the final paragraph, paragraph 26?

**WITNESS REFERRED TO STATEMENT OF EVIDENCE-IN-CHIEF
PARAGRAPH 26**

30 A. Yep.

Q. The second sentence in that paragraph caught my eye. "Plan Change 7 has the potential to increase the chance that Otago farmers will experience longer or more lasting effects of a drought". Now I appreciate

that your evidence was written based on the notified version of Plan Change 7. Things have moved on a little since the notified version came to fruition. Do you have a working knowledge or have you had a chance to keep up to date with the work of the technical experts in relation to Plan Change 7?

5

A. I haven't been able due to my workload been able to keep up with the changes that you've made to Plan Change 7, yeah, so I haven't, no, sorry.

Q. So if you will accept for a moment that Plan Change 7 is not intending to take any water off of farmers compared to the water that has historically been used, but rather it's seeking to roll over the existing historical use of water, would the issue that you have addressed in this part of your final paragraph, would that be addressed?

10

A. So how long will the rights be signed for? Do the farmers have to have repeated applications to maintain the same amount of water rights?

15

Q. Was the point that you were making in your paragraph 26 that Plan Change 7 has the potential to reduce water allocations to farmers?

A. My understanding initially was that if the farmer didn't get the resource consent for water then it had the potential in view of climatic change to increase the chance (inaudible 15:07:03) within Otago which is a dry region so if you're saying to me there's going to be no change in the water allocation to the farm but the farmer has to apply every six years or five or 10 years for that resource allocation then what that is going to do is potentially it will increase the chance of drought because whose to say that the resource allocation will be allocated?

20

25 Q. Thank you no further questions.

A. Thank you.

CROSS-EXAMINATION: MS BAKER-GALLOWAY – NIL

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

30 Q. Judge Borthwick speaking. The impact on farmers is in abundant evidence in this hearing, not just simply the impact of PC7 but the impact of policy signalling prior to Plan Change 7 being notified and farmers acting on those signals but not necessarily now to their advantage, you

know, PC7 is approved in the way that it's been amended and that is putting enormous stress on individuals and as you rightly point out it's not just an individual stress, but it's individuals – it's both people, their families and their community. What would you have the Court do though right now, yes. How do you manage that? Is it because the Court's, not through any choice of itself, but is asked to make a decision, so it's come to us and we must make a decision. So what would you have the Court do in terms of being mindful of the social and personal cost of these procedures?

5
10 A. Your Honour that's a very good question. I'm not sure how it ever actually came to this, to this process and why it couldn't have been sorted in a more timely fashion outside of Court. I'm not 100% clear on that but that certainly, I think, would be a better approach. In my experience of working with farmers and especially around M Bovis is that their knowledge, what
15 farmers know isn't taken into consideration so it's not at all privileged. No-one values their knowledge and it leaves them feeling quite demeaned.

1510

A. That is on top of everything else that's going on within the public purview
20 and the media on social media, so actually you used to be proud to say you were a farmer. I'm not a farmer. You used to be proud to be able to say you're a farmer but that pride has actually gone for a lot of our farmers. I do think if the resource consents are quite short-term in terms of access to water rights, that puts a significant burden on the farmer and
25 the family and I have to ask then why would their sons or daughters potentially want to take over the farm? And if they're not going to farm, whose going to farm for us? Whose going to grow our fibre? Whose going to grow our food? And is that where we really want to see things going? Otago is a significant agricultural region for this country so we
30 really need to think carefully. I think, you know, listening or reading some of the evidence to date I think there's been – and I think you've alluded to there has been damage, emotional trauma, done to some of the farmers that have come to speak to you within this Court. So again, I say I'm not sure how it came to this but it would be better, I feel, for everyone if issues

like this could be sorted outside of Court and if people understand that farmers have valuable knowledge and it is worth listening to, perhaps things could have been resolved in another fashion.

5 Q. Right. I don't just see – I mean we've seen the trauma and so to have
farmers come before us and give evidence, notwithstanding that trauma,
points to real courage and strength and I don't think, or I would not want
it thought that this Court only listens to experts. It's not either/or, it's and
10 in both and my farmers who appear before us on this hearing are experts
in farming systems and are taken very seriously and it really is and in both
in order to get the full picture of what is actually happening in the region;
what could happen in the region and I think that's going to become
extremely important for yet another Plan Change which has come before
the Court, Plan Change 8 where the Court's going to be listening hard to
15 our farmers, not merely – not just experts because the Court regards
farmers as being experts in their own system. In terms of trauma, we've
got – the debate is between short-term consents and with that all of the
uncertainty that your evidence talks about together with uncertainties
created by other things also happening within the wider environment and
20 you've touched upon those and other witnesses have touched upon that
as well. It's not just this Plan Change. So that's short-term consents.
Long-term consents come with it also I think, considerable uncertainty,
that is when they get your consent but then there may be a review coming
and a review which, even on the farmers' own evidence, may necessitate,
25 may require wholesale changes to irrigation on farm systems and
methods of conveyance and on farm storage. So you've got if you like
two burdens, short-term or long-term, both with their attendant risks and
both with uncertainties. So how does the Court manage that? I mean
because those are the – there's nothing but hard decisions in this case
and there are two of them and in terms of managing that process, the
30 decision's one for the Court to make but how do you manage that in terms
of that decision? How does that impact of uncertainty get factored into
account?

A. Well all I can say at this point your is I'm glad I haven't got the Court's
decision to make because you are right, you weigh up uncertainty and

uncertainty is undoubtedly linked to mild distress which then again is linked to moral residue and then burnout and then potentially unintended consequences. I think I don't think I'm the person to answer that question. I think in what would be preferred by the farmer, farmers need to answer that question because I take your point. You might come to a long-term resolution in terms of access and then something may happen and there is another review so I dear say you probably cannot go back and ask that question of the farmers that have already been – it would probably be another extension of the Court so I'm not sure how your judicial process works.

5
10
Q. Yes. But it would be – in terms of managing stress, that farmers are presently under, do you have any recommendations to make because faced with hard decisions that's what the Court has to make, how does one take into account stressors on the farming community is feeding into that?

15
20
25
30
A. Yes, I mean in New Zealand we have got some great supports around farmers such as the Rural Support Trust which do really good work. I think at the moment things are at a very difficult point for farmers because we've got the whole intensive winter grazing debate and there they feel caught between a rock and a hard place. You spend a \$1 million on a wintering shed, you get the animals off the paddock, those that are concerned about paddock wellbeing are happy but then the Animal Welfare Group aren't happy because the cattle are inside, so the life of the farmer at the moment is just really, really difficult. The other issue being, of course, that when they are stressed, quite often they don't go and seek advice or support. Part of that is because of the intimacy of many rural communities and when you go into a doctor's waiting room, the other is there are no health professionals around. It's very difficult for them to access – doctors work within the day some time when the farmer hasn't got the opportunity to go, so it is very difficult. Farmers seek support from their wives and within their families generally but the whole thing around stress at the moment the way I see it within farming is there is almost a perfect storm brewing and that is my concern and I know you're going to hear it from the Rural Support Trust and I'm sure they will

5 tell you just the increase in calls, etc. I can't answer your question. I really, I mean, it is so difficult. There are so many things that are happening to support farmers, like we heard on TV1 this morning about (inaudible 15:18:58) in farmers. There's lots and lots of initiatives but whether the farmer accesses those or doesn't, it's very, very difficult. You just – unfortunately we just hear about when things don't go well, quite often, and that's difficult for – mainly for male farmers but for female farmers as well. Yep.

10 Q. Thank you.

QUESTIONS FROM THE Court: COMMISSIONERS EDMONDS AND BUNTING – NIL

QUESTIONS ARISING ALL PARTIES – NIL

THE COURT: JUDGE BORTHWICK

15 Q. Well thank you very much for your time and for your evidence. It's very clear, so thank you.

A. Thank you very much. Goodbye.

WITNESS EXCUSED

MS REILLY TO THE COURT: JUDGE BORTHWICK

Q. Your Honour Mr Michael Lord is the Chairman of the Otago Rural Support trust; previous President of Federated Farmers and a farmer that lives in Otago.

5 A. Oh okay, right. Thank you.

SUPPRESSION ORDER ISSUED**MR MAW CALLS****10 MICHAEL LESLIE LORD (AFFIRMED)**

Q. Good afternoon. Do you confirm for the record that your full name is Michael Leslie Lord?

A. Yes.

15 Q. And you have prepared a statement of evidence on behalf of the Federated Farmers dated 5th of February 2021?

A. I have, yes.

Q. Are there any corrections that you wish to make to that statement of evidence?

20 A. Oh the only correction I'd make, it's in paragraph 4. It says: "I'm a counsellor for the Dunedin City Council. I've chaired the Financing Council Controlled Organisations Committee for three years". It's actually five years.

Q. So we should delete three and put five?

A. You could almost make it six.

25 Q. Thank you. Subject to that correction do you confirm that your statement of evidence and the evidence you are about to give is true and correct to the best of your knowledge and belief?

A. To the best of my knowledge it is, yes.

30 Q. Now have you prepared a summary statement in relation to the key points you wish to raise?

A. Yeah, I have got some speaking notes but I haven't prepared copies sorry.

Q. Right. Well perhaps we will see how we go, yes.

THE COURT:

Q. And if we need to take five minutes for counsel to collect his thoughts we will do that.

A. I can wait five minutes.

5 Q. Yeah, you just speak to your notes.

A. Okay, thank you. Sorry I need the glasses and I can't focus and read so...

Q. I am doing exactly the same thing on and off, on and off.

10 A. 56 years and they let me down. Well I assume this has been read and you've seen it so I won't go into all the details.

Q. Yes.

15 A. I guess one thing I did want to talk about a wee bit was stresses and stresses being cumulative and I just heard in the last lady's submission that there's a lot going on in the farming situation at the moment and even things like when a farmer gets stressed and I can give you this from a personal example, I had a farmer ring me two weeks ago, oh no, probably a month ago now and he for the first time in his life had been to a doctor and he had asked for some help because he wasn't keeping it right and the doctor said, oh yes, look no problem. And here's this guy struggling
20 just to do that so those cumulative effects are very much getting farmers down and affecting their ability to function. The other thing I was going to talk about really was drought and drought effects and how they affect farmers. Now I lived on a farm. I had my farm until I sold it just recently actually so I am no longer a farmer right at the moment although I've just signed up to buy a block today. I've got to go and sign it straight after this
25 but the block that I sold was the largest bit of contiguous land below sea level in New Zealand so I knew both ends of the spectrum. I had a lot of floods and I had a lot of droughts and when I got droughts – the thing about a flood that to me was a bit unique was when you have a flood you go out and you look at the weather forecast and you can see the big red patches on the thing and everyone talks about it and you see flood warnings in the paper and usually they don't come for more than about a
30 week in advance. The rain comes. The water comes in and then you can start dealing with the aftermath and usually you're not the only one

involved. You've got your neighbours on either side. Some are worse than others but people rally around help you because they know it's only a short time. With drought it is quite different and what's particularly different about droughts is that where you don't know when a drought starts; when it's gonna finish and so droughts start off – you just get dry.

5 You go around after your rotation. You go back to a paddock to graze it again and there's just not sufficient grass there and sometimes you go back a few days later hoping there'll be more and there's actually less and you look at the weather forecast and it says in the next 10 days we're

10 going to have eight days with rains in it and you think, wow, I'm blessed and 10 days later you haven't had a drop of rain but it's gone around you, it's gone up the hill, it's gone across, you know, it's ruined the parade in town and it's done this and it's done that and you still haven't had any rain and you sit there for a week feeling how unjust that was but then you see

15 in the forecast there's 10 days and they've got five days of rain in them and boy that Wednesday looks pretty jolly good. We're going to get some real rain next Wednesday and it doesn't happen and it doesn't happen and it doesn't happen and it can go for months and months and months. On the Taieri Plains where I farmed the average rainfall was 760 mills a

20 year but how that comes can be an effect and with climate change it seems – I mean we all know about 2015 floods here in Dunedin, well it was the same on the Taieri but 2006, 1993, 1994. I have a whole lot of floods where the trend seems to be now that we cannot deviate too far off 760 mills of a rain a year; just what we need but you can get 260 mills in

25 one night or one two-day period and so you get the benefits of about 50 mills and the balance of it goes down the creek and the regional council, you know, it gets pumped away and you get no benefit from it so how rain falls on a farm can be very – in fact, one year I remember looking at the rain gauge at the end of the year and I'd only had 490 mills of rain and I

30 was quite glad 'cos I said, look I've farmed with under 500 mills of rain for the year but the way that rain fell there wasn't one drop wasted and there wasn't one drop fell at a time when the grass wasn't growing and I actually finished the season within kui of the best seasons I had but I did put a poem in my evidence and I would like to read that and if you don't mind I

could stand, just because I can probably read easier but – it's a poem written by a friend of mine in Australia, Murray Hartman, and he's given me permission to read this at any rural event; rural trust event that I wish. It goes:

5

His cattle didn't get a bid, they were fairly bloody poor.

What was he going to do? He couldn't feed them anymore.

The dams all but dry; hey was \$13 bucks a bale.

Last months' talk of rain was just a fairy tale.

10

His credit had run out; he had no chance to pay what was owed.

Bad thoughts ran through his head as he drove down Gully Road.

Jeez Great Grandad bought the place back in 1898;

Now I'm such a useless bastard I'll have to shut the gate.

Can't support my wife and kids not like dad and those before.

15

Crikey Grandma kept it going while Pop fought in the war.

With depression now his master, he abandoned what was right.

There's no place in life for failures. He'd end it all tonight.

There was still some things he had to do –

He'd have to shoot the cattle first.

20

Of all the jobs he'd ever done that would be the worst.

He'd have a shower; watch the news and they'd all sit down for tea.

Read his kids a bedtime story; watch some more TV...

Kiss his wife goodnight and say he was off to shoot some Roos –

And then in a paddock far away he'd blow away the blues.

25

But he drove in the gate and stopped as he always had to check the roadside mailbox and found a letter from his dad.

Now his dad was not a writer; mum did all the cards and mail but he knew the writing from notebooks that he'd kept from cattle sales.

He sensed the nature of it's contents; felt moisture in his eyes...

30

Just the fact his dad had written was enough to make him cry.

Son I know it's bloody tough. It's a cruel and twisted game this life of being upon the land when you're calling out for rain.

There's no candles in the darkness, not a single spec of light,

But don't let the damning get you, you have to do what's right.

I don't know what's in your head but push the bad thoughts well away;

You see you always have your family at the end of the day.

You have to talk to someone and yes I know I rarely did, but you have to think
about Fiona and think about the kids.

5 I'm worried about you son. You haven't rung for quite a while.

I know the road you're on 'cos I've walked every bloody mile.

The date December, 7 back in 1983 behind the shed I had the shotgun resting
in the big low tree.

See I'd borrowed way too much to buy the Johnston Place and then it didn't

10 rain for years and we got bombed by interest rates.

The bank was at the door. I didn't think I had a choice.

I began to squeeze the trigger and that's when I heard your voice.

You said: "Where are you Daddy? It's time to play our game. I've got the
squatter all set up. We might get General Wayne".

15 It really was that close and you're the one that stopped me son and you're the
one that taught me there's no answer in a gun.

Just remember people love you. Good friends won't let you down.

Look you might have to swallow pride and take that job in town.

Just 'til things come good son. You've always got a choice.

20 And when you get this letter ring me, 'cos I'd love to hear your voice.

Willie cried and laughed and shook his head and put the truck in gear.

Shut his eyes and hugged his dad in the vision that was clear.

He dropped the cattle at the yards; fed his last 10 bales of hay and then he
strode towards the homestead shoulders back and held high.

25 He still knew the road was tough but there was purpose in his eye.

He called his wife and children who'd lived through all his pain;

Hug said more than words. He'd come back to them again.

They talked of silver linings; how good times always followed bad and then he
walked towards the phone; picked it up and rang his dad.

30 And while the kids set up the squatter he hugged his wife again and then they
heard the roll of thunder and they smelt the smell of rain.

A. I just wanted to share that there's a lot of gully roads and a lot of people
walk down them and in Otago we've got a lot of gully roads. We've got a

Black Gully Road at Heriot, we've got a Coal Gully Road at Milton, we've got a Serpentine Gully Road and we've got School Roads. We've got Boundary Roads, we've got Settlement Roads, all roads that go back a long time and have a lot of meaning to the people that live in those areas, although they might not be settlements now. Since I took over as Chair of the ROST we've dealt with the aftermaths of several farming deaths; very sad farm deaths and the ones I struggle with the most are suicides and we've dealt with 11 suicides of farmers and farm workers in the last two and a half years in Otago. We've got lots of Gully Roads. 140 years ago, and I just note this is sort of what the last lady said, but 140 years ago in this country there was lots of small farms; tens of thousands of farmers with anything from six to 10 acres to 20 acres to 30 acres. They were peasants hardly producing enough to feed themselves and just sell a wee bit to maybe cover some clothes for the kids. But over the years progress was made. The use of fertilizers, better grass species, better genetics. The horse was swapped out for the tractor or the horse spent half it's life just producing enough feed for itself so suddenly things got better and better then there were bigger tractors and bigger gear and the machines that were operated on the back of those were bigger. The Government encouraged and subsidised farmers to become more and more efficient and they did. They became the cleanest and the most productive farmers in the world and I've had a good look around the world and I can assure you that is true. But the public of New Zealand abdicated the responsibility of feeding themselves to just 2% of the population and we've not fallen short. We've done that. And just for an example on my farm, I was in the habit of producing approximately two and a half million litres of milk a year which if you just – it didn't go as raw milk all the time but if you just put that in raw milk, 125,000 people in Dunedin, that's 20 litres for every man, woman and child in New Zealand and there's a lot of farms a lot bigger than mine in Otago. I was just a wee fella. But we can be lawyers. We can be judges. We can be engineers. We can be dentists. We can be doctors because we know that someone else is gonna take care of feeding us and when I was a kid I didn't – I grew up in town. I never had a farm. All my cousins had

cousins that were on farms. All my cousins were on farms and I felt sad that I couldn't have a farm and I aspired to get one and I did but the funny thing is, in those days in the 1970's people aspired to be farmers. The last – it was a job that was a noble job. It was a job you could be proud of and you know, I've had hundreds and hundreds of school kids over the years come to my farm and I know every single one of them's gone away thinking that was pretty special. I've got piles of letters at home from kids that came out and saw what we were doing for the first time but no longer is that the case. People are not proud of farmers anymore and farmers know that and it gets them down and just even on – over a month ago, 13th of April I had to send a letter to the Minister of Agriculture Damian O'Connor asking him to consider an extension into Otago Region of the drought that's been moving further south. Now with some farmers, their farms look green. Some farmers they've done okay. They've got enough rain in the spring. They've got surplus feed. There's a lot of farmers who are gonna have a really tough winter. The minister has extended the boundary. It now covers Otago and tonight I have to go home and spend two hours on a Zoom call calling together and sharing that phone call for the first drought committee meeting for this new drought. I guess I know it's a tough job and I could see the questions that you asked the last submitter. I'd like to urge you to plan carefully and take into account the farming community, the humans who are on the front line. The effects of his plan makes a difference. Not all farming families are the same and very much you know, you just look at any age group of family. Like I'm 56 years old. I've got a 28 year old and I've got a 26 year old. I've got a 24 year old and a 20 and a half year old, nearly 21 Dad. I want some inheritance he says. But if I was still farming, if I was running my farm and we had to take on a big irrigation project, I've still got enough energy at 56 that I can still be pretty useful. That 28 year old's absolutely at the top of their game. They can work. They can be keen. They can go on the internet. They can research stuff and pretty much with a good 28 year old or a 30 year old or a 32 year old, you know, you can achieve a lot but if things get put on hold and don't come and ask me to have much energy at 62, or 65 because it diminishes and even the circumstances for that 28

year old change. Suddenly by 34 they've got three or four kids; they've got every other thing calling on them; pressure as well and it's the same with bankers. If you've got a 56 year old dad and a 28 year old son they're a fierce and force to go to the bank and borrow money and you don't build

5 – some of these big centre pivots are a million dollars each. You want to go into the bank and ask for \$4 million, you try doing that when you're 67 and your son's 35. It just doesn't work. So the effects of putting something on hold can affect the ability of certain farms. There will be certain people that will just miss that gap. I know it's not an easy decision that you have

10 to make and I don't envy you at all but I want you to remember we're not just farmers, we're people. We're husbands, fathers, wives and mothers. We're sports coaches, we're teachers, we're Church members. We're Rotarians; we're Lions'; we're hunters; we're fishermen. We love our families. We love our community. We love our country. We love the

15 Highlanders and we love the All Blacks and we are getting worn down. I guess the only other thing I would say and it's not just water but it's very sort of regulation. As I was coming in this morning there was a guy on the side of the road. I thought he might have even been broken down. I said: "Are you all right"? He's got WorkSafe written on the side of his

20 truck and it's just another person that wants to come into your farm and tell you how to suck eggs, to tell you you need a guard on that or you need to watch this or you need to operate this safely or I saw your worker and he didn't have a crash helmet on and you know, there's a whole lot of people putting regulation on farmers and it's just coming at farmers

25 from everything. I just think of those people that suicide and look it's not all – I can't lay that at the foot of the Regional Council or the foot of any one entity but there's a lot of stress and a lot of pressure on farmers and it's greater than it's ever been before and I guess I'll leave it there and just urge you to do your job as well as you can. I know it's not easy sorry.

30 Q. No. And you would have heard me say there's no easy decisions. There's hard decisions. There's only hard decisions.

A. Yes.

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- Q. I'm not only for farmers, but across a number of variables, other people and other environmental considerations. That's just hard. But in terms of one of those decisions, it's whether you go short-term or long-term with a possibility of review and that review then requiring farmers to do so much more if the review is to make water less reliable and that's the dichotomy. It's the short-term would be the opportunity to know the environment that you're planning for and to go in that direction or long-term. You need to have what you think you have anyway now taken away and still more costs and more burden placed on the farmer. That's the tough – they're tough choices so what do you do when that's what's presented to you? There's no – both of them have down sides, considerable down sides in terms of the impact, social impact.
- 5
- 10
- A. Yeah, that's true. Are you asking me to tell you which?
- Q. Yes, I am, yes.
- 15
- A. Look really I don't know. I don't know the answer. But there's a lot smarter people than me in this room and people like Kim will have a much greater view of what the farmers want than what I would have, sorry, Ms Reilly, than what I would have. People that have a much better understanding of how to run and organise these plans, yes, I guess all I'm just saying is look whatever decisions you make, they will affect people and that poem, it's almost a wee bit pithy because it had such a good ending but for lots of people –
- 20
- Q. They don't have that ending.
- A. – accumulated stress means their wife leaves them so there is no wife when they get home and it's those types of stresses that are affecting farmers and we see it every day and unfortunately with no many of them we only find out after the event. I've done a wee bit of mental health training and I am starting to get aware of the signals now so when I talk to someone and they say, oh, well Dave didn't come duck shooting this year. I don't know what's wrong with him. He's come out every year. It's 27 years and he just didn't come. That raises an alert with me, you know. When I hear someone that's gone to Lions in a farming district with all his mates for years and he's just old and wants a leave of absence. He's gonna have a year off. Don't know what's wrong with him. That alerts
- 25
- 30

me and I get scared because people don't want to talk about those things. You can't even say well go and have a talk to him. See if he's okay. Well shivers, no I can't do that. You go, you'll be right. It's not much fun for me or anyone else and I guess it's just pretty hard, yeah.

5 Q. And signalled there being – of depression, being disengagement and withdrawal from...

A. Yes, very much so, yes. Yes, one of the first signs and every day you see farmers that are operating sub-performances you know, like once depression sets in you see things like they'll drive down to the paddock and a mob of cattle that maybe you're going to move them today or tomorrow or the next day, suddenly, its they just wait three or four days longer in the paddock. Oh I'll get them another day. I'll get another day, sort of more like doesn't want to get out of the truck and there's signs outside hotels; trucks outside of hotels. That's another sign, like why is that person there? He's not usually there. It's the third time I've seen him in a fortnight. This is habitual, you know, it's not right, so I mean we're always on the lookout for those things but we can't always stop things but I really can say that it's the cumulative effects of lots of different things, not just water, not just the unbearable rates, you know, but I think the other thing, it's the knowledge that we see and look I don't want to – years ago we had a water plan with the Regional Council. Water Plan 6A. Well there was going to be a 6B that dealt with the waste in town. People live in town. They just push the button when they go to the toilet and the problems gone. In the country we have to account for when the cow goes to the toilet. Now the reality of it is and I'm a city councillor and I know that for long periods of time, our systems do not operate to the level that the consents say and no-one monitors that and we had a situation recently where I was in a council meeting. It's all recorded. You can go back and find the date where it said we've had an increase in our – because of a change in standards we've actually reached a higher level of achievement. I don't know if I'm saying that quite right, but I'll follow on. And I'll just ask the staff member, I said, this change in standards doesn't mean that they've increased the level that we can pump out, therefore, we're not allowed to just discharge, so basically they've raised

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the bar, or lowered the bar and the staff member said “look I'm not sure exactly what that means. I'll have to send you a follow up answer”, and that was exactly what they'd done.

Q. They'd lowered the bar or...

5 A. They'd lowered the bar so we could just discharge more effluent in an untreated state. And so farmers know about that. I mean like people talk about how bad the environment is but I mean there's not a river around me that I wouldn't happily swim out of or drink out of. I mean I've got water as clear as that in my drains and yet urban water's in a ridiculous
10 state. Now I understand the reasons why and I understand there's a huge cost to fix it. I don't think it will ever be fixed. I don't think it can be fixed. It's just the same effect of hundreds and thousands of people living in small areas but the poor old farmers getting – he can have a few cows make up a bit of mud in the corner of a paddock on the cold, wet night
15 and suddenly he comes under the eye of the Regional Council. Suddenly that's an offence. You have footprints and cows weigh 600 kilos and they go in on a wet night; sink and then a bit of water fills up. You know, I've seen photographs and they say this is wrong or – how do you fix that?

Q. So a double standard?

20 A. Exactly. Yes. Well it appears to be but...

Q. Yes, all right. Okay, so I'm just going to see if the lawyers have any questions.

CROSS-EXAMINATION: MS BAKER-GALLOWAY – NIL

RE-EXAMINATION: MR MAW – NIL

25 **QUESTIONS FROM THE COURT: ALL PARTIES – NIL**

THE COURT: JUDGE BORTHWICK

All right, thank you very much for your evidence.

30 **SUPPRESSION ORDER ENDS**

THE COURT:

Okay, so I think that's us for today.

COURT ADJOURNS: 4.00 PM

COURT RESUMES ON THURSDAY 20 MAY 2021 AT 9.35 AM**THE COURT: JUDGE BORTHWICK**

Good Morning, anything arising?

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MR MAW:

Nothing from the Council your Honour.

THE COURT: JUDGE BORTHWICK

- 10 Q. Well, I want to talk to counsel about the topic of priorities and I've asked or directed Mr Page come back at 2 o'clock so we can do that together. One question for you Mr Maw and you may, just wanting your view on it, the – how does one regard, on a deemed permit, how does one regard the volumetric conditions on a deemed permit, so this is the take for a large amount of water, and I think it can be expressed in probably one of
- 15 two ways that I've seen, but anyway the take authorisation, is that also regarded as a deemed condition on a deemed permit, it's definitely a deemed permit but is it a deemed condition? That's an important question and I'd like your view on that as soon as possible, yes. Like before 2 o'clock. So that might require you just sort of working through
- 20 section 413 I think in particular and thinking about that condition in particular, so not (inaudible 09:37:40) priorities, sort of know what's happening there, but that volumetric take.

MR MAW TO THE COURT: JUDGE BORTHWICK

- 25 Q. Did you have in mind one of the examples in terms of the deemed permits that has one of these conditions on, so –
- A. I have, no it's nothing so clever as that overnight, but, yes, see you can take any example that you like of a deemed permit subject to conditions where those conditions include a rate of take.
- 30 Q. Oh right, so it's not, it's the rate of take that's expressed on the permit –
- A. Yes.
- Q. – not a volumetric?

A. Well, how does it go? It goes rate of take and then that can be worked up to a volume, is that right by applying some math?

Q. Yes, so –

5 A. Yes and so I'm not bothered about the volume, I'm bothered about the rate of take.

Q. Okay.

A. It's the actual condition on consent.

Q. So –

A. What is it? Is it a deemed condition?

10 Q. Okay, yes.

A. I do think you need to look at some –

Q. Oh no I was, I had in my mind the deemed permits that I've seen have what I understand is a rate of take but I hadn't understood them to have an addition of volumetric, so -

15 A. Volume, no, no I don't think they do and I think we worked out in the office how to do the math.

Q. It's a big number.

A. Yes and so that was fine, we could do the math and we could see what was happening there but yes it's the rate of take.

20 **THE COURT: JUDGE BORTHWICK**

Q. Is that a deemed condition or not?

UNIDENTIFIED SPEAKER:

(Inaudible 09:39:08).

25 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Okay so that could be significant –

A. Mhm.

Q. - and I'm asking you, but you know –

THE COURT: JUDGE BORTHWICK TO MS WILLIAMS

30 Q. Ms Williams, you've got a big interest in this, so you can think about that too and yes, once –

THE COURT: COMMISSIONER EDMONDS

And Ms Baker-Galloway too.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

- 5 Q. And Ms Baker-Galloway. Have you got any interest in deemed permits?
 A. Not in terms of the technical detail of the p- or we are comfortable with the way the technical detail of the deemed permits are being brought there –
 Q. Yes.
 10 A. – into the controlled activity rule, put it like that.
 Q. Yes, yes.
 A. So to the extent of the mechanics of bringing that through –
 Q. Yes, but you do have an interest in the topic of deemed permits?
 A. Only to the extent that we support them being rolled over in their current
 15 form of use, yes.
 Q. Oh I see, so you've made a submission on that?
 A. Yes.
 Q. Yes.
 A. Yes.
 20 Q. Okay, no that's good, so you can think about it too?
 A. I will think about it, yes, yes.
 0940
 Q. All right, we've got three brains -
 A. Yes.
 25 Q. - all thinking about this –
 A. Yes.
 Q. – and if you could do so ASAP, ASAP, that would be really good and depending on where you get, we may just expand the questions for Dr Sommerville, yes.
 30 A. Right, very good.
 Q. Very good, thank you. And when I say ASAP I actually mean by lunchtime today so you need to follow this one through pretty quickly.
 A. Cool.

MS WILLIAMS TO THE COURT: JUDGE BORTHWICK

I just want to say Your Honour that I am in regular contact with Ms Dixon so, not necessarily I'm saying that I can get an answer from Ms Dixon though, as
 5 well, but certainly I have just been in contact with Ms Dixon about this issue and in advance of her coming back to attend the hearing next week.

THE COURT: JUDGE BORTHWICK TO MS WILLIAMS

Q. Yes, so you might say to Ms Dixon that I flagged it and, this morning and if she had any views, is that, is the rate of take a deemed condition, she
 10 should express those views through you –

A. Yes.

Q. – before we break for the luncheon adjournment. As I said I think it's, it's tracking through 413 I think and then one would have to know in terms of the back history of those deemed permits, is that a deemed condition or
 15 is not, you have to take a view on that and it would be good if somebody could alert Mr Page to the Court's question?

A. I can do that as well your Honour -

Q. Oh good and then I think we've told he has to be –

A. – since I know that my friends here today are both taking actually a part
 20 in – and I have no intention of taking active part other than right now, so –

Q. So you're just seeing how we are?

A. Yes, indeed.

Q. Yes, okay, right. Okay good, and then the registry's asked for Mr Page
 25 to come back, cool, at 2 o'clock. So we're in your hands.

MS BAKER-GALLOWAY TO THE COURT: JUDGE BORTHWICK

Very good, thank you. So I've given my legal submissions so I'm not going to repeat those, but I wondered, I'm in your hands, if it would be helpful if I remind
 30 the Court of the sort of live positions of Fish & Game?

THE COURT: JUDGE BORTHWICK

Yes that would be really helpful, but your case may have evolved.

MS BAKER-GALLOWAY:

Yes and so it would be good to know where you stand and so, we Mr Farrell provided his supplementary to the joint witness statement, when we kept it as
5 narrow as possible which was that our interest in the objective and so that was filed and he marked up the text of the joint witness statement where BF agrees and disagrees on just the paragraphs in respect of the objective, what I didn't provide, because I didn't want to give you unnecessary pages, but what I can give you if you think it would just be helpful even just to have today, is the actual
10 version of the plan change that was appended to the 4 to 6 May JWS with the different provisions, Fish & Game are seeking in respect of the table and the non-complying rule in respect of new takes beyond six years, so that you could just see how it all nooshes together, so and then I can talk –

15 THE COURT: JUDGE BORTHWICK

I think so because then what happens is that Mr Maw's first question will be, are you still pursuing that other relief and so I actually think it would be helpful.

MS BAKER-GALLOWAY:

20 Yes, yes.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. That would be your first question of Mr Farrell wouldn't it?

A. Precisely what relief was being pursued.

Q. Yes in anticipation yes.

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MS BAKER-GALLOWAY:

Yes exactly, yes, so –

THE COURT: JUDGE BORTHWICK

30 So actually that would be helpful, yes.

MS BAKER-GALLOWAY:

Okay, so I'll hand these up and even if they're just useful today because things keep moving on, evolving which is good.

5 THE COURT: JUDGE BORTHWICK

But that's also good because it's going to clearly signal where your sitting in terms of your relief, yes.

MS BAKER-GALLOWAY:

10 It just means no-one – hopefully people get less lost.

THE COURT: JUDGE BORTHWICK

Yes, yes.

MS BAKER-GALLOWAY:

15 Q. So as I said this was attachment 1 of the JWS 4 to 6 May. Fish & Game's only live interest in respect of that JWS was the objective because in respect of the technical wording of the controlled rule and the restricted discretionary rule and the schedule, Fish & Game don't have any expertise to bring to the table so we've let the more engaged people just
20 work through that and, so that's the extent of our active interest. So I've highlighted in yellow, just so you see where it fits, Fish & Game's other live points. So there's just a technical change on the how to use the regional plan section that's in respect of the non-complying rule for new takes. If we get into the 10A proper, Mr Farrell's supplementary of 18
25 May confirms he can support version B of the objective, so you might recall....

A. So you might recall previously in the marked supplementary we had a more explicit objective about environmental –

Q. You did. Yes.

30 A. – but Mr Farrell will explain that he can also support this version B on a similar basis.

- Q. Meaning that he would do some back-editing to the version that he likes or that this – one of those two versions or his preferred version which I forgotten off the top of my head, in fact I think he likes B doesn't he?
- A. He likes B. Yes.
- 5 Q. Yes he likes B. B is now sufficient to cover the ground in terms what he was wanting to achieve?
- A. Correct.
- Q. Okay. Understood. Okay, so on that basis – cover the ground – on that basis he wouldn't be pursuing the proposed wording –
- 10 A. In the 18 March supplementary.
- Q. In 18 March.
- A. 23 March supplementary sorry. So, that's it.
- Q. 23 March. Okay. Now, I would signal one thing that I mean I'm really grateful you know, that he's re-thought his position like this but the Court's
- 15 bound to have questions, just bound to have questions on this objective, on either version. And that may clue in, you know I don't what, where I'm actu– formulated the questions, do you think he ought to be there? To take the questions and listen to them?
- A. Next week?
- 20 Q. Yes.
- A. We were hoping to get the objective in terms of Fish & Game's interests covered today.
- Q. Okay, well we're probably not ready to talk about the objective today. That's all – we're ready to listen to him and understand where he's coming
- 25 from but the wider interests that the Court has in the objective, I'm not sure that we can articulate – there's some things that we can start knocking off I guess but – yes...
- A. Yes, I can find out. That's on Tuesday isn't it? The objective? Or is that on no? I'll find out in the morning tea break Ma'am.
- 30 Q. Probably Wednesday I think, I'm not sure.

THE COURT: JUDGE BORTHWICK TO MR MAW

- A. I'm in a similar position in terms of whether I should be crossing Mr Farrell on his understanding of the objective and I do have some questions that

I describe them as perhaps preliminary questions but I had thought I'd probably be exploring that when the witnesses are empanelled next week.

5 Q. I think that's what we thought, yes because we – we've yet to just find time in our lives to sit down and study this.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

A. Mr Farrell is available on Wednesday. I might not be but he might be able.

10 Q. Okay. I think that actually makes it a lot easier because we just haven't had the time to sit down and study and formulate our questions and looking at it we know, you know we can see some obvious areas we want to push around but yes – but we're not ready.

A. No, we can be of assistance there.

Q. Okay very good. Okay that's really helpful. Thank you.

15 A. So, then just looking at the first policy 10A2(i) in terms of you know these mechanical changes upfront to deal with how the schedules working you know this sort of carve out for community water supplies, how that works with the schedule. We've got no problem with any of that but do emphasise that any sort of material exemptions for either community
20 water supplies with their own restricted discretionary rule or renewable energy generation, we're still not supportive of that.

Q. So, what exceptions for what sorry?

A. Well any consenting pathway for either community water supplies or renewable energy generation for longer than six years.

25 Q. Okay I'm with you.

A. We'll still in opposition to that because of the risk it all just undermine the whole purpose of plan change 7 and implementation of land and water plan.

30 Q. And so one of the things and again, can't talk about TAs because we haven't even heard most of the TA case but for hydro, we've had one hydro company although Pioneer's made a submission in relation to Fraser's Dam but we've got four deemed permits for Trust Power and then we signalled because we're generally concerned about hydro and

don't understand the hydro question because we didn't know until yesterday, we didn't know where the hydro dams were. So that's probably not a good place for starting. We know where Trust Power's interests are and thought maybe they could just an exception for that to get general alignment of those deemed consents with their deemed permits with their other assets. And assets, I mean their other permits.

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A. Downstream in the Waipori, yes?

Q. You got a view on that? Just a carve out on that basis only.

A. We just haven't heard a good reason from Trust Power about why it's such a big deal to have them re-apply for their four deemed permits in another six years as part of that scheme. Yes, so we just haven't had an argument on the merits about why that's such an imposition to re-apply once there's freshwater objectives set for the FMU, values properly identified and the target set. And then they can re-apply and if they have to reduce some of the use of the water from those four races that flows into the Momorangi and down the Waipori, that's the outcome that gives effect to the land and water plan.

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Q. Okay.

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A. And why shouldn't that happen in six years instead of in 2038? Or through a laborious consent or through a laborious consent review.

Q. So you're really holding your position in relation to even an exception for Trustpower?

A. Yes, at the moment.

25

Q. Yes, at the moment.

A. Yes, yes.

Q. And meaning that you're going to wait till we hear the closing submission?

A. No, no, meaning that probably the one, and you can explore this with Mr Farrell, the one distinguishing factor that you flagged earlier in the week is the climate change.

30

Q. Climate change.

A. What does the RPS say about it, what are the Climate Change Commission going to say about things like this and the end of the month.

Q. Yes, yes.

- A. That is a really hot topic.
- Q. It's a hot topic.
- A. Yes.
- Q. I mean and you've got the Government's own domestic policy in relation
5 to climate change including also that we are, what is it, 100% renewables
in nine years' time?
- A. Yes.
- Q. So removing constraints on a consenting pathways where the assets are
already in place, that may be the distinction.
- 10 A. That may be that weight that tips it.
- Q. Yes. Not for new assets?
- A. Mm mm.
- Q. But for that, that's what we were thinking –
- A. Yes, yes.
- 15 Q. Although we have to make a decision on the new assets as well –
- A. Yes.
- Q. – that's what we were thinking, yes.
- A. Yes.
- Q. So Mr Farrell's got a view about that too, is that what you're saying?
- 20 A. Well he's familiar with what the regional policy statement in particular says
about that climate change, yes.
- Q. All right. So I'll mark you down as an open mind?
- A. Yes.
- Q. All right that's helpful and then, but you haven't heard, we haven't heard
25 the TA case, so, we've got -
- A. Yes but we've got much less of an open mind.
- Q. Fair enough. Okay, so hydro open mind and TAs not so much.
- A. Or Trustpower open mind. I'd say Trustpower open mind, yes.
- Q. Trustpower, yes, no, so in fact it is Trustpower open mind, okay. Good.
- 30 A. Good.
- Q. All right.
- A. So yes then policies, happy with the policies, happy with the – now that
the Policy 10A.2.3 no longer refers to no more than minor, and that's good
and like the use of avoid and then this 10A.2.4 is where we've shifted our

focus of Dr Hayes' presumptive table where if the degree of hydrological change is more than in the presumptive table, the presumption is, the effects are likely to be more than minor unless, or sorry, ecological effects, I have to keep qualifying that, ecological effects, are more than minor unless those appropriate suite of comprehensive assessments establishes otherwise.

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Q. And that leads to your non-complying activity rule? No?

A. No, no, no.

Q. Doesn't? Okay, good, all right.

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A. The non-complying activity rule doesn't need a new policy.

Q. Yes.

A. Yes, so they're not, I guess what it links to, the non-complying activity rule still links to 10A.2.2 so they – so for new water irrespective of any other policies in the plan, only grant consents for new water, right, we'll call it new water, because it's not previously authorised for a duration of no more than six years, so a non-complying rule is in respect of this new water, not previously authorised if someone is seeking for a duration of longer than six years.

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Q. So just remind me what this policy does? This policy is like a description of what is a more than minor adverse effect?

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A. Which 2.4?

Q. Yes. 2.4.

A. 2.4 yes. It's, well it's presumptive trigger of what's likely to have a no more than minor ecological effect.

25

Q. Yes.

A. And its relevance now that there's no longer a policy that uses those words as either when you're considering minor in the context of a notification decision or minor in the context of the other non-complying limb. So yes, so then we've got the table which in Mr Farrell's March evidence, fixed a few of the drafting points that were put to Dr Hayes or some of the other points that were put to Dr Hayes and in the sort of double columns on the right, in the first draft it referred to the Schedule 1A in the water plan but on review of that after the questions from

30

Dr Hayes and just looking at how up to date that Schedule 1A might be, we've gone back to the original words of Dr Hayes instead.

Q. Oh I see what you mean, yes, yes.

A. So then Fish & Game supports the controlled rule and the restrictive
5 discretionary rule as they're trucking along, and if you get to Page 10 –

Q. Does your – I can't recall whether this document does it or not, does this document include the exception for stranded assets? It doesn't yet does it? The (inaudible 09:57:03) for stranded assets? It seemed to, we asked people to think about it, so I thought about it and didn't bring it forward.

10 A. Yes.

Q. And I thought they thought it had merit in their JWS. Anyway it doesn't,

A. Not -

Q. - did you have a thought about that, so you remember what we did there or what we suggested there so?

15 A. No.

Q. There will be some people who've invested quite some considerable amount of money –

A. Yes.

Q. – already in infrastructure, it's in the ground, but –

20 A. Yes.

Q. – they're not taking or using water yet.

A. Yes or the cherries have been ordered and they're growing but they haven't even planted that, yes.

Q. Yes that's right but also the way this could work, actually it could also
25 apply if you've got your irrigation mainline in the ground, it is likely to apply to the horticultural industry and viticulture I guess –

A. Mmm.

Q. – but it could also apply to centre pivots –

A. Mmm.

30 Q. – and that's what we were told, they're the boundaries and because of that we said, that looks like an RD rather than a control and anyway the plans came back and said control, we said RD because you probably need to be thinking about contaminants at least?

A. Mhm, mhm, yes.

Q. So anyway the planners thought that was an idea –

A. Yes but they haven't drafted anything yet have they?

Q. But they haven't drafted anything, did you have a position on that in terms of –

5 A. Ooh, not, no, not right now.

Q. Not right now?

A. I'd have to talk to, yes.

Q. Yes, okay.

A. Yes, okay, I'd forgotten about that one, sorry.

10

MR MAW:

Just on that question of the drafting of provisions to deal with the stranded assets, on pages 14 and 15, actually it might just be page 15 of the joint witness statement for the 6 May, is the wording that had been considered.

15

THE COURT: JUDGE BORTHWICK

Oh okay, right.

THE COURT: COMMISSIONER EDMONDS TO MAW

20 Q. That's 64 you're referring to –

A. Yes it is.

Q. – paragraph 64 there's an RD, yes.

A. Yes.

25 **THE COURT: JUDGE BORTHWICK**

Oh good, yes. So that's an RD, I thought they said they didn't like the RD.

THE COURT: COMMISSIONER EDMONDS

No, no the planners, yes go – landed on the RDA.

30 **THE COURT: JUDGE BORTHWICK**

Oh did they? I thought they said they wanted control, I was wondering what –

THE COURT: COMMISSIONER EDMONDS

Oh I see.

THE COURT: JUDGE BORTHWICK

5 Q. Oh so is it the matters of discretion actually (inaudible 09:59:10) there's some matters of discretion which we thought they perhaps didn't have a look at closely enough. Okay.

MR MAW:

Now that hasn't come through into the version.

10 **THE COURT: JUDGE BORTHWICK**

No.

MR MAW:

- at the back, but the text at least –

15

THE COURT: JUDGE BORTHWICK

Is there.

MR MAW:

20 Is there.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

Q. Oh well, something for you to think about whether you've got an interest in that -

A. Okay I see that much.

25 Q. – and what's your position?

A. So the pipes were in the ground before March 2020.

Q. Yes.

A. And there's still discretion over area to be irrigated.

30 Q. Yes and I, I don't know, speaking for myself, thought you might need to have more than just your area?

A. Mmm.

Q. If you could pull in a centre pivot on this?

A. Yes. Okay, all right, very good. So then on page 10 of this PC5A you'll see this non-complying rule in yellow, 10A.3.2?

1000

5 Q. And that's the rule that Mr Maw says you've got a scope problem with and will no doubt have an argument about that.

A. Yes but I can address that in Legals in June but we say it's squarely asked for in our submission but Mr Maw says it's not on the plan change. So, we'll round off that argument but this is for the water that – so it's not
10 schedule 2A catchments because if you're taking water outside of the 2A limits it's prohibited so we don't need to worry about that. It's just for non-2A catchments for a duration of more than six years for a consent that's not replacing previously authorised take and if it wasn't non-complying under this rule, you're recall that it falls under that restricted discretionary
15 rule that is absent of some important things like manu whenua values.

Q. Okay. All right, no I understand that. Okay.

A. And then the definition of community water supply, just sort of observing that we got no problem with the definition but it does still encapsulate a wide range of uses I guess of that water which is probably one of the
20 reasons it sits behind our opposition to an exemption for community water supplies –

Q. Because of the breadth of...

A. – given it's more than just drinking water that's being exempted – that proposed to be exempted.

25 Q. More than just drinking water, I mean water consumed as drinking water.

A. Yes as drinking, yes. That basic human need type thing, yes.

Q. And so then and I still have not read the TA stuff. But I did have a look at what Mr Twose was doing?

A. Mhm.

30 Q. I expected that he would come back and have another go at that definition, given the cross-examination and look at the RD. He's seems to have pitched a whole new proposal there, so there'll be no doubt people have some views on that whether he can. But did you have at look what his re-drafting at all?

A. I've looked at it briefly.

Q. Yes.

A. Yes and Mr Farrell's looked at it briefly.

5 Q. Okay. So Mr Farrell could answer questions or are you going to come back and when the TAs present their case, examine?

A. Wasn't planning to. No. Yes, we're running quite a confined case. So, and haven't engaged directly in detail in those issues other than as a matter of principle trying to uphold the integrity of the plan change.

10 Q. Yes. And so it is the breadth of uses by consumers that cause you to hold to the six years?

A. It's one of the – that's the main reason, yes.

Q. And the other reason?

15 A. No, no that is the main reason because if it was that that basic human requirement for drinking water that was being provided for could see again that that would tip the weight into justifying slightly different treatment –

Q. Yes like a longer...

A. – to everybody else.

Q. Like a longer permit?

20 A. Yes.

Q. But that's not what they're asking.

A. But that's not what they're asking.

Q. Yes. Okay. And you're able to say that because your submission on the plan was in support of six years.

25 A. Yes, was generally in support of the plan change as notified, subject to some typing up in the other side of things.

Q. Okay. All right, anything else you need to address before we see your move to your first witness?

30 A. No that was all I proposed to address your Honour, to set the scene.

MS BAKER-GALLOWAY CALLS**MORGAN JOHN TROTTER (SWORN)**

Q. So, do you confirm your full name is Morgan John Trotter?

A. Yes it is.

5 Q. And you've prepared a brief of evidence dated 5 February 2021 for the purpose of this hearing?

A. Yes I have.

Q. You have the experience and expertise set out in paragraphs 1 to 5 of your evidence but can you update the Court as to your current
10 employment.

A. Yes since I wrote my evidence, I now have a new role. I'm a project manager for a large river and wetland restoration project in the Upper Tairei and this is all about encouraging stakeholders and landholders to work together to improve management of freshwater resources in the
15 upper catchment.

Q. And so when did you finish working at Fish & Game and start your new job?

A. It's a bit of a blur. Approximately two months' ago.

Q. And do you confirm that where you make statements of fact in your brief of evidence, those statements of fact are true and correct to the best of your knowledge and belief and where you express your opinion you hold that opinion based on your experience and expertise?
20

A. Yes I do.

Q. And in your evidence, you've set out a summary on page 3. Could you just please read that to introduce your evidence to the Court.
25

A. Certainly.

WITNESS READS HIS STATEMENT

30 Many streams in Central Otago experience high levels of abstraction and do not have effective environmental flows such as a minimum or residual flow and associated allocation limit to protect the habitat and the ecological values. This is often due to historic allocation under deemed permits. In general the lower the minimum flow and / or higher the allocation limit, the greater the risk of adverse effects in ecosystem health and trout fishery production. Higher

minimum flows in the order of 80 to 90% of mean annual low flow or MALF and lower allocation limits, less than 30% of MALF are likely to have only minor effect on ecosystem values. Outside of these precautionary guidelines, comprehensive assessment on a case-by-case basis would be required.

5 CROSS-EXAMINATION: MR MAW – NIL

QUESTIONS FROM THE COURT – NIL

WITNESS EXCUSED

MS BAKER-GALLOWAY CALLS**NIGEL JOHN PARAGREEN (AFFIRMS)**

Q. So do you confirm your name is Nigel John Paragreen.

A. I do.

5 Q. And you've prepared a brief of evidence dated 5 February 2021 for the purpose of this hearing?

A. Yes.

Q. And you have the qualifications and expertise set out in paragraphs 1 to 3 in your evidence?

10 A. Yes.

Q. You have expertise in environmental management and work for Fish & Game but you are giving this evidence, not as an expert but as a non-expert, that's correct?

A. Yes.

15 1010

Q. And do you confirm that where you make statements of fact those statements are true and correct to the best of your knowledge and belief?

A. Yes.

Q. That's good. And you have a summary of your evidence at page 5?

20 A. I do.

Q. Can you commence with that please?

A. Oh Ms Baker-Galloway do you – I have a few changes that might be of use.

Q. Oh sorry, corrections, yes.

25 A. Would you like me to go through those?

Q. Yes. Yes go through the corrections, thank you.

A. If we go to paragraph 15 on page 6, there's the second, oh the first full sentence on the top of page 6 refers to Mr Farrell's something, that should be "evidence", "Mr Farrell's evidence". If we go to page 22 and Figure 1, that's listed just below paragraph 83, in the headings labelled, "Most
30 Permissive Recommendation" –

THE COURT: JUDGE BORTHWICK

Q. Sorry, which – where are you at?

A. Page 22 paragraph 83.

Q. Oh page 22, I went to paragraph 22. All right, page 22 and you're looking at a heading?

5 A. At the heading in the table in Figure 1, called, "Most Permission Recommendation", that should have some additional information in there which should be to add "based on Dr Hayes' thresholds and Plan Change 7 time frames."

Q. "And Plan Change 7 time frames"?

A. Yes. And there's a similar -

10 Q. I just need to put that down for the record. Okay and a similar change to be made...?

A. Similar change to be made in paragraph 128 which is on page 33.

Q. Where do you want me to make it?

15 A. Yes please, so there are a number of additional pieces of information to add, in the top left box, which says, "Allocation", that should read, "Allocation Compared to MALF", and two boxes down where it says, "Residual Flow", "Residual", that should say, "Residual Flow Compared to MALF". In the two boxes top, top right, one which says, "All Relevant Streams", that should say, "All Relevant Streams in Appendix D"?

20 Q. I can't see. Sorry, are we still on paragraph 128?

A. Paragraph -

Q. "All Relevant", no I've got it, okay. The centre column -

A. Yes, centre column, yes.

Q. "Relevant Streams" should say, "All Relevant Streams"...

25 A. "In Appendix D".

Q. "In Appendix D". Yes.

A. And similarly the box to its right, that should read, "Streams in Appendix D Where MALF is Less than 25 Litres Per Second." That's the extent of them, thank you.

30 **EXAMINATION CONTINUES: MS BAKER-GALLOWAY**

Q. Thank you. So then back to your summary which is on page 5 and the top of page 6?

A. Thank you for that.

MR PARAGREEN READS SUMMARY

“Water allocation has been an issue of concern for Fish and Game for decades. The 2021 deemed permit deadline has historically been viewed as a time when these issues will be resolved. However, this has not come to pass. The Otago Regional Council has failed to prepare properly for the deemed permit process. The Otago water planning framework is not fit for purpose and does not give effect to the NPS-FM.

10 In the years leading up to 2021, Fish and Game has perceived a change in the nature of water abstraction. This is in part due to perverse incentives embedded within the water planning framework. Investment in spray irrigation has likely entrenched reliance on water use in communities, making it more difficult to reduce allocation and return water to rivers.

15 A summary of applications considered by Otago Fish and Game from 2017 until the present as part of the replacement of deemed permit processes demonstrates that applicants generally seek allocations and residual flows which represent a very large degree of alteration to the waterbody. In many cases, the application is marred by hydrological uncertainty.

20 When compared to the values and risks based framework described by Dr Hayes for assessing adverse effects on ecology from surface water abstraction, the applications surmised generally tended towards being high risk and do not meet his recommended thresholds for a no more than minor adverse effect.

25 There was a significant gap between the allocations and residuals sought by applicants and the ‘no more than minor’ adverse effect threshold criteria developed by Dr Hayes.

30 Fish and Game accepts the need for short term consents, so that a fit for purpose planning framework can be developed. However, the criteria guiding the non-complying pathway in Policy 10A.2.3 for longer term consents or

consents that don't otherwise comply with short term criteria mean the plan change does not work as intended.

5 Fish and Game does not have confidence that the issue of long term consents, of the type characterised in the summary of applications, with review conditions will enable over-allocation to be phased out in future. This would delay the implementation of the NPS-FM.

10 Fish and Game seeks relief to give better effect to the intent of Plan Change 7 and ensure the issue of surface water consents does not undermine the implementation of the NPS-FM, via the development of the Land and Water Regional Plan. The changes to Plan Change 7 set out in Mr Farrell's have been refined subsequent to consideration of ORC evidence and other parties' submissions." And the last paragraph I feel is likely no longer relevant as the
15 policy that it refers to has changed.

THE COURT: JUDGE BORTHWICK

Q. So you want me to, sorry what do you want me to strike out?

A. Oh, well yes we could strike out the entire last sentence of paragraph 15 which starts with "Of" –

20 Q. Beginning with, "Of particular emphasis", delete that sentence?

A. Yes please.

Q. Yes okay.

A. If it would be useful your Honour, I also could run through a quick explanation of Appendix D which is a summary of applications, as –

25 **EXAMINATION CONTINUES: MS BAKER-GALLOWAY**

Q. That's on page 47.

A. Yes. It's quite ghastly to look at but does have some what I hope is valuable information.

THE COURT: JUDGE BORTHWICK

30 Q. Looking for a ghastly Appendix. So, yes, I'm just, might be struggling, oh that one. There is something ghastly here, you're quite right. Is this the

one that looks like this, because the Appendices haven't really come out well?

A. Yes.

Q. Okay, so this is your ghastly Appendix D?

5 A. It is.

Q. Okay, got it.

A. Would you like me to run through a summary of what we see here?

Q. Yes I'd be interested to see how that works.

10 A. So this – what I was attempting to achieve is to summarise key characteristics of applications that Fish and Game, you know, Otago Fish and Game has been asked to assist, as a party which may provide effective party approval and this is in the time that I've been with Fish and Game which is from January 2017 until the present. What I have done is listed the applicant and the water body which they take water from and then provided key statistics which (inaudible 10:18:06) if we look at the group of headings titled, "Environmental Details" in the main body of the table, we start off with the mean annual low flow which is a naturalised mean annual low flow, if there's an alternative mean annual low flow for the application which there often is, I've listed an alternative. If there is, 15 if what I see to be hydrological uncertainty, which in the assumptions you'll see criteria for what that – for how I've based that and I've listed that as "Yes" there is. If there's a species interaction issue which I have judged to be of concern, so that's mostly if non-migratory galaxiids are interacting with salmonids, I have identified that in that table. I've als-

20 Q. So non-migratory galaxiids interacting with ...

A. Salmonids, so principally Chinook Salmon, Brown Trout or Rainbow Trout.

Q. Yes.

30 A. I think we have one example in here, Brook Char. And then if we go across to the group of headings, titled, "Sort and Application", we have the primary application applied, the residual flow, the turn and if one has been provided a generalisation of the general summary of the adverse effects from the application, not all applications provide that general summary, some provide individual ones, say the impact on recreation

might be no more than minor and I haven't bothered with the individual ones because I thought that was too complicated and too restrictive.

Q. When you say you haven't bothered with the individual ones, what do you mean by that?

5 A. So I've only provided the summary of adverse effects where the application has summarised adverse effects in total. If they've looked at one aspect of adverse effects, say only cultural or only ecological or –

Q. Oh okay, yes.

A. – I haven't done.

10 Q. So overall, this is their overall summary?

A. Overall. Yes.

Q. And where you've got a wee dash, they didn't provide one?

A. They didn't provide an overall summary.

Q. Oh but they may have addressed individual impact?

15 A. Yes they still may have addressed individual impact.

1020

Q. Yes okay.

A. And if we take a look at the final group of headings under "Calculations". What I've done is I've taken the either the allocation as a percentage of their naturalised mean annual low flow or the residual flow as a percentage of the mean annual low flow and just created that statistic which can be directly compared to Dr Haze's thresholds. And if you'll turn to the one page previously which must be the first of the appendix, page 48.

25 Q. And so, then where do you want me to go?

A. One page previously, Ma'am.

Q. One page previous. Okay.

A. You should see two tables which aggregate or summarise the information in those ghastly tables, to someone that's much more useful. So you can see if we take the first indicator which is listed on the top left of the first table which is listed as "Primary Allocation" as a percentage of mean annual low flow. We can see the summary from each of the applications that have been summarised in the table. The mean number is 522% which is the allocations, 522% of the mean annual low flow and the

median is 206% and we can see that the most permissive recommendation from Dr Haze's thresholds is merely 30%. You can do a similar exercise with the residual flow as a percentage of MALF. And you can see a similar, quite significant gap between where the applications are hoping – what the applications are hoping to achieve and what Dr Haze has recommended for ecology effects only. The really important thing that this table shows is just how far apart the recommendations are from the reality that we're seeing in the applications.

5

10 Q. And when you're talking about ecology was that the top or bottom table you were referring to there?

A. Both.

Q. Both.

15 A. These only deal with Dr Haze's recommendations which are limited only to ecology adverse effects.

Q. And can you give me again what your definition of "naturalised" means?

20 A. It's the – it's not natural state. It's the flow in a river without the impact of abstraction or the impoundment of water through dams. In my mind I think of it as helpfully informing us of how much water is available to be allocated.

Q. And so this is what's been applied for, this isn't what the council granted?

A. Yes.

Q. So you have done that end of the equation in terms of a comparison?

25 A. No unfortunately I didn't have time and producing this to request the information from the regional council. But I did still think this was useful, I'm not aware of any other witness providing this type of summary.

30 Q. Sure, I'm not saying that wasn't useful I was just interested to see whether either (inaudible 10:23:30) a few of the cases you might have looked at where they ended up in terms of what had ultimately been granted, that was all.

A. Anecdotally I can say that my experience has been, the application generally sits around the – generally gets granted with similar levels of allocation of residual flow, particularly allocation because it's usually calculated using that policy 642 which is...

Q. Of the allocation, the – does – sinking lid.

A. Yes part of the sinking lid policies.

Q. Purported to their sinking lid policies, yes I take.

5 A. Yes, so rarely Fish & Game has been able to reduce allocation successfully on applications. Typically they tend to go through without much change from application.

THE COURT: COMMISSIONER EDMONDS

(inaudible 10:24:27)

THE COURT: JUDGE BORTHWICK

10 Q. So, if my Commissioner doesn't know. It's good that I don't know because I'm challenged mathematically, sometimes. I was wondering mathematically what is being described when you say that in terms of the summary of applications on average, people are seeking 522% of mean annual low flow whereas the recommendation is only 30% of mean
15 annual low flow, so what does that even look like? Is that – you're saying take everything out of the river and then some more or what is 500% mean?

A. What does it mean practically?

Q. Yes.

20 A. So if we think about our mean annual low flow as low flows – seven days, the lowest flows are across the year, averaged across multiple years.

Q. So just need to slow down and start that sentence again. If you think?

A. Sorry, if we think of the mean annual low flow, I understand it to be the
(inaudible 12:25:33) seven day mean annual low flow. That is a seven
25 lowest consecutive days of flow across the year. Averaged across the entire dataset that we have. So it's an average of an average. So we're only looking – we're looking at that low flow at the bottleneck in the waterbody. If we take an allocation, you would image an allocation can only take the amount of water that is actually present in the waterbody.
30 So if we take a hypothetical, you may say there's a hundred litre a second MALF stream. So at low flows there'd be...

- Q. So, slow that down again. You might say that a hundred litres per second is MALF 3, is what I heard you say?
- A. You might say in a hypothetical stream we have a hundred litres per second at MALF.
- 5 Q. At MALF.
- A. At MALF.
- Q. So you need to take it really slowly because I'm imagining, at the same you're talking, I'm picturing in my mind what you're actually saying. Yes, so a hundred litres per second at MALF. Got it.
- 10 A. At MALF. So, if we had an allocation that was 10 litres per second then the maths is relatively simple. We'd have an allocation that's 10% of mean annual low flow.
- Q. Yes.
- A. You could only take 10% of the water at low flows.
- 15 Q. At low flow.
- A. If we had an allocation that was two hundred litres a second. Then we'd have a 200% allocation as a percentage of mean annual low flow.
- Q. So, if your mean annual low flow is 100?
- A. Mhm.
- 20 Q. What does an allocation of two hundred look like? If it's not taking all of the water out?
- A. It means you can take all of the water out at a hundred litres a second plus you can also take an additional – as more water comes in with higher flows, you could take additional water. So as the stream rises above its
- 25 MALF flows, you could take additional water which means that in this hypothetical situation, any flows between zero and two hundred litres a second could be abstracted. And flows above two hundred litres a second would then go to the waterbody.
- Q. Remain in the river. And so when people on average are applying for
- 30 522% of MALF, they are taking flows on your hundred litre per second example, between zero and five hundred.
- A. And five hundred.
- Q. Yes.

A. Yes, so they could abstract the stream dry, five times over at low flows essentially.

5 Q. Yes. Okay. I'll give you another MAC example. So, just say the mean annual low flow is 600 litres per second. Yes? So that is your hypothetical. How does your 522% apply there?

A. Well it would be around about five times, six hundred litres per second because it's...

10 Q. So you can extract water down to one hundred litres per second, so well below MALF? How does that five hundred – where's the distribution of the 500%?

A. Sorry, I misunderstood, I thought you were saying it was a 600 hundred litre a second mean annual low flow.

Q. Yes there is. Okay that's the proposition, so how do you now apply your 522%, what does that look like when people are taking water?

15 A. So, if we just get the allocation correct in my mind. The allocation would be 500% of six hundred litres a second which is 3,000 litres a second. Three cumecs? So that's means that if your allocation is three cumecs and your mean annual low flow is six hundred litres a second in the stream, the abstractor would be able to abstract water from zero litres a second up to flows at 3,000 litres a second. And what that essentially means in practice is that a river, only stays at its low flows for a very small amount of time. It sort of varies around them. What it essentially means is that as the river varies around the irrigator could take all water. That's a particularly extreme example but we do have examples similar to it. The Trust Power example is similar to that. Where they're able to take water in some cases from barely no residual flow, they take all the water from the perennial stream and they're able to take water up to insane amounts, for a stream that might have 12 litres a second in it, they might take, be able to take 600 litres out of it. I actually do have an example of a Trustpower one in here, it is the most extreme of the examples that we've used – that I summarised, here it is. Trustpower, I've – on page, I'm sorry these appendices don't have page numbers, should be page 52 or if that helps.

20

25

30

1030

Q. How many pages from the back of the table?

A. From the back of the table?

Q. Yes?

A. Close to the front than the back I imagine.

5 Q. What's the permit at the top of the page?

A. The permit at the top of the page is Queenstown Lakes District Council, Permit Number 2007 049.

Q. I have it, Trustpower.

10 A. Trustpower and then I have summarised Shepherds Stream which was the only race that I had application that I'd reviewed at the time of writing this, it has a modelled mouth of three litres a second and a primary allocation of 220 litres a second with zero residual flow and that leaves an allocation as a percentage of MALF of 7,567% in a residual as a percentage of MALF as zero.

15 Q. Good, I think we're okay with them, we're okay.

THE COURT: COMMISSIONER BUNTING

Yes, thank you, yes.

THE COURT: JUDGE BORTHWICK

We're good with math.

20

THE COURT: COMMISSIONER EDMONDS

Q. So, could I just understand the residual flow column, is that below the point of take?

A. Yes in most cases, yes.

25 Q. Yes. So the ones that have minimum flows, how have you accounted for the minimum flow?

A. There are some things that I had to jettison in order to make this table only as ghastly as it is.

Q. Right, sure.

30 A. And one of those was the minimum flow, so, for example, I can't remember if Trustpower is seeking to be held to a minimum flow or not, I suspect not, whereas others may be. On the question about where the

residual flow is measured, in some select cases, a residual flow might be measured for a catchment. For example, in the Kyeburn, which I believe is one of –

Q. It's on page 49 is the first one in the table.

5 A. Is it? So –

Q. I think half way down?

A. In the Kyeburn there is a residual flow at the bottom of the catchment, but that -

Q. Right, so that's the 200 that you've got there, is that right?

10 A. Yes and there is a section on notes where I've attached notes and indicated those cases. It's just very difficult to get a huge amount of information into something that's legible.

Q. Sure, sure, no I'm just trying to understand what you do have in here.

THE COURT: JUDGE BORTHWICK

15 Sorry, where's the Kyeburn, is that – what's the –

THE COURT: COMMISSIONER EDMONDS

Well it's just halfway down, yes on the -

20 **THE COURT: JUDGE BORTHWICK**

Halfway on the same page or are the –

THE COURT: COMMISSIONER EDMONDS

Which is on the first page of the table.

25

THE COURT: JUDGE BORTHWICK

It's on the first page, Kyeburn.

THE COURT: COMMISSIONER EDMONDS

30 So that's page 49.

THE COURT: JUDGE BORTHWICK

Q. And ...

THE COURT: COMMISSIONER BUNTING

Q. Excuse me, what is meant by Alternative MALF?

A. One of the big issues that we have or that Fish and Game has, I should say, I shouldn't speak on behalf of other parties. One of the issues that
 5 Fish and Game has is that there's often a lot of hydrological uncertainty, especially in the smaller tributaries, and we spend a lot of time working in smaller tributaries, a lot of these takes have been taking for a very long time and not had a whole heap of oversight, not had a whole lot of interest in them and so there's generally not a great deal of information, often
 10 people haven't gone in and put say five years' worth of a flow recorder in, so we don't have observed naturalised mouth data. In other cases where people have put in flow recorders it might be impacted by a take up stream and so we have to find alternative ways to try and get basic information and one of those things that we can do is use a modelled
 15 mouth. There -

THE COURT: JUDGE BORTHWICK

Q. A what (inaudible 10:34:48)?

A. A modelled mouth.

Q. A modelled, okay.

A. Yes, so there's smart people out there who can estimate a mouth and there's a very helpful NIWA more, national level model which I think
 20 Mr Henderson ran through in his evidence, that can provide relatively accurate estimates, so in some of these cases, in these cases where there's an alternative MALF some of the cases I've listed them where two
 25 hydrologists have come to a separate mouth outcomes. For some cases there's been disagreement about using the naturalised mouth or the observed mouth and in other cases there simply a modelled mouth has been used against an individual's estimate of mouth. It's one of the complexities of dealing with these deemed permits. We just have a very
 30 sparse amount of information.

Q. And so with that in mind, alternate mouth which is a modelled mouth, on the page that you're looking at with Kyeburn, there's very little by way of

alternate mouths but there is – one is provided for, the Kinny Take at the top of the page.

A. Yes.

5 Q. And so have you looked at – have you calculated – have you done your calculations using both the naturalised mouth and the alternate mouth or just for the naturalised mouth?

A. I have only listed naturalised mouth for this one. I've designated – in the table I've designated the spaces where I've used a modelled mouth as that mouth figure being underlined so you can see...

10 Q. Oh okay so like you've done it for Lone Star, that mouth creek?

A. Yes. And that creek, 21 is the alternative mouth that I've listed which is the modelled mouth and then 11 is a mouth that's been provided, I would say by the applicant.

15 Q. And so your answer in the right-hand column is the calculation for Loom Star is 382% as an allocation against a modelled mouth in that case?

A. From that creek, I've always used the primary mouth figure for that calculation so it's against the 11 litres a second which is...

Q. Okay, so you've never used the modelled mouth?

A. Never used the alternative mouth.

20 Q. So why did you underline it?

A. So I could understand which mouth figures are modelled and which mouth figures result from an estimate or observation from a person, so if you look for example at Annetts Creek, the very first entry for Kinny, there's two mouth estimates, neither of which are modelled from Shiney, so that's two hydrologists have provided alternative, most likely two hydrologists have provided alternative mouth estimates and you can see that they're quite different which makes it incredibly difficult as an applicant to try and work out what's going on.

25 Q. Okay, all right. Okay so just returning to your summary page which is page 48. It's un-numbered. The second box, what are you doing there? So it's a comparison of primary allocation stats, the small streams. You've got a summary of the application, that's 522% of naturalised mouth presumably?

30 A. Yes.

Q. Yes. And streams and mouth is greater than, okay, so where the mouth is greater than 25 litres per second, so you've carved out streams of the flow greater than 25 litres per second to examine what's actually happening there on average?

5 A. The intention was streams that are less than 25 litres a second.

Q. Oh less, I'm so sorry. I'm not that challenged. All right, less. Okay, so very small streams indeed. Okay.

A. And what this table – I feel quite effectively shows, is that the allocations on those smaller streams are generally larger than if we look at the total and the residuals left over are generally much smaller.

10

Q. Okay. I think I understand that.

CROSS-EXAMINATION: MR MAW

Q. Good morning.

A. Morning.

15 1040

Q. Now I too was going to do some mathematics and we will get to the mathematics shortly but before we do you made an addition to table – figure one at your paragraph 83 and you inserted some words in relation to the right-hand column based on Dr Hay's thresholds and PC7 timeframes. Are you able to just explain what you mean by the Plan Change 7 timeframes in the context of this table? I didn't quite follow?

20

A. Ah, yes, apologies. So if we look at the very last row which on the left-hand bottom boxes is labelled turn sought in brackets and years and you can see I've provided a mean and a medium so those are the mean and medium terms requested across the applications that I have summarised and I've listed in the box to it's right, I've listed two additional figures. One is a controlled pathway figure and the other one is a non-complying pathway figure. I suppose that's quite lazy writing on my part. I apologise. These refer to the two terms that were available I guess, maximum terms that were available in the notified wording of Plan Change 7, one being six years and the other one being a maximum of 15 years.

25

30

Q. So you've retrofitted the Plan Change 7 timeframes for the notified version against the data set, set out in your appendix D?

A. Yes.

Q. I understand so it's a hypothetical in that regard?

5 A. Yes.

Q. Very good. Onto the mathematics then. If I can take you to your paragraph 102.

A. Yes.

10 Q. I had in mind a similar exercise but this time in the context of the Manuherikia River and seeking to gain an understanding of what's currently happening in terms of the existing allocation compared to what the allocation and the minimum flow might look like if the Dr Hays' thresholds were to be applied. So when I read your paragraph 102 the first flow statistic there is the naturalised mouth assumed to be four
15 cumeecs?

A. Yes.

Q. Now in terms of the Manuherikia River do you know where that mouth's statistic relates to?

A. It's measured at Camp Ground from what I understand.

20 Q. And in terms of the current situation, do you have an understanding as to what the current minimum flow being observed at Camp Ground is?

A. There's voluntary minimum flow which is not listed in the water plan of 900 litres a second.

25 Q. And then when we look at the other flow statistics here you note that the paper allocation in the Manuherikia is 32 cumeecs?

A. Yes.

Q. And an estimate of actual use of 16 cumeecs?

30 A. Yes. And I can say as of two days ago, that 16-cumec figure has been updated because the ORC has released its consultation document called Manuherikia Key Choices and I think that the figure would now be updated to eight cumeecs.

THE COURT:

Q. Eight?

A. Eight.

Q. The actual use is eight not 16?

A. Not 16 and that's measured in a similar way to one of the methodologies. It's a summation of all of the maximum allocation or inter-streams rate of take that have been used across the country in a typical season.

5

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Okay, well we'll use eight as the most up to date estimate of actual use for the purposes of the mathematics. Fortunately, we're dealing in fours which hopefully will help but we will see. So looking at the naturized mouth and thinking about the thresholds recommended by Dr Hays are we at this point to look at, in relation to the minimum flow, the percentage relating to streams with a flow of less than five cumecs?

10

A. I believe we are and that's a mean flow of less than five cumecs and I think the Manuherikia falls into that category.

15

Q. So assuming that to be the case, the percentage of mouth recommended for a minimum flow by Dr Hays is 90% of the mouth?

A. I'm sorry Mr Maw I'm just thinking through this and I think I may have steered you in the wrong direction. I think we are perhaps looking at the second column extraction from a surface body with mean flow greater than five cumecs. I think the mean flow may be somewhere around 12 or something like that.

20

THE COURT:

Q. You've got to tell me where you're looking at for your digits so when you say "we think we're looking at surface obstructions greater than five cumecs", which page are you looking at?

25

A. Oh you're right. I'm sorry, I pulled up – while Mr Maw was talking I pulled up the document that you would have received this morning which is Mr – the changes that Mr Farrell has made to the draft amendments as at May 6 and I've turned to page 4. Yes, where it's got table 10A(2)(4).

30

Q. Okay.

A. Sorry about that.

Q. And so take it really slowly. Which column are you looking at?

A. So third column from the left is what I'm suggesting the Manuherikia would fall into which is obstruction from surface water body with a mean flow greater than five cumecs per second.

Q. Greater than five cumecs per second?

5 A. That's right.

Q. Why are we looking at that table? Isn't it less than? So I thought at that – yeah, Manuherikia – what is the naturalised flow? Assumed to be four cubic metres per second, yeah?

A. Yes. So that's a mean annual low flow.

10 Q. Mean annual low flow.

A. And Dr Hays' recommendations separate based on medium flow which will be higher.

MS BAKER-GALLOWAY TO THE COURT: JUDGE BORTHWICK

15 Q. Would it help if Mr Paragreen explained the difference between a mean flow and a mean annual low flow?

A. Oh yes, he will need to. Yes.

Q. And why it's a distinguishing thing?

A. Okay.

THE COURT:

20 Q. Okay, so what's the first definition? So there's a mean flow and the second definition was going to be the mean annual flow?

A. Yes.

Q. Is that right? Okay, so your first definition from mean flow is what?

A. So the mean flow is the average flow that you find the river at, I imagine.

25 I'll have to – excuse me, I'm appearing as a lay witness and I'm certainly not a hydrologist but my understanding is that is the average flow in the river.

Q. It's an average flow in the river and the mean annual flow or mean annual low flow?

30 A. Mean annual low flow.

Q. Low flow. And your definition is?

A. The same as we covered earlier Ma'am the...

Q. So just give me it again.

A. It is the – if we talked about the seven-day mean annual low flow, the seven lowest consecutive days of flow across the year, averaged across the entire dataset.

5 Q. So a seven-day lowest – I'm writing it down so you have to go a bit slower. Seven-day...

A. The seven consecutive days of the lowest flow across the year and then...

Q. And you can average that across your dataset?

A. Yes.

10 Q. And so this table, the column that you want us to deal with, which is the top column, third from the left, is a body with a mean flow, so it's not dealing with mouth at all but a mean flow or the average flow in the river, okay. But your evidence is dealing with naturalised mouth?

A. Yes.

15 Q. Yes. So okay. And so is your understanding that Manuherikia mean flow is greater than five cumecs is that what you say?

A. That is my understanding, yes.

THE COURT: JUDGE BORTHWICK TO MR MAW:

Q. You there?

20 A. No, no, I'm in the right box on the table I think.

Q. Okay, well I am now.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So when we think about the Manuherikia River, a mean flow greater than five cumecs, if we were to then apply the Dr Hays' table the minimum flow would be no less than 80% of the seven-day mouth so the seven-day mouth as I understand it is the four cumecs recorded at paragraph 102 of your evidence?

25

A. Yes.

Q. And if then we were to calculate 80% of that figure we would get to 3,200 litres per second?

30

A. Yes I think so.

Q. So that would be the minimum flow applying the Dr Hays' thresholds for ecological health?

A. Yes.

5 Q. And then to put that into context with the voluntary minimum flow at present of 900 litres per second that's showing the difference between the current voluntary flow and that which Dr Hays would recommend in terms of an ecological flow?

A. Yes, quite a substantial difference.

1050

10 Q. So that's dealing with the minimum flow component. I want to deal next with the allocation so to get an understanding of the current actual allocation compared to what the outcome of the Dr Hays' table would look like, so when I read your paragraph 102, you say that now the actual use is eight cumecs?

15 A. Mhm.

Q. So when we go back to the table and we look to see how much allocation should be made in terms of ecological values we would stay in the third column from the left, so the same abstraction from surface water body with mean of greater than five cumecs and we would go down to the allocation rate which is the bottom row in the table?

20

A. Yes.

Q. And there we see that the flow allocations of no more than 30% of seven-day mouth?

A. Yes.

25 Q. So to calculate the size of the allocation block that would be 30% of 4,000?

A. Which straight away to do on the top of my head, is that 1.2 cumecs?

Q. Yes, four threes. 1.2.

THE COURT:

30 Q. 30% of 4,000 is actually four cumecs isn't it?

A. Yep.

Q. Did you come up with a number off the top of your head?

A. Yes. I think we came up with 1.2 cumecs or 1,200 litres but I don't have a calculator with me.

Q. Oh okay.

A. I can open my computer to start that up?

5 Q. Yes. It's good to get it right. Okay so it's only me who can't do the math off the top of my head. I'd say everyone else is fine. So you might as well verify it.

A. So 4,000 times 0.3 is 1200 litres per second yes.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. So when we think about the difference between the application of the Dr Hays' thresholds and we think about the current degree of allocation which is now estimated to be 8 cumecs or 8,000 litres per second there's a significant difference between those two figures?

A. Yes there is.

15 Q. Thank you. Those are my questions.

RE-EXAMINATION: ALL PARTIES – NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. I was just wanting to understand your evidence in relation to dams which is at the very end of your evidence so it shouldn't be hard to find.

20 A. Yes.

Q. So you've got two outcomes that you see so perhaps you could just elaborate on the first one, your A.

A. Yes, so if there were, say there were a carve out for dams and they would be considering long-term applications prior to the notification of – or prior to the land and water plan being operational, there is a risk that we may not get outcomes that are consistent with the land and water plan and I'm particularly thinking about guidance which is relevant to areas in the national policy statement such as overallocation and it's intrinsically, and I know you'd like to separate them and it is intrinsically linked with the second point B. Dams are a critical part in at least my mind of the tools that we have to address overallocation. They can be a thing that both

25

30

helps overallocation in some cases, say by moving to a reliance on stored water rather than a low-flow water in the run of river water or you could use a dam to impound more water and expand the area under irrigation and I would argue that that would mean that it is more likely that the catchment would have overallocation rather than less likely in that situation so they can be beneficial. They can be negative environmentally.

5

Q. So you've got a concern that there isn't any regional guidance in terms of the water plan at the moment?

10

A. There will be regional guidance in the water plan. I'm concerned that it doesn't – that that guidance doesn't give effect to the national policy statement 2020. It doesn't include key concepts such as phasing out overallocation or what manoto rawai means in the local context and how we implement that and I'm concerned that because dams have such a close link to water allocation in catchments and overallocation in catchments I'm concerned that if one were to go before the other or if they weren't joined together we'd miss an opportunity for integrated management in the catchment.

15

Q. Right, so what you're saying is such regional guidance as there is in the current water plan, doesn't do what it might need to do under the MPS freshwater.

20

A. Yes, that's the succinct way of putting it, thank you.

Q. And we have had plainly evidence about the national policy statement on renewables and the fact that there's no guidance in the regional plan in relation to that matter.

25

A. Yes I have heard other planning witnesses talk on that topic.

Q. Yes. And there is the suggestion that when you're thinking about dams and applications for dams then you might need to be going up the tree to the MPS on renewables as well as presumably thinking about the National Policy Statement freshwater of the land and water regional plan to come, but still needing to be thinking about that ahead of time?

30

A. Yes, it sounds incredibly complicated. I must admit I'm not as up to speed on the MPS-REG as I am on the MPS-FM and I understand there are, at

least a significant degree of new ones amongst the planners' discussion on the topic.

1100

Q. So I might be better to ask Mr Farrell about that when he comes along.

5 A. I think so, yes.

Q. Okay, thank you. And so there's quite a bit in your evidence about the resourcing implications of these processes and we've heard that from other parties and as well and so on that resourcing front then, the controlled and the restricted discretionary applications, what level of resourcing might you need for that presumed (inaudible 11:01:25) I think non-notifications are part of those, you wouldn't need any resourcing to deal with those?

10

A. Mmm. Plan Change 7 is beneficial in that sense for us. Fish & Game has been struggling to resource properly the deemed permit process to date and that's left us unable to speak out and represent licence holders in a way that we would like to. With Plan Change 7 because of the non-notification and because we're relatively happy with where the controlled activity pathway is going, it means that we can focus our resources on the Land and Water Plan with the hope of getting positive outcomes there for our licence holders and for the environment and I would hope that flows through, so that when six years comes up and these permits come up again, if that is the term that's granted on those consents, I'd hope that the Land and Water Plan is sufficient so that we can deal with it without an additional significant resource burden.

15

20

25 Q. So presumably you'd still be keeping an eye on any non-complying activity applications?

A. I guess we'd have to –

Q. – of, that (inaudible 11:02:47) yes and –

A. One of, sorry, I don't mean to interrupt.

30

Q. Sorry, no that's fine, so go on? You were responding to my question?

A. One of the things, one of the points that I note in my evidence is that when the – effect is when the hydrological alteration is quite small or when the term is quite small, we have more confidence allocating less resources to it and it's a quicker simpler process for us. When the – as an effected

party I mean, providing effective party approval. When the hydrological alteration proposed is significant and the term is not significant, we really do feel the need to investigate thoroughly and interrogate the information and that takes – because the adverse effects could be quite large and that takes a lot of resources and creates a lot of complexity, so if there was a non-complying consent, and the term that was applied say was six years because the policy that’s proposed by Mr de Pelsemaker is quite directive, then I’d be more comfortable looking at that, or we’d be more comfortable with that, with that approach and I imagine it would take less resources to deal with.

Q. Thank you.

QUESTIONS FROM THE COURT – COMMISSIONER BUNTING – NIL

QUESTIONS FROM THE COURT – NIL- JUDGE BORTHWICK

QUESTIONS ARISING – NIL

15 THE COURT: JUDGE BORTHWICK

Q. Thank you very much for your evidence and I’m right on top of that now and I actually do appreciate the amount of work that’s gone into those tables as well, so that was really helpful, thanks.

A. Thank you.

20

MR MAW:

The next witness Mr Cole for Fish & Game, I can indicate I don’t have any questions for Mr Cole.

THE COURT: JUDGE BORTHWICK

25 I don’t have any questions.

THE COURT: COMMISSIONER EDMONDS

So no I don’t either.

THE COURT: JUDGE BORTHWICK TO COMMISSIONER BUNTING?

Q. Do you have any questions?

A. Just a moment – no I don't, thank you.

5 **THE COURT: COMMISSIONER EDMONDS**

We read it last night.

THE COURT: JUDGE BORTHWICK

So that's a clean sweep.

10 **MS BAKER-GALLOWAY:**

Clean sweep. Do we need to swear him in still or just in by consent?

THE COURT: JUDGE BORTHWICK

Well how about – I guess we could admit that by consent and for the Court to place whatever weight it sees fit on the evidence, is that how you want to do it or you can swear him in, I don't mind, but you might, I can think of one or two other witnesses where we didn't have questions, but they felt important to get across their (inaudible 11:05:10) summary, so I'm really in your hands.

20 **MS BAKER-GALLOWAY:**

I'd actually like his summary to be read into the record, so perhaps –

THE COURT: JUDGE BORTHWICK

Okay, we'll still take a cup of tea and then we'll come back to you.

COURT ADJOURNS: 11.05 AM

25

30

COURT RESUMES: 11.25 AM

MS BAKER-GALLOWAY CALLS

IAN BRUCE COLE (SWORN)

5 Q. Do you confirm that your full name is Ian Bruce Cole?

A. That's correct.

Q. And you've prepared a brief of evidence dated 5 February 2021 for the purpose of this hearing?

A. That's correct.

10 Q. And do you confirm where your statements of fact, those statements are true and correct to the best of your knowledge and belief?

A. They are.

Q. And if you could please read your summary on page 3.

15 **WITNESS READS STATEMENT**

My experience as a recreational angler and angling guide includes 30 years angling in New Zealand. Mostly in the south and south of the south island, covering Central Otago rivers and lakes. While the Central Otago waters offer a range of quality angling experiences, many rivers and streams are seriously impacted by water takes for irrigation, leaving dry or depleted river reaches in summer as well as in river barriers to fish movement. As Mr Paragreen's evidence outlines, this is a historical legacy from the goldrush era which will be addressed by upcoming water policy changes once an upgraded water plan for Otago is in place. As I understand it, plan change 7 is required because a 30-year lead time for the phase out of mining privileges runs out this year but many consent applications for replacement RMA consents have still to be processed. PC7 allows existing water takes to continue for a short period until a new planning framework is in place and resource assessment work has been done. In Central Otago the seasonal variation in river and stream flows is worsened by the very high levels of water allocated for irrigation and the lack of minimum and residual flows to protect rivers during summer are creating a range of environmental problems including very low flows and a complete loss of flow resulting in dry river beds, excessive weed growth flatlining or depressed flows for long periods and a loss of natural flow variability. Placements in

(inaudible 11:27:18) and weirs across rivers to take water create barriers to fish movement and entrap fish into irrigation raceways while channelisation and gravel extraction degrade natural habitat features of river and streams. River and streams are highly valued recreational resources and the adverse impact of historic mining privileges needs to be addressed within an environmentally sound planning framework and with good quality resource information and support. Plan change 7, short-term consent option including improvement proposed by Fish & Game allows irrigation to continue without pre-empting long-term water planning.

10 **EXAMINATION CONTINUES: MS BAKER-GALLOWAY**

Q. Thank you Mr Cole I don't think there are any questions.

A. Any questions. Okay.

THE COURT: JUDGE BORTHWICK TO I COLE

Q. How did you just finish that off then?

15 A. Just with the last, point 20 Ma'am. Yes. Just over the page.

Q. Sorry, so you've gone over to point, no you haven't, I wonder if mine is different from yours. My last paragraph is paragraph 19 in your executive summary.

A. Okay well I do apologise – mine, unless I printed out an old one but the...

20 Q. So I finish off, "PC7 allows irrigation to continue" and it finishes, this single sentence and it finishes with the words, "occurs within a reasonable timeframe".

A. Okay well my apologies then maybe I've..

25 Q. It doesn't matter if that's your summary, that's as good as gold. No, it's all right it was more or less the same but just a little different at the end. Okay anyway the copy we've got is dated the 5th of February, so that's the copy we'll work to and we've taken a note that there may be some slight differences from the 2nd.

30 **THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY**

A. I'll follow that up. I've got the same paragraph, you've got.

THE COURT: JUDGE BORTHWICK

You all right with that? You haven't got any questions arising?

CROSS-EXAMINATION: MR MAW – NIL

5 WITNESS EXCUSED

MS BAKER-GALLOWAY CALLS**BEN FARRELL (SWORN)**

Q. Do you confirm your full name is Ben Farrell?

5 A. It is.

Q. And you've prepared three briefs of evidence for the purpose of this hearing, one dated 5 February 2021, a supplementary brief dated 23 March 2021 and supplementary evidence dated 18 May 2021?

A. I have.

10 Q. Appended to the 18 May 2021 supplementary are your marked up additions to the expert conferencing statement on Schedule 10A.4 Controlled Activity and Restricted Activity Rules and Objective 10A1.1, 4-6 May 2021?

A. Yes.

15 Q. And do you confirm that where you make statements of fact those statements are true and correct to the best of your knowledge and belief?

A. Yes.

Q. And where you express your opinion, you hold that opinion based on your experience and expertise?

20 A. I do.

MS BAKER-GALLOWAY TO THE COURT: JUDGE BORTHWICK

Q. And Ma'am I was going to ask if it would be helpful to enter the attachment I handed up this morning as an exhibit?

25 A. It would –

Q. Produced by Mr Farrell?

A. And so this represents the relief that Mr Farrell now supports, so it's moved on from the 23rd of March document?

Q. Yes.

30 A. Okay.

THE COURT: JUDGE BORTHWICK

Q. So if I could have you produce – so you're from an area with the document entitled "Proposed Plan Change 7 Draft Amendments" as of 6 May 2021 together with the yellow annotations shown?

5 A. Yes.

Q. And so I'll just get you to produce that as exhibit Fish & Game, I think it's probably 1 isn't it?

MS BAKER-GALLOWAY:

10 Yes I think it is Ma'am.

THE COURT: JUDGE BORTHWICK

Q. Exhibit Fish & Game 1.

CLARIFIED EXHIBIT 2

15 **THE COURT: JUDGE BORTHWICK**

Exhibit Fish & Game 2.

**EXHIBIT FISH & GAME 2 PRODUCED – ATTACHMENT TO JWS EXPERT
CONFERENCING 4 – 6 MAY 2021 AS ANNOTATED BY BEN FARRELL**

20 **EXAMINATION CONTINUES: MS BAKER-GALLOWAY**

Q. Could you please answer any questions?

CROSS-EXAMINATION: MR MAW

Q. Good Morning.

A. Good Morning.

25 Q. I'd like to start with your supplementary evidence dated 23 March and in particular paragraph 10A(i) and in this paragraph you are providing some evidence in relation to the NPS REG and the NPS FM and at the beginning of your paragraph you note that you had some involvement in helping to prepare the NPS REG. What was your involvement in relation
30 to the preparation of the NPS REG?

- A. In 2010 to the period prior to the NPS being gazetted in 2011, I was engaged by the New Zealand Wind Energy Association as a Planning and Policy expert to work with I guess or as a technical advisor working with Government and state (inaudible 11:34:21) representatives. I guess I'm back room drafting of draft versions of the NPS REG so I was participating in a evolution of that document and providing my feedback. I'd also probably add that I was a member of the, technical member of the group that produced the – developed the implementation guide for the NPS.
- 5
- 10 Q. Casting your mind back to that period of time, what was your understanding in relation to whether the allocation and prioritisation of freshwater resources was a matter to be addressed either through the NPS REG or other guidance, national guidance?
- A. I have always understood that the intention of the NPS REG was not to cover off allocation and prioritisation as stated in the preamble because that would be dealt with under the direction of the NPS for fresh water which going back a decade, came out a month after the NPS for renewables. So the two have been developed at the same time.
- 15
- Q. When you think about allocation and prioritisation of fresh water resources, do you agree that long term durations for individual activities might have the effect of allocating and prioritising fresh water resources?
- 20
- A. Yes.
- Q. I want to ask you some questions now about the marked up provisions which have just been produced as exhibit 2. Starting on page iv there's some highlighted yellow text. Now just, I think I've understood the purpose behind this additional text, but that's the flag for the rule relating to non-complying activities for new uses of water?
- 25
- A. Yes.
- Q. When you think about the structure of the RW – of the Regional Plan for Water, is it your view that it would be clear to users of the document that consent activity classification was being changed for those uses through use of this text?
- 30
- A. No.

Q. I want to move on now to the policy that has been recommended as the hook for the ecological flows table, so this is your recommended policy, 10A.2.4? Now looking at the wording of that policy there, the end of the first line, “Recognise that proposals which in combination with other water permits breached the minimum flow and allocation thresholds in Table 10A.2.4”, just from a pure drafting perspective, would it be more accurate to refer to the table as the presumptive minimum flow and allocation thresholds?

A. Yes.

10 **THE COURT: JUDGE BORTHWICK**

Q. So the edit being, “breached the presumptive minimum flow and allocation thresholds”? Is that what you’re saying or is that how – is that a change to the text that you’re suggesting?

A. Happy to change the text to what I’m suggesting to as quoted.

15 Q. “Breached the presumptive minimum flow and allocation thresholds”, is –

A. In Table 10A.2.4?

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Is that where you were going?

A. Yes.

20 Q. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. And that then lines up with the heading on the table over the page and encapsulates that those are presumptive thresholds? Do you agree with that?

25 A. Yes.

Q. Now looking at the policy and its intent, when you think about the table relating to ecological flows, were you in Court when I asked some questions of Dr Hayes?

A. Yes.

30 Q. And throughout those questions, Dr Hayes recognised that those thresholds didn’t respond to cultural values?

A. Correct.

Q. And nor did they respond to amenity values?

A. Correct.

Q. Or recreational values?

5 A. Correct.

Q. And so the ecological values in the table are a subset of the full set of values that will need to be considered when assessing applications?

A. Yes.

1140

10 Q. With that in mind, when you think about this policy, is there a risk that when it is applied the focus will be exclusively on ecological assessments and the thresholds in the table when determining whether effects are no more than minor?

A. Yes. In the absence of any other policy direction relating to those other matters which is currently absent from the draft.

15 Q. And so if we play that through that potential risk may result in long-term permits that might meet the thresholds in the table being granted in the absence of consideration of cultural amenity and recreational effects?

A. I'm not sure about that.

20 Q. There's a risk though given that those other values are not specifically referred to in this policy that those are not seen as important values when determining whether effects are more than minor?

A. There's a risk, yes.

25 Q. Now just thinking about this policy and its application it will inform the decision on notification, that's the first part of the intention with reference to section 95A(8)(b)?

A. Yes.

Q. And it will also inform consideration of whether an application gets through the gateway in terms of 104D(1)(a)?

30 A. Yes. If the table's applied. I'll just add that the second part of the policy allows comprehensive detailed ecological assessment to be provided by an applicant or those decision makers at those decision-making stages.

Q. When you then think about an application having made its way through then that gateway, this policy then would have no ongoing effect?

A. Correct.

Q. And so when you think about the outcomes that this policy is seeking to achieve, and you think about the objective, is there's a link between the objective as you are now recommending and what this policy is seeking to achieve?

5

A. There is a link. There's a link to the part of the first priority and the objective of the MPS for freshwater being ecosystem health.

Q. So take me back to the objective and its objective version B that you are recommending and my question is where within this objective is your proposed policy grounded?

10

A. It's an aspect of the term. While the bottom line as I've sort of called it in my supplementary evidence, the bottom line of not compromising the ability of a new water and land plan to give effect to the MPS-FM 2020.

Q. So in a sense it's a subset of the requirements in that regard?

15

A. Yes.

Q. And again do you accept that there is a risk that the ecological assessment and the way that the policy is only focussing on the ecological assessment may result in those other values not being appropriately considered?

20

A. Yes it's a risk in the absence of no other policy direction in this sort of drafting for those other matters.

Q. I want to turn over now to the table with the presumptive minimum flow and allocation thresholds and I want to ask you about the text in the box on the bottom right-hand side, so just for the record, this box appears in a column headed *Abstraction from Permanently Flowing Reaches of Intermittent Streams*. And I'm going to be asking you about the allocation rate row in the table for streams not containing threatened indigenous species or significant salmon that are spawning and juvenile rearing habitat.

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30 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. So the allocation rate for what? Are you looking at table 10A(2.4) correct?

A. Yes.

Q. And I've got the third row down: "Allocation rate".

A. Right-hand side.

Q. "Flow locations of no more than 25%". Or?

A. It's the "or" so flow and allocation rate exceeding 20% for the instantaneous flow at point of take if mouth estimates cannot be made.

5 Q. Oh okay, sorry. I thought you said something about creatures. All right. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Now when you think about that text that's going to then be a variable allocation rate dependent on flow in a stream?

10 A. Yes.

Q. And when you think about how water is abstracted from a surface water resource, do you accept it might present some practical difficulties to structure an intake structure in such a way that has a variable intake rate dependent on a proportion of the flow in a stream at any given point in time?

15

A. I don't feel I'm in a position to answer that, I'm sorry. As I've alluded to or clearly stated in my evidence-in-chief I have relied on the expert ecologists and hydrologists in the practicality of these standards.

Q. In your experience as a planner have you ever seen an allocation rate based on a percentage of instantaneous flow?

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A. No.

Q. Thank you. Those are my questions.

RE-EXAMINATION: MS BAKER-GALLOWAY – NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

25 Q. Good morning there.

A. Good morning Commissioner.

1150

Q. I just wanted to follow up on some of the evidence that you were given about the MPS for renewables and there's a suggestion that the water plan doesn't necessarily contain any particularly directive provisions that you might think about but then we were pointed at the RPS in terms of

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going up the tree. You did look at this a little in your evidence didn't you in your evidence I think?

5 A. I have, so in respect of the MPS for renewables, my starting position was effectively agreeing with and adopting Mr de Pelsemaecker's position and review of the RPS provisions. I observed through cross-examination you know, the criticism through Trustpower's counsel of that analysis so through my supplementary I took another look and thought about the implication of the MPS a bit further. Where I landed was that there should be no need to go up to the MPS for renewables. Aside from any relevance

10 discussions on allocation and prioritisation of water being relevant, the recently adopted RPS gives effect to the renewables MPS and to that extent I don't think there was a need to go above the RPS.

Q. Okay.

15 A. And then turning to the RPS that's where I understand through some of the examination coming out of Mr Maw, that there's now some uncertainty as to the extent that the infrastructure provisions in the RPS actually apply to allocation prioritisation of water. And I haven't seen a clear position and I don't have a clear position on that. What I would say in terms of the RPS provisions is that assuming they are relevant, I don't see them going

20 much further than to provide for development. There is reference to protection of significant infrastructure but if that protection is intended by the other planners you're referring to in terms of the evidence as being allocation of water to protect the investment, then I don't think the RPS intended to mean or to apply to water.

25 **THE COURT:**

Q. It would be good if you actually took us to the provision if you set it out in your evidence or just that we have that provision in front of us when you're saying that?

A. Yes.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

Q. Also if it isn't set out in your evidence we can go to the RPS. So it would be better if we had the RPS in front of us maybe?

5 THE COURT:

Q. Have you got volume 2 in front of you? We can provide you that?

A. I don't but I have got the RPS in front of me.

Q. And you might have been thinking policy 4.4.3 on page 64 of the RPS.

WITNESS REFERRED TO RPS, PAGE 64, POLICY 4.4.3

10 A. In terms of existing renewable electricity generation yes.

Q. And so what was the interpretation thing, because it's an interpretation matter I think your last response was, you know, if protection, and I think 4.4.3 from memory was the only thing that contained the word *protection*.

15 I might be wrong, in terms of the RPS provisions for significant infrastructure, but if that's what you're thinking about, 4.4 and 4.3, the protection there, I noted that you didn't think was intended to cover allocation of water so that's an interpretation you made and if you could explain why you come to that view?

20 A. No, I'm going to withdraw I think what I said because there is actually clear reference to recognising functional needs including resource needs.

Q. So whereabouts are you looking now?

A. 4.43A.

Q. Yes, recognising the functional needs including resourcing needs.

25 A. Yes. Where I'm unclear is coming from, I guess, the position or the legal arguments or examination that Mr Maw put up that the infrastructure does not include the water but looking at policy 443A and functional needs I would agree with any evidence if you've seen it that suggests that hydro needs water.

Q. And is that in order to protect the generation output of existing...

30 A. Of existing, yes. I guess just to round off and just to summarise where I got to with the RPS limiting the duration of a consent of a controlled activity pathway for six years I think is sufficient to provide for hydro, be it

existing or new and also to protect the generation output of that infrastructure in an interim period.

Q. Gosh, the feedback on that mic system. Oh just getting a bit of feedback on the mic.

5 QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

Q. So you were just answering the question about limiting the duration to six years in terms of this policy. I just got a little distracted. Could you just repeat your answer?

10 A. I guess so I'm now saying that the RPS does seek to provide for renewal development and to seek to protect existing resources and in this case including the resource, the functional need.

Q. Right. That's under A in here?

A. Correct.

15 Q. Yes.

A. And I think Plan Change 7 through enabling the status quo to be maintained for a duration of six years under a controlled activity regime is as interim period achieves both the provision for the infrastructure and protection of the functional need of existing infrastructure.

20 1200

Q. So you can't foresee a situation where there may be an argument advanced that the point you're just making in respect of the water plan and the interim period doesn't adequately address the MPS for renewables and try and take it up a level and perhaps even up to part two?

25

A. Well I think that's where the MPS of freshwater comes in and the conflict between the two national policies and my understanding that the MPS for freshwater is the primary instrument to direct how water's to be allocated and prioritised. The reality as I see it in this case irrespective of whether it's the hydro argument or even the TA's drinking water argument, that I think you should be really alert to is the – while it's an assumption is the real world action that we can anticipate and that is the land and water plan being developed and notified in the next few years. And that's where

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I see the efforts around integrated management land use and water, that's where the requirements of all of the NPSs relating to water use and land use that relies or affects water should be had through you know, a Te Mana o te Wai in an off lens. So, going back to your question
5 Commissioner, I'm not – I do not agree there is material risk in this planning framework if it ignores the directions in RPS for renewables, in terms of the operative framework. I think there is wide agreement the operative framework is unacceptable and doesn't give effect to the high order instruments. I'd go on to say, if plan change 7 is amended to allow
10 or to intentionally make provision for some activities to have long-term durations, that will frustrate the ability to implement the MPS freshwater in an integrated and (inaudible 12:01:49) manner, in my opinion.

Q. Is one way of looking at the operative MPS, as of that date, that those provisions became operative, that the two MPSs, so one way of looking
15 at RPS, sorry as of the date that it became operative was that the two MPSs as they existed at that time, or as they were considered by the decision-makers were brought to account through the policy suite that includes for – the policy suite for renewable electricity generation that includes policy 4.4 and 4.3.

20 A. Yes.

Q. And what has changed since this becoming operative, is that we now have a new MPS for freshwater management.

A. I don't think it's that we have new MPS for freshwater management because as I have said in my evidence, the concept of Te Mana o te Wai
25 for example has been around almost a decade, well since 2014. What has changed is the – I guess the scrutiny of the adequacy of the RPS and the acknowledgment that it does not give effect to the MPS for freshwater or...

Q. You mean the 2020 version?

30 A. The 2017 version's my understanding from the Skelton directions.

Q. Oh, I see.

A. So, that's where I'm coming from so...

Q. Now I want your opinion not Professor Skelton's though. And that's why I led with the question on the RPS when it became operative or at least

the MPSs under consideration by the decision-makers for the regional policy statement, did they seek to bring into account the two MPS instruments and I thought you answered, “yes”.

A. Yes, I did.

5 Q. Things have become a lot more nuanced under the MPS for freshwater management 2020.

A. Yes.

10 Q. Yes. And you would have heard discussion in the Court that there’s a general unease across a range of activities where more enabling provisions are required and the Court doesn’t have a clear view yet as to what those activities are. So, should there be an exemption for dams of what dams? That hasn’t actually been brought to us in evidence, should there be exemptions made for hydro? Well what hydro, we know Pioneer’s got assets everywhere. Does it include that or just some of the
15 assets and so with Trust Power, one thing that we were considering and have no view on – so the parties will not to take anything out of it, is whether some carve out should be made for Trust Power deemed permits because the RPS did endeavour to bring to account the two NPS superior documents and because also of the policy signalling by central
20 government around its ambitions for renewables for us to – for New Zealand to be 100% generally, renewable energy, fully renewable by, what is it, 2030? Yes. Bringing those two matters to bear, is there a case for a longer permit?

A. Just dealing with the current hot topic –

25 Q. Which is what? There’s quite a few of them?

A. Yes your Honour. The hot topic of climate change and the need to achieve or the renewal electricity generation targets of the country, that’s been around since two – since the NPS in a statutory context. NPS for renewables. So that’s been around for a decade.

30 Q. The hot topic being the domestic target of 100% renewables or...

A. Well it was 90% back then.

THE COURT: COMMISSIONER EDMONDS

It was 90% wasn’t it back then.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

Q. Yes, so now we're 100%?

A. Now we're 100%. At a policy level in Otago, I think the only thing that's changed is the most operative RPS which, and I'm unsure if someone is taking you to the climate change provisions there in the past in evidence –

Q. No they haven't.

A. – but you should look at those, so that is 4.2.2.

Q. 4.2.2?

10 A. There's an objective, well objective 4.2.

Q. I suspect I'm not going to find it, oh maybe I will.

THE COURT: COMMISSIONER EDMONDS

Page 55.

15 **THE COURT: JUDGE BORTHWICK**

What page reference have you got?

THE COURT: COMMISSIONER EDMONDS

Oh it's 560 CB 560.

20 **QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

Q. Yes?

A. That does not have any specific reference to New Zealand targets but Clause C, potentially –

Q. Where are you? Clause C of what?

25 A. 4.2.2 C

Q. 4.2.2 C?

THE COURT: COMMISSIONER EDMONDS

So that's a policy.

30 **QUESTIONS FROM THE COURT CONTINUES:**

Q. That's a policy, yes?

A. Policy.

Q. Encouraging activities to assist or reduce or mitigate the effects of climate change?

A. Yes.

5 Q. Yes and –

A. So I think that's policy direction that could be used to actually, if your understanding is based on evidence that there's an urging or a pressing need or any need to –

Q. To respond to climate change?

10 A. Correct.

Q. Yes.

A. Then that policy is relevant to encouraging activities.

Q. It might also be sub policy for encouraging system resilience?

A. Yes.

15 Q. And then that's to do with a confidence that generators have to invest in upgrade and maintenance of systems?

A. Yes.

Q. Yes and that may be linked to the duration of a permit?

20 A. Yes, so sorry, that was the first part of my evidence was taking you to that policy, making sure that you're aware of that, it is relevant and I think it's probably the only key policy direction in a RMA statutory context and I'm aware of it's changed over the last 10 years. In terms of duration of consents, I, as I said earlier, I think the six year controlled activity frame work is sufficient, thinking about long term investments and long term risks and decisions, I really – I see an opportunity in the Land and Water Plan development process and I am actually surprised, for example, by Trustpower about the arguments being made that there is such a risk, and certainly I'm not convinced there is a risk that's material to their case, when I'm assuming if they're not or at least I would have thought they should be actively involved in the development of the drafting of the Land and Water Plan provisions and so the moment that's notified there could be a more effective regime for them compared to a potential consenting frame work. So just to sum up my response, I don't see the duration, the need for a duration as being significant, a long term duration for them.

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QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

Q. Well that was very helpful that you brought us back to that provision, yes. The climate change and I understand what you're saying generally in relation to – now have they made out the case I guess is, as Ms Baker-Galloway opened and I think the answer in your view is no because they can be involved in the development of the Land and Water Plan and have the opportunity to consent ...

5

A. And that's assuming there's nothing in the RPS which I have had no oversight.

10

Q. You mean the new one to come?

A. In the new one to come. So ...

Q. I was really interested in getting your thoughts about something which came up in yesterday's evidence from the OWRUG witness whose name I have entirely forgotten, but Director of Landpro?

15

A. Ms Scott.

Q. Ms Scott, that's it and she said for pragmatic and practical reasons, maybe there ought to be some staging and sequencing of catchments or sub-catchments under the Land and Water Plan and the way to achieve that would be through variable durations on these consents and we've heard similar evidence, but not as developed as perhaps Ms Scott's opinion, well maybe there should be an overshoot of six years to something like 10 years because probably two reasons, firstly the volume of consents which will come in either after six years, so huge volume of consents to come in and will need to be processed quite possibly on a whole catchment or sub-catchment basis, which is a tremendous body of work both for the rural community and together with the Regional Council and other people who are interested such as Fish & Game. So that would be the first reason. The second reason is this, is that there will be significant cost to everybody who's filed an application for resource consent to date because they've had to go under two plans, both the operative plan and Plan Change 7 and that's how this Act works, in one sense it just is as it is, but in another sense, those costs might be viewed

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as being higher than what you would have anticipated because of the information demand in the notified Plan Change 7 and it was taking, particularly the primary sector in the direction of having to, well it wasn't encouraging primary sector to go down a controlled activity pathway because it didn't look any different from either fully discretionary or was restricted discretionary under the operative plan, so there's been a huge amount of work for which now a concern that that work itself will become stranded or will be overtaken by new policy (inaudible 12:14:25) in the Land and Water Plan and so an anxiety for that not to happen again, which is very understandable and an anxiety if you like, that the Land and Water Plan will not be ready when the Council hopes in six years' time, but even if it is ready, I guess in six years' time, that farmers, it's not like you're going to switch on a – flick on a switch and farmers will be able to seek new consents under the Land and Water Plan, yes they will, but they must also quite likely have to think about their irrigation set up and their land setup and that of itself may require them some time to do it. Particularly depending on the interface between land and water and any controls and regional initiatives that come down in order to meet the land and water plan, farmers will, yes, there might have to be some significant investment in terms of storage or changes to irrigation conveyancing, systems, irrigations systems on the property itself as well as actually land management. So that's not going to be done just in six years' time, it will require some thought and in terms of farmers getting ready. So, that I think would be the second argument for staging the sequencing. With that in mind have you got any thoughts or any responses to that? Is it all off at six years or is staging of sequencing of catchments to allow farming community to catch up with new policy initiatives under the land water plan?

A. Firstly in terms of the resourcing, which is the first part, I understand of that matter. I haven't heard the council suggest there's a resourcing issue..

Q. On their part?

A. On their part.

Q. But there may well be a resourcing issue within the community?

- 5 A. There may be within the community. I heard Ms Scott talk about her clients and what they will do. Not sure how to take that because they don't represent everyone and there's six years to go or four years from now to think about it, to give two years' notice. But resourcing – we know is has been an issue that's been articulated in evidence. The response from the regional council is that they're aware of the issue and that's they're ramping up and it's now on or so...
- 10 Q. I don't know that my question was particularly focussed on ORC resourcing though but to be fair I think, what we've heard in this hearing and elsewhere is that there is in fact tremendous strain on those persons working within the water field. Just simply because of the demands nationally with the new NPS in any years.
- 15 A. Okay so getting to the staging and sequencing of catchments and certainly I acknowledge the evidence from particularly the farming sector and the relativity of the cost and the lead-in times required and the anxiety and the stress about that. If done appropriately in my opinion with - the development of the land and water plan should be able to utilise all of that information.
- 20 Q. Yes, I would tend to think so although there may be some onward thinking.
- 25 A. And so all of the efforts gone into a potential consent application, in my view should be able to be looked at and used in a meaningful way and therefore not lost and not seen as a waste of time in the development of the land and water plan. And so there is certainly opportunity in the land and water plan to deal with the stage and sequencing in the resourcing at a catchment basis. So that's one option.
- 30 Q. Yes I thought about that, so land and water plan can deal with the staging and sequencing, that's your proposition and I heard Mr Maw examine on that yesterday. That if I've only got a six-year consent, so that's a fixed term, if there's staging and sequencing in a land and water plan that may be beyond my six years which then compels me to get another top up, if you like, two years, three years whatever the land and water plan says which is a cost.

- A. That land and water plan could theoretically include a rollover clause. It could be a permitted...
- Q. Well it's an application for a new consent to replace an existing permit, so you'd still have to go for an application albeit that here, we might – as in here we may get to a speedy and efficient process which shouldn't impose too much cost. But there's cost.
- 5
- A. Theoretically there could be a permitted activity clause.
- Q. No you wouldn't want that. I think there's dangers, well no, there's lots of fishhooks in there.
- 10
- A. Okay, agreeing...
- Q. That's not for me to decide, hopefully. Yes.
- A. Yes. Agreeing that at least at a minimum, a controlled activity consent, so yes, costs.
- Q. Yes.
- 15
- A. Another option you could embed in this framework are a trigger or a clause that ties back to the objective, the objective is now as plan as recommending a tie to the land and water plan coming into effect and picking up on this risk that the council does not notify or does not have the new framework in place. You could embed a clause in plan change 7 that explains what is to happen if to a resource consent so that it gets – effectively the duration is longer than six years lawfully.
- 20
- Q. Yes, so how do you do that? Lawfully?
- A. Well it'd be...
- Q. I've got a permit for six years, I can't – I don't think but I could be wrong but I don't think you can extend the duration of a consent. You got to apply for a new consent.
- 25
- A. I agree with that but in this framework you could, I'm thinking draft a provision that when these consents are granted, they are granted for a duration of 10 years not six years.
- 30
- Q. That's a possibility.
- A. And it's intended to be six years but then there's a condition of consent which allows the overlap – the extra time if a certain action has not occurred.

Q. So I get my consent for six years or 10 years, if the land and water plan isn't ready? I don't know if that lawful, I don't know.

A. Well and this, to me the reality is, the moment the land and water plan is notified those provisions will have immediate legal effect.

5 Q. Okay, so tell me about that.

A. So whatever those provisions say will be relevant to...

Q. Yes but in this region they say that this plan shouldn't be given much weight now I think I might take a different view on a wholesale application of that idea but that's what would likely happen wouldn't it? The decision-makers would be invited to give the new land and water plan the weight, regardless of the strength of its provision.

10 A. Well, if there was a – I'm thinking of a scenario where it's a bespoke matter and that's dealing with this issue of the deemed permits. And the scenario we're talking about is a scenario where the council has not done something it said it would or...

15 Q. I think there's two scenarios either the council doesn't do something which it says it was going to do and there could be two reasons for that, one is that the new RPS gets held up in a court somewhere or the new land and water plan gets held up presumable in a court somewhere, not that we're to blame for everything because the hearings will be extensive as well but it will get held up so, that's one scenario. The other scenario is that it's not held up in fact you get your plan, you get both of your plans but farmers aren't ready on day one. Farmers are ready to respond when they know what the settled policy is and then need to start thinking about how to achieve it on-farm or in fact cross region depending on what assets they're using to bring to water to themselves. So that's the, yes – the idea that we could just flick all farming systems on to align the water plan just – but that could be the problem for the consent. You have the five-year grace period as is the case in Lindis and Kyeburn.

20 A. But I do think behind all of this it doesn't matter whether it's a resource consent or the impending policy or plan change, the issue is here because of the actual impact of the taking of water.

25 Q. I don't disagree I just would like your view on – so the issues not the merits or the need for change, the issue is how do you manage change in an

uncertain consenting environment, is six years as a drop dead date too short a period, either in relation to the need for asset change, if that's what's to come, or in relation to actually the RPS and the land and water plan being completed and fully operative.

5 A. My position is that six years is sufficient.

Q. Why do you say that?

A. I say that because of my belief that this council will notify a plan change or a new plan that will deal with these issues. It will, or at least, should grapple with farm system change if its required. As I've said in my
10 supplementary evidence, sorry my evidence-in-chief, oh sorry, I was talking about 10 years as opposed to six years.

Q. So what was your thoughts on 10 years?

A. Sorry so going back to my evidence I was suggesting that there should be a term no longer than 10 years.

15 Q. Rather than six?

A. Rather than six. No, sorry, rather than the 15.

Q. Oh, yes. So the original policy?

A. Going back to the notified version. So I'm reasonably comfortable with a longer than six-year timeframe.

20 Q. Six years?

A. I'm not wedded to that, but that's just what the framework has been. To me, I mean 10 years is a generation effectively. I would have thought – I think I said in my evidence-in-chief that six years, or the time until a new land and water plan is notified does allow lead in time. I'm not across the
25 evidence if it's before you that says six years is not enough time to allow farm system change.

Q. It's the idea of what are you changing and whether six years. I mean I would have thought six years is plenty of time to change a farming system if you know what your goal is, but six years, you don't. But the six years
30 we're talking about is not six years on a resource consent where we've actually fully worked out all of our systems. It's actually six years on a plan which hasn't even been notified.

- A. And I think what I'm understanding, the issue that you're actually raising is this anxiety and additional cost of having to do a new application when you necessarily don't know what it's for because...
- 5 Q. I think there's two things: it's one you'll have to do a second short-term consent because the plans aren't there and so that's just cost upon cost with this process being extremely costly, you know, because of the overlap on the plans and some of the unguided matters of control and discretion on that PC7, so there's cost and then there is – so that's one issue. The other issue is – yes, it's just timing and circumstances when
- 10 you've got all of those application coming in and it seems to me it's likely to be a leading time for infrastructure to come down in the future.
- A. I think those issues are yet to be properly thought about and that's the type of thing that will be thought about in an off-process giving effect to the MPS.
- 15 Q. Okay. Yes, I agree. I mean what does that even mean in an off-process?
- A. Well it's a timing on target.
- Q. Yes.
- A. So that then relates directly to farm system change if it's going to be required.
- 20 Q. If it's going to be required, yeah.
- A. So I wouldn't envisage for example a new water and land plan coming in and imposing such a burden on someone with a six-year current, we'll say, permit to make them change their farm system before they have to apply for a new permit. To me that would be unreas...
- 25 Q. Unreal, but it might. You know, there may be this expectation that you'll comply with the new systems in mind and some of the evidence we've heard is that actually some of the new systems were being rolled out at least on the Kyeburn before the application was notified and then they've had to do a lot more work since.
- 30 A. Yes, and until we've been through this limit setting process, state of degradation for the water bodies, what are the community aspirations, not just the applicants and the catchment groups thinking as to what's appropriate. We don't know the level of change that may or may not be required.

1230

Q. And I suppose the timing is the sequencing of that change as well because it may not, yes, not everything may be required to be changed at day one but I know it's a sequence of a period of time, correct?

5 A. Correct.

Q. Yes. Right.

A. But if you're finding that there is a need to really grapple this issue in the actual consent duration then I think there should be able to be a way to craft the provision in this Plan Change 7 framework that deals with duration in a more specific way. The sequencing in a more specific way.

10

Q. Okay. Those are my questions.

QUESTIONS ARISING ALL PARTIES – NIL

THE COURT:

Thank you Mr Farrell.

15 WITNESS EXCUSED

MS BAKER-GALLOWAY TO THE COURT:

A. Right, that's Fish & Game's case for now.

Q. For now. Mr Powell coming through?

20 A. Yes.

Q. And he's going to be back for the joint witness conferencing?

A. Yes, yes. That's the Tuesday afternoon I think at the moment in the draft...

Q. Yes. For both priorities and the other one?

25 A. Honestly we've not engaged at all in priorities so I don't think – that's the other one, yes.

Q. No, so it's the other one? It's a general invitation because if the Court's staff asking questions of, you know, writing, you might want to have your person in there I think.

30 A. Yes.

Q. Okay, no that's really helpful. All right, well thank you and that's your case.

A. Thank you Ma'am.

Q. I'm going to see you at two?

5 A. Yes.

Q. If you're interested in priorities? You should be.

A. Yes, no permits, yes. Yes.

THE COURT TO MR MAW:

10 Q. All right, very good and do you want to talk about what we were talking about or you want more time?

A. Ms Melhopt's been furiously working away on this.

Q. Furiously working away on it, okay.

A. She'll provide an update as to the thinking.

15

MS MELHOPT TO THE COURT:

Q. I was wondering Your Honour if we are addressing this at 2 o'clock whether it might be worth just spending a couple of minutes now perhaps getting some more context around the...

20 A. No, I'm not going to give you context until two when I've got Mr Page in the room.

Q. Okay, that's fine.

A. Yes.

25 Q. I just thought we might be able to have a discussion with Mr Page before 2 o'clock.

A. Oh I see.

Q. We've been in touch with him during the day or during the morning. That's fine, we can address that at two.

30 A. No, I thought you just wanted to point me in which provision. Anyway, so I'll give you the context at two when we have Mr Page in the room and it's not something that you need to have a definitive opinion on, prior to next Tuesday but it is something that you need to think about and that is whether the rate of take is a deemed condition.

Q. And I have been in particular looking at section 413 this morning and 413, subsection one that a mining privilege or right granted under the Water & Soil Conservation Act is deemed to be focused on a water permit, so deemed to be a water permit granted on the same conditions and the provisions of this Act so whilst the rate of take may not be listed under a heading of conditions in a deemed permit and we've got, sorry, situations where on a deemed permit the rate of take may be listed as a condition or it's set up in the kind of introductory – not introductory material of the consent but it forms part of the consent but it's not listed as a condition.

5

10 A. A condition, yes.

Q. But if that rate of take was on the previous mining privilege or right under the Water & Soil Conservation Act then it would be a water permit deemed to be granted on those conditions so that's...

15 **THE COURT TO MS MELHOPT:**

Q. But is it a deemed condition? So it's a slightly different question.

A. And the deem condition is referred to in section 413(2) and then looking at the provisions referred to there in the Water & Soil Conservation Act, so if we look at, so section four for instance which refers to water race licences, that does refer to the quantity of water specified in the licence so if there was a quantity of water then that would flow through as a deemed condition.

20

Q. Maybe.

A. Maybe. So that's the thinking this morning.

25

Q. So I haven't – I'll think about it over lunch obviously but – so that's just a maybe from me on that. I didn't see on my really rough quick look at it this morning, I didn't see anything in terms of those subclauses referred to in 413(2) which clearly signalled, as is the right, you know, as it does for example contrast with the right of priority, rate take. There was nothing called rate of take in that, therefore, we've clearly –

30

A. There's nothing obviously.

Q. – a deemed condition so I don't want to be too tricky about this but really trying to get a view on it, yes.

A. And it's the reference in section 413(2) that it's every deemed permit resulting from a mining privilege should be deemed to include as conditions of the permit, such provisions of the Water & Soil Conservation Amendment Act.

5 Q. Yes, and so when you go through, I think it's starting at section four – and I haven't got it in front of me, and travelling through to section 13, at least in the Water & Soil Conservation Act. That doesn't clearly pick up rate of take as being a deemed condition for the purposes of a deemed permit under the RMA. It's indirectly I think you're saying.

10 A. Yes.

Q. Because it's water in a race?

A. Yes. And it refers to the – so section four in particular refers to the quantity of water specified in the licence.

15 Q. I see. And so the rate of take could be the quantity of water. What subsection's that?

A. That's in section four of the Water & Soil Conservation Amendment Act.

Q. And then historically, in terms of that quantity of water, has that quantity of water been brought forward on deemed permits as rates of take or something else?

20 A. I think there's a –

Q. It's probably a smorgasbord out there but...

A. – mixture of rates of take volumes. It's different across different – in terms of the permits that I've cast my eye over.

25 **THE COURT TO MS WILLIAMS:**

Q. And that's where your thinking got to Ms Williams?

30 A. So I'm not – I'm still struggling to quite get my head around what the difference is between a condition and a deemed condition so I'm waiting with interest for Your Honour's contest at two on that. However, where I got to Your Honour is similar to Ms Melhopt that section four of the 1971 Amendment Act certainly talks about the rate and quantity, sorry the quantity as specified in the licence.

Q. Okay.

- A. So that – and similarly for section five, which is the dam licence, which then refers through to section 21(2) as amended of the Water & Soil Conservation Act 1967. Again that talks about the storage as it's defined at a part point in time, so there is something there. It's just taking a bit of teasing out to get to but there is certainly something which established that there is a quantity for storage for dams and there is a quantity which maybe taken for the specified purposes for water race licences and – and that then in my opinion Your Honour, then it is implicit in the application in section 13 which is the exercise of priorities under the 1971 Amendment Act because it's only the amount that if the superior priority holder wishes to exercise their priority, that must be contingent on knowing what that quantity is that they're entitled to take.
- Q. Okay. All right, we'll talk about that at 2 o'clock. Very good. 2 o'clock we will give you a copy of Dr Somerville's opinion and we'll talk about that, what happens next. Yes, okay. Very good. We're adjourned.

COURT ADJOURNS: 12.40 PM

COURT RESUMES: 2.01 PM**THE COURT: JUDGE BORTHWICK TO MR PAGE**

Q. Thank you for coming back Mr Page. No doubt as counsel would have told you, we've got the opinion back from Dr Somerville and before I tell you what his key findings are, and a potential other legal issue that comes out of them, I want to say, and you need t bear this in mind, that we have got a potential workaround from the priorities issue which we think as a panel is at least worth brining to you, not that we have written up anything, but we think it's an idea which is worthy of consideration. So I want you to keep that in mind, all right, but at the moment where we're sitting is that it's a workaround for Manuherikia and Taieri. We don't know enough about the other catchments which are potentially impacted on 1 October, so quite helpfully the witnesses, you know, planners and the priorities conference has actually narrowed down, you know, the catchment's under consideration in terms of whose exposed to the risk. All right, so Dr Somerville's – which I have brought with me. Have you got a copy of that? Thanks. Okay, so we'll hand that out when we finish but Dr Somerville concludes: "Deemed permits are a creature of statute that finally expire on the 1st of October". Secondly: "On an application for resource consent to replace a deemed permit the right of priority cannot continue to be exercised after it has finally expired on the 1st of October 2021. Rights of priority cannot be recognised in the provisions of Plan Change 7 if they have ceased to have any effect on enactment of the RMA and/or deemed permits finally expire on the 1st of October 2021". So this is significant and this is an issue that we've been alive to for some period of time and don't know whether the parties are alive to the rights of priority not continuing under a 124 basis. So they expire, is the opinion of Dr Somerville. Now he'll present his opinion hopefully Tuesday and you may have different opinions. I mean that's why you're coming back, okay? But it's a significant risk to holders of those rights. It's not a risk as far as I can tell which is addressed by simply rejecting the plan change. If you have a vehicle to work on your risk, it is PC7 or it's central government or it's both. And that's the other reason for obtaining the

opinion. There is another risk which we have not invited Dr Somerville to express an opinion and at this stage, aren't thinking that we will and the risk is, when you read his opinion, the risk is actually deemed permits do not proceed under section 124. So we've got worse and worse but we've got a possible solution for our worse. Now we don't think we need to go to the second risk because they are actually arguments that we can see for and against that proposition. But on the deed the rights of priority don't continue to exist after, you know, don't continue under section 124 and don't continue after the 1st of October. We have a possible workaround. It does rather depend a lot on just how well those water user groups, if I can just use that as a generic term, are holding together now and going forward in the future, so it depends on the strength and integrity of those groups. The solution for, or a potential solution for Manuherikia is this, that as a condition of entry under the controlled or RDA rules, the permit, the applications for permits are to proceed on the basis of the minimum flows at Falls Dam, Ophir and at the Camp Site. That is because several witnesses have told us that there is a whole of catchment management approach taken predicated on the adherence to those flows. Two are secured by resource consent. One is secured by voluntary agreement but that is neither here nor there. It appears that the whole of catchment indeed takes in all of the tributaries. It's just not a main stem management, it's all of the tributaries. That's what we've been told so that's why we're putting forward this as a solution so I say again, entry conditions; adherence to those flows. Those flows will probably be set out in a schedule attached to the Plan Change. Now either evidence was right or wrong. We've been pressing into that to understand what the correct position is. That, if you like, will mimic the arrangements which the catchment have entered into, to overcome the problems of priorities and to ensure that everyone has an opportunity to take water in declining flows. So it's just reflecting back the community's own arrangements. It's a regulatory approach and so there may be some that would prefer the region to stay out but what are you – you know, unless you've got a legal argument to counter Dr Somerville, what are your options? You know, you need to do something to step over this from the 1st of October, so you

know, we're not looking at a whole of catchment. It's risk. You're now on risk from the 1st of October. I don't think even if the Court were to go with the idea of 20-year consents or five-year consents under PC7 you won't have them processed by that date so you know, so, anyway, that's why we suggested it. Taieri we think a similar solution also exists so what we were told about Taieri was that there are minimum flows in the second schedule and that people on the main stem and in tributaries are managing their takes again via water sharing; via water groups from minimum flow to minimum flow. It seemed to differ from Manuherikia in as much as – and I can pull those, you know, I can pull the flows out but it seemed to be a far, instead of a whole of main stem, whole of catchment approach, it seemed to be far more localised between two minimum flows and we thought tribs entering into that. So it's a slight variation, but we thought - that's all voluntary as far as we understand, but we thought again if it got you over your hump of 1st of October, that would be – and the parties are doing that anyway on a voluntary basis. That actually could provide you something on a firmer footing going forward. And again, that's a scheduled basis so slightly different from Manuherikia. We don't know what to do about Loburn. Loburn's not actually flow sharing because with water and so it may either the deem consents expire and that's okay because they seem to be taking water. Whenever it is available they seem to be taking it.

1410

A. So maybe Loburn's not a problem when it expires and then Carrick, or Bannockburn's also one of those groups and I haven't read the transcript from Mr Parcell and I've forgotten what he said. If he said anything about managing collectively the resource, do they all come into a group? Are they all working to a flow somewhere or flows on multiple races? I just haven't read it. And then there was some other smaller water bodies as well. Oh, Arrow and Cardona I think are in your list and I have no sense whatsoever of what people are doing in the Arrow and on the Cardona either in a catchment, sub-catchment sense. I'm just blind to what's actually going on there. So with that in mind where we don't have any information, the question is can we get information and to do something

which is not – if it exists already then bring it into a schedule, not just in a dissimilar way to Taieri and also the Manuherikia. Or if it does not exist then to pick up as an idea something that I floated in terms of looking at matters appearing under matters of discretion I think they are, appearing under the operative regional plan rule which one at least, the planners thought had merit but expanding on that as a matter of discretion or matter of – what do you call it, a conditional activity rule, or matters of discretion and on a conditional activity rule, the matter of control. The matter of control; matter of discretion on those two rules; having a look at any proposal brought to the table again by a catchment or sub-catchment for sharing flows because they may be there and I don't know anything about them or it may be that you'll be able to get them out of parties and that they can bring them forward into the plan in a more regulated way. It's not an invitation for the regional council to get in on the ground and start creating minimum flows or any. What it is is responding to what appears now to be a significant risk for many permit holders in the Central Otago, so that's all we're doing. We are not recreating; are not attempting in any way to put in minimum flows or even turn our mind to the environmental outcome of those minimum flows. I think that that would be a really big task. Now it may be that some of that information's already known because you've got the applications in for those catchments and so you already know what's actually proposed but that could be by way of a minimum flow with an environmental outcome and that may also be contingent on an upscaling of infrastructure; I don't know. So we're sort of not looking at that level. We're looking at now, what is currently happening now whilst those deemed permits continue to exist. So I'm going to post – I don't know whether any of that is of interest, but that's my best thinking overnight. We need to post that opinion from Dr Somerville and that may very well be quite distressing for many people. Very distressing for many people so the question is how do you want to handle that in terms of speaking into the communities who are impacted by that?

THE COURT TO MR PAGE:

- 5 Q. They were already under enough stress, as they're under enough stress in front of this Court let alone, you know, reading the other things which are now happening; reported on in the ODT this morning. So it needs careful management, really careful management; communication, so looking at you Mr Page because I think you're the only one whose got reach at the moment into that community.
- 10 A. Yes, well I'd be grateful to have the opportunity to receive the opinion and get it out this afternoon via email with some explanation. They will understand that it's one piece of advice that's coming to the Court but it doesn't bind anyone.
- Q. No it doesn't.
- A. It's just a point of view and accept that. I think people know of Dr Somerville's status in the profession so it needs serious consideration.
- 15 Q. It does.
- A. And they'll understand that. As to your suggestions, I'll need to take some advice about that. I can certainly see how something of the kind you're explaining may well work for Manuherikia. At Taieri I'm less sure about but on the other hand it might matter less.
- 20 Q. Yes, although you've got, as I understood it, 70% of the water, is it by volume? Has been already reallocated.
- A. Yes.
- Q. 30% remains without allocation but it actually involves a large number of small – a large number of perhaps small takes was what I think I heard
- 25 yesterday.
- A. Yes. So anyway again I'll need to think about how that works but as you say, there are big chunks of the catchment that are reconsented and none of this matters to them.
- Q. No.
- 30 A. And also in terms of compliance with minimum flows, the top two are largely managed already through other permits that aren't subject to – so it may not matter particularly.
- Q. It may not matter.
- A. But I don't know that for sure. So I will find out.

Q. And you know, in saying that it may not matter, it's like, you know, there's a bunch of individuals who you'll have to bring on board with a may not matter idea, yes. It may matter to the individual. I don't know. Look, I don't know. We've tried our hardest to understand exactly how this economy – that's what I said in the first and second, yeah, it seems to be an economy out here. You know, the market out here is actually working. We've got somewhere in some instances but nowhere in others so I don't know.

A. And a lot of that's tied up in complicated family histories too.

10 Q. Probably.

A. No, I'm serious, particularly in Taieri.

Q. Yes, yes. So there we are. So that was my thinking overnight and I'm hoping that at least in two catchments that might advance things from the JWS which of course doesn't actually do any drafting for me so that of itself is actually going to be a bit of a challenge. You know, landing that, but anyway I thought it a worthy workaround, worthy of consideration, yes and if it was worthy there it may be worthy elsewhere.

MS WILLIAMS TO THE COURT:

20 Q. Sorry Your Honour I agree with Mr Page that (inaudible 14:17:52). It's conceptually attractive and I can certainly see that that would work in Manuherikia. I just don't know enough about the detail for those other catchments in that may require me to do a bit of combing through the evidence and just to see what's there.

25 A. I don't know you're going to find it, I mean, yes, not that I've got a full proof memory, I don't, but you know, I just – I don't know that you're going to find it.

Q. Yes. And it may be, however, that because there is the existing planning framework around water management committees and things, that maybe that's something that can be incorporated back into Plan Change 7 and provides a mechanism to – that's your concept with the current framework to take that forward?

30 A. Yes. So that was the other thinking that I had was perhaps a more nuanced approach being taken than what I had previously suggested and

just bring forward the matters of condition, you know, the matters of discretion on an IDA rule under the operative plan really trying to get people to bring to the table what their flow sharing regime looks like in the same way as Manuherikia if it's worked up like that, even if it's informally worked up like that, so at least it could be considered, yes.

5

Q. And I also see an advantage in that Your Honour because going forward into the new land and water plan process, we're going to have to be thinking in terms of freshwater management units and sub-units within that so actually people are going to have to start thinking in terms of catchment approach anyway so this is a way of perhaps a soft entry to that way of thinking if people aren't there already.

10

A. Yes. I mean reading the deem permit, JWS this morning and the planners seem to be falling back on oh well it's not formal. It's like it may not be but it seems to be working pretty well out there so something's working out there which perhaps could be brought forward in an application, so that was the real fallback. We've got a fallback. We could do something better in terms of a schedule maybe if that's got merits, and of course, then you've got, you know, I don't want to overcomplicate things but whose in the tent? Whose out? So in the tent in Taieri, you've got quite a – I presume the 70% are reconseented are all on those minimum flows?

15

20

1420

MR PAGE TO THE COURT:

A. No.

Q. No?

25

A. I mean what the council has done is indicated that when the reconseenting is complete that the minimum flows will be imposed on all of the permits on a whole of catchment basis because otherwise at the present time you would have part of the catchment on minimum flows.

Q. Some ons and off, yes.

30

A. And half – and some on and some off.

Q. Yes.

A. And there would be inequities around how that works.

Q. But nevertheless they're doing this voluntarily.

A. Yes.

Q. Was the evidence. So either that evidence is to be given weight –

A. Yes. Well and so to take Kyeburn as an example, the Tiroiti minimum flow doesn't bite yet but the residuals on the tribs do so in effect, the regime is in place because of course those residuals are designed to ensure that the minimum flow is not breached so indirectly, many of them are operating in that way.

Q. And that's sort of a step – I don't mean that's – I haven't thought about you know, in the Kyeburn example, Kyeburn works because it's got a residual but then again Kyeburn's also trying to do something for the environment and that's why it keeps at a pretty high level, you know, on Manuherikia. It's just those three that's really high level. I'm not sure how that responds to the environment. Obviously that's the debate in the ODT but I'm not bothered by that, so I don't think it's the problem that we have to solve. We have to – the thing with the plan change is to keep farmers on their water –

A. Yes.

Q. – for at least a short period of time and then of course there's a debate around that, but at least a sort period of time.

A. Yes. Well no, I understand. It will take some thinking through but there's a cornel of a idea there that may need to be developed.

Q. Good, okay. Yes, so you've always got the problem of the tent and whose in and whose out and, you know, I can't solve that. The region solves that by doing a review. The question for the Court is how does it keep the integrity of the current farming systems which are predicated on the exercise of those priorities continuing and so that was my thoughts overnight.

MR MAW TO THE COURT:

Q. Well what I've written down simply Your Honour is what's the mechanism that best reflects the status quo in bringing that forward.

A. Yes.

Q. So we'll reflect on the suggestions that you've helpful made.

A. Yes.

- Q. But again I think conceptually it's about how do we capture what's happening on the ground currently without simply saying, we'll just bring down the priorities because that's not going to work.
- 5 A. Dr Somerville's clear. You're not doing that. You know, you can't do that. They will expire and I know that you might have a contrary view and you can give me that and I've been known to disagree with Dr Somerville and he with me so you know, so don't think that its done but I wouldn't have been asking these questions of Dr Somerville unless I had a serious concern for the region and so that's why we've done it. It's not the – yes, 10 Plan Change 7's not the only recourse but anyway, in the meantime, I've got to keep on working on what I can work on, yes. All right. Any other questions?
- Q. Yes. The second issue of risk in terms of section 124, I didn't quite catch whether you were going to or not going to...
- 15 A. I'm not going to. That would just be the...
- Q. Right, thank you.
- A. I'm just saying that there is a – I'm indicating that there is an argument which could be taken and I'm not going to take it.
- Q. No, that's helpful thank you.
- 20 A. Yes, so again it's another element of risk but it's not something that I think I need to deal with, if I can deal with it in other ways.
- Q. Pretty good. Now I had some matters of housekeeping if we've finished this topic?
- A. I just want to know. So I was going to release the minute in the end of 25 day dispatches. I'll release the opinion in the end of day dispatches just so you know unless you want me to release it tomorrow morning? I mean I'll give you guys a copy. There's no problem with that.
- Q. Yes, the thought that occurred to me was whether something like a one-day embargo for perhaps Mr Page to get his thinking organised prior 30 to communication out to the rural community. It might assist.
- A. Yes, do you think – the thing that I'm concerned about is the impact on communities through uncertainly particularly if there's a workaround that could for many help.

Q. Yes. Well I need to get that out this evening and it would be good if the parties had the opportunity to see that before everybody else did and phones started running red hot.

A. Yes, so you'll get it now, yes.

5 Q. Yes. But I'm grateful for my friend's suggestion of an embargo at least to the morning anyway.

A. At least 'til the morning?

Q. Yes.

10 A. Okay. And then I wasn't just because I haven't written anything, I wasn't going to write anything around it in terms of is there a workaround unless you want me to write something around it but I haven't actually put down my thoughts.

Q. Yes.

15 A. And again it's kind of – well it's almost a problem for the lawyers not for me, but well I don't know.

Q. Yes.

A. I'll do whatever helps because I know people are under massive stress.

Q. Just a question. Are we in Chambers or an open Court?

20 A. We're in open Court but I don't have to load the – I don't have to uplift the transcript or the audio.

Q. Well I mean the fact that we're having this discussion in open Court means that I can convey to my clients that the Court is minded about the difficulties of it and interested in exploring whether there's a workaround.

A. Absolutely.

25 Q. And that's a message I can send.

A. You can, absolutely and you can send it, that we have thought about a workaround that at least has some attraction to us. It has to be landed. You really do have to put your best policy people on it though. I can't express that enough and you know, you have to put your best policy plans now on this drafting if it has merits, yes. Because there's quite a bit of drafting coming out of the JWS anyway.

30

Q. Yes, so should we be alerting the planners that we are calling to a need to be thinking about this for when they're going to be appearing next week on to present the JWS's?

A. Oh absolutely. Yes. Definitely. You might want to do that.

Q. Yes.

A. But you have to think about the timing of that and it's just a question of timing. We'll give you the opinion. We'll upload it tomorrow and tomorrow morning. That ought to give you time to talk to your client base.

Q. Yes.

MS WILLIAMS TO THE COURT:

Q. Sorry Your Honour just on the planning caucus next week I do have a constraint with Mr Brass. He has some health appointments which he must attend on Monday and Tuesday morning so he's not going to be available until Tuesday afternoon and that means that effectively I can't see him having the time to consider this matter until Tuesday afternoon or perhaps tomorrow.

A. Okay.

Q. I'm sorry about that Your Honour.

A. No, no, no.

Q. We'd anticipated that he was going to be available – not going to be required until Thursdays but of course now it's turned into Tuesday.

A. I'm not quite sure, I mean it's no direction for the Court. I mean I really don't mind when these things are done. I think the only problem for me today was thinking I could list and shift the TA's so we could actually have a clear run at this but that didn't find favour with my colleagues so you know, because we've got to land that somewhere. I don't mind what day you do it. I know that – I haven't actually spoken to Dr Somerville about his opinion or about the implications of his opinion but Dr Somerville has emailed me to say that in fact, he's available all next week so there's no time constraints from us.

Q. All right, thank you Your Honour.

A. So it's really probably just a case of talking to Mr Cooper about when best to do it. Monday we're not here anyway so that made that one easy.

Q. Yes, it's just as I say, Mr Brass unfortunately Monday and Tuesday morning he is otherwise engaged.

A. And so you know, again if we're thinking about these ideas, how that might be shaped or landed, I mean I don't even know whether people can draft or should be drafting, you know, if it has merits it needs to be drafted. You have to be thinking about the timing of that; getting it into Court, if the risk is a real risk as my sense of it is at the moment but I haven't heard counsel sense it is a real risk, then we need to be turning our decision out really quickly, you know, to give people a chance to do whatever they want and again I don't know how that looks because there's other decisions.

10 1430

A. There's the long-term consent decision, there's the fish and game decision, there's the (inaudible 14:30:10) decision, so again you're going to have to be landing something. If you've got to get a decision out and people apply to preserve their position going forward and even if it's just for a short time, yes.

15

DISCUSSION BETWEEN BENCH AND MR PAGE

MR MAW TO THE COURT:

20 A. It was the debate ability of that issue that I was smiling at Ms Melhopt. We have had a long debate.

Q. Oh you were debating this issue too? Is there a deemed consent?

A. Is it protected under – in terms of the protection under 124.

25 Q. So it's not even the deemed condition, it's actually the deem – yes, I know, that's always been – so that's the monster – that's the elephant in the room that one.

A. The elephant in the room.

30 Q. And I thought well we won't go there. We'll just deal with the next worse case scenario, the second to worse-case scenario so that's what we're dealing with. I think it's debatable. And I think it's debatable because of 143, subsection 3 and 124, yes. And I think you can have arguments flowing each way on that one.

A. Yes and that would certainly reflect the work and the thinking that has been occurring to date at least at our end on that. That would reflect the

thinking and the discussions and the debates that we've been having on that topic.

Q. Yes. But you know, the desire is not to turn everybody off, but to keep everybody on.

5 A. Correct.

Q. And hence the workaround thinking over the night, yes.

A. Okay. All right.

Q. Housekeeping.

A. Some housekeeping matters, so casting ahead to next week, the first item
10 I have on the list is what to do with Mr de Pelsemaeker's supplementary evidence. So he's filed supplementary evidence in response to the territorial authority's further evidence.

Q. Yes.

A. I had not anticipated that Mr de Pelsemaeker would be cross-examined
15 on his supplementary next week on that point but rather he would be available for both the Court's questions and cross-examination in the final week of the hearing in reply.

Q. Well that's one way of doing it, yes.

A. Because otherwise he's in a sense, having to respond early to a case
20 whereas he hasn't had to respond early to a whole lot of other cases.

Q. Yes.

A. And it may well be that his thinking continues to evolve in that space after
we've heard from the TA's whenever we get to them next week. So he's
25 filed in a sense to assist the Court in terms of his, what I would describe as preliminary thinkings on the issues, but I hadn't expected that he would be crossed on that next week. His name was on the schedule though so I was just walking through it.

Q. Yes, okay, so I know it's Ms Irving's clients, but do you have a view on
that? It seems to be convenient that I guess you pick up on that
30 supplementary as part of this review, you know, his reply evidence and deal with it there?

A. Yes, well I think what my friend suggested makes sense because I'm told
that there is a problem with two of the TA's witnesses on Thursday and
so we've got three that are available on Thursday but two that are not.

Q. Oh, how many witnesses are we going to get? I thought we had about three?

A. I think there are five.

Q. No. You've got Mr Twose?

5 A. Yes.

Q. And then you've got a couple of...

THE COURT: COMMISSIONER EDMONDS TO THE COURT:

JUDGE BORTHWICK

10 A. There's three other witnesses isn't there?

Q. Do we? I think we only had – Mr Heller's not available, well he's not anticipated that he's coming back and then you've got a couple of – two more.

A. Three more.

15

MR MAW TO THE COURT:

A. I've got Ms Muir for Ms McGirr, Mr Twose, just supplementary but we had Mr Paterson, the economist, held over.

Q. Oh, yes, okay.

20 A. And then Mr Lanthem is noted as providing a representation for CODC only.

Q. Oh okay, all right, well maybe you're right: five and CODC didn't actually respond or somebody was sick and couldn't respond anyway to the Court's questions so that would be good if they could. I don't know who
25 that was, whether it was Tom Heller or was somebody else. We've got a bit of a blank.

MR PAGE TO THE COURT:

Q. That's the Clutha District?

30 A. Yes, I think so.

Q. Yes, no, I'm aware of that situation that they didn't respond and couldn't but not why.

A. I think it was illness was my sense of it but I might be wrong. I have to confess I still haven't read it because, yes, I just haven't had time with focussing on other things.

Q. No, I understand that. But...

5 A. Anyway, you've got a problem and was the idea that you get set down for Thursday was it?

Q. Well they were originally going to be here for Tuesday and that was fine. Now, for good reason, Tuesday doesn't work for the Court. But Thursday works for three witnesses and not two.

10 A. Okay. Why doesn't Tuesday work for the Court?

Q. Well I understand you wanted to hear from Dr Sullivan on a Tuesday?

A. Oh I didn't. Look, I've got no view. I mean Dr Somerville said he was available Tuesday but he's actually said he's available every day of the week so, you know, we're flexible.

15 Q. Okay, well I'm running out of knowledge at this point so...

A. Okay, so am I. But anyway, he texted me to say he was, so I think he is.

MR PAGE TO THE COURT:

Q. The issue might well be Mr Sinclair and his unavailability for next week.

20 A. Yes, actually it could be the special advisor, yes. Actually, no, that's true. All right. So it's Mr St Clair's, yes. In that case you probably want Dr Somerville going first to present that opinion?

Q. Yes.

A. And then you probably want priorities dealt with in terms of the planners coming back on Tuesday and if we did that...

25

Q. Mr Brass is the...

MS WILLIAMS TO THE COURT:

A. Is the constraining.

30 Q. Brass is the constraint, okay. But he can go in the afternoon.

A. Well that's what I was going to suggest Your Honour is that Mr Brass can go in the afternoon. It's just that he wouldn't be able to appear together with Mr de Pelsemaeker and Ms Dicey in the morning if we get to them in the morning. That's the only issue.

MR MAW TO MS WILLIAMS:

Q. Because he was jointly presenting?

A. Yes. And to what extent that matters?

5 Q. Yes, possibly – oh we might just have to await until after lunch.

THE COURT:

Yes, that's right. We'll have a late start.

10 **MR COOPER TO THE COURT:**

Q. Well Your Honour just a constraint of Mr Sinclair, he's to catch a flight back to Wellington. He's booked on a flight (inaudible 14:38:40) so he's agreed that 2.15.

A. Oh, that's not helpful. So Mr St Clair, is he only available Tuesday?

15 Q. Yes Your Honour. He's in a hearing (inaudible 14:38:53),.

A. Oh okay, all right.

MR WILLIAMS:

Well do we know precisely what time Mr Brass...

20

MS WILLIAMS TO THE COURT:

A. Mr Brass is available after one so it's through to 1 o'clock that he's unavailable so that's why I was saying he's not available in the morning but he is in the afternoon.

25 Q. Well then maybe we just proceed with that special advisor but I can't stress enough the importance of getting really good crafting if you want to go in that direction or any direction actually on a response to priorities.

MR MAW TO THE COURT:

30 Q. Yes, the (inaudible 14:39:29) suggests that the time tomorrow and Monday plus the intervening backup workdays of Saturday and Sunday.

A. No.

Q. That phrase doesn't often find favour with my colleagues. That gives us a window of opportunity to actually reflect on that and to start thinking about drafting collectively.

5 A. Yes, is it possible to land it and even – I mean again you're going to have to do that section 32 analysis and all that kind of business but even if it's not perfect, if there was merit and everyone was generally aboard, you know, then to present that, so we can say, yeah, you know, we'll go ahead with that, but now you've got some more time to finish the drafting.

1440

10 Q. Okay, well we will work on that so staying with next week's schedule, a brief of evidence has been filed from Dr Snelder or is about to be filed?

A. Yes. Today was it?

Q. Today. It has been finalised and is ready to file.

A. Okay.

15 Q. Are you anticipating that Dr Snelder would be called to produce that report or do you want that...

A. I think that's what I said in the minute that he would and then he can be available for any questions. We have Dr Olsen. He was his counterpart, oh well not really his counterpart, but I don't know. He's available for questions and I also reminded everybody – now's the time for final requests, directions so I don't know. I haven't seen – I don't know what's in it but if you need to reply you need to say.

20

Q. No, that's in order. We'll check his availability and make sure he's scheduled for some point next week.

25 A. Tuesday morning seems like a good time to have him, maybe. Depends on whether people have got questions for him?

Q. Yes and the only other witness we could slot into the Tuesday morning would be Mr Curran on the dams because he's yet to be heard but we might need a while with him.

30

THE COURT: COMMISSIONER EDMONDS

Well there was the other witness that we had. Two with the list. So there was more than one piece of work to do on wasn't there?

MR MAW:

Mr Sheehan. Yes. You may need some reading time on some of that information but the joint memorandum of counsel will be filed at 9 o'clock tomorrow morning addressing those matters.

5

THE COURT TO MR MAW:

Q. So this is the issue thing?

A. Yes.

Q. That's at 9 o'clock tomorrow?

10 A. Yes and that's also going to flag the basis or the mechanism by which to get that evidence into the Court which we discussed yesterday.

Q. So this is the re-call of Mr Sheehan?

A. Yes.

Q. Yes and then you've got to call Mr Curran, yes.

15 A. Yes. Then – yes, that will need to be scheduled and we'll figure out a time for that but possibly later in the week. The next item on the list is cross-examination of witnesses for next week. Now there's a little bit of uncertainty as to precisely how that is anticipated to work and there's a question as to whether parties are to be giving – I think they're directed
20 to issue cross-examination notices on Friday but there's some uncertainty as to whether or not witnesses needed first to indicate whether they wanted to respond to some of the content in the joint witness statement or not or whether the Court's anticipating that each witness would be called back sequentially following the presentation of the joint witness statements and the empanelling of the witnesses.
25

Q. Well I thought they were going to present particularly on the schedule. I mean that's the major items - particularly present on the schedule and the controlled and RD rules because that – we've got broad agreement we should have that and then there's some decisions for the Court to make.
30 As we emphasised to Mr Cooper this morning we weren't particularly interested aside from hydro and community saying get a schedule that looks good for them, we weren't interested in them presenting on those rules. I think that's actually to take up the purpose of the presentation which is to clearly speak into the primary sector what is the initiative here.

A. Yes.

Q. And then – I'm not sure how you're going to handle that but then to, at least at that point, to jointly empanel major technical then planning or maybe technical and planning on the schedule with the parties to ask whatever questions so that's a cross-examination notice. Whatever questions you've got because just because the planners like it, doesn't mean to say that lawyers like it, so that's okay.

A. I have some questions.

Q. You've got some questions?

10 A. Around the drafting.

Q. Oh we've got questions around the drafting too.

A. But I had envisaged that we would – so the presentation will come first and then we will jointly empanel – there are quite a few potentially but we would jointly empanel perhaps the – I was going to say the planners in terms of speaking to the changes. I had envisaged I might then lead out of them the differences between the two different camps so to speak and there may be some individuals who weren't in either camp who may wish to say something but that would be the forum or the platform for them to respond.

20 Q. Right.

A. And then having led that evidence perhaps the Court might answer some questions followed by questions from counsel or the other way around.

Q. Or the other way around, yes, and I think you did something very similar on Southland.

25 A. Yes.

Q. And we were reluctant to sort of do all of the questioning and then you did the opening, the questioning.

A. Yes.

Q. And that worked out really well.

30 A. That seemed to have worked quite well.

Q. Yes.

A. And so that's the sort of approach that I had in mind.

- Q. That's the sort of thing that we'd imagine and you know, counsel asking questions, we thought, well that's probably by way of – maybe yours are more open-ended as you're trying to sift the differences?
- A. Yes, I will be more careful in terms of teasing out just differences.
- 5 Q. Yes but there may be cross-examination from other lawyers, yes.
- A. Yes.
- Q. And so to that extent we just needed to know whose going to be in the room so we could manage the time.
- A. Yes.
- 10 Q. And that's hence a cross-examination notice. That's the purpose of it.
- A. Right, so that's helpful, so that I think may help Mr Cooper with his scheduling in terms of understanding whether we need each witness to come back and then we don't by the sounds?
- Q. Yes, and I think Mr Cooper's schedule was, early on when we weren't
- 15 quite sure, you know, with that schedule, people didn't have the opportunity to give their evidence so did they want to be re-called specifically on the schedule but as it happens, life has overtaken all of that and, yes.
- A. Okay. That's helpful. Okay.
- 20 Q. And did you think you'd go technical bobs, then planners and then priorities or?
- A. Yes, I'm relaxed, or am I? I would have thought – I had thought priorities could fit anywhere.
- Q. I think that's right.
- 25 A. So that could but then realistically technical then planning. The planners are picking up on the technical.
- Q. I think that that's right, yes.
- A. So yes, and then priorities did have to sit somewhere. It might follow, or it's part of the planning response so it depends where we get to with the
- 30 scheduling.
- Q. Yes. I'm not sure about the priority issue even with the workaround falls out of that scheduling issue.
- A. No I understand what you're saying. No, it's a separate standalone issue.
- Q. It is, yes.

- A. But it's an issue that will be being responded to by the planners.
- Q. Yes.
- A. Insofar as they're here that topic mightn't even follow on.
- Q. Yes. Which then tends to put TA's out until Thursday or Friday.
- 5 A. Yes, which...
- Q. Well we've already got Monday. We've got rising on Friday aren't we?
- A. Yes.
- Q. So how does Friday look for a TA case?
- A. I had thought that the options were either Thursday or in the June week.
- 10 Q. In the June week? Well you see that's what I was talking to Mr Cooper about.
- A. Yes.
- Q. About an entire lift and shift so we could actually have a proper run at the primary sector without having to commit time and energy to this other
- 15 thing but there are – I am persuaded there are better arguments against that.
- A. Well the TA's are not going to be uncomfortable about being bounced out of next week.
- Q. But you're looking uncomfortable having regard to the TA's?
- 20 A. Yes. I'm just conscious that Mr de Pelsemaeker needs to produce his reply.
- Q. His reply and I think that was one of the reasons going against it, was that we do need that reply in.
- A. Yes. I'd very much like to have all of the evidence heard next week and
- 25 we'll do what we can to achieve that.
- Q. Okay, so see how you're placed on a Friday and it may well be that we commence the TAs and run over to Friday. The two witnesses that can't come Thursday, they can come Friday.
- A. Well I'll find out.
- 30 Q. That would be good and that would make it a short day. Yes.

MR COOPER TO THE COURT:

A. (inaudible 14:49:40) are leaving on Wednesday and will be away until the end of Friday so those two witnesses: Mr Muir and Mr Lambert are out for the week.

5 Q. Are they out for the whole week, effectively?

A. Well Tuesday's the only...

MR MAW TO THE COURT:

10 A. We could squeeze them in on that Tuesday morning after we hear from Dr Somerville. It might be the window.

Q. So look to Tuesday morning. I guess that might be up to Ms Irving though whether she's happy with that so we've got witnesses to come, are two from the TA's, possibly Tuesday morning. That's the only time that they're available. We've got Dr Somerville. We've got Dr Snelder. I think he should at least be available just to answer any questions that the Court might have or parties might have in cross-examination and Mr Page and others.

1450

20 Q. I mean I'll get a minute out about this. Well I already have got a minute out about this. I'd just be repeating myself. If people want to call reply evidence they've got to ask for a direction so the invitations there. We've got Mr Curran on his dams and we've got Mr Sheehan to come back and we have – that's a lot for next week, and anyway, but the joint memo is going to be filed 9 o'clock tomorrow so that's something. Actually that's quite a few for next week but okay. We shall do our best. Mr Cooper will do his best and we'll see how that goes. All right, anything else?

25 A. No. Those were the matters of housekeeping thank you.

Q. Now I know this is a shocking lapse of memory but are you the only lawyer dealing with farmers? Have you got any other farmer lawyers, you know, as actually farmers' litigant?

30 A. Pastoral farmers, yes. Not horticultural farmers, no. Mr Reid is and Mr Van Mueller.

Q. Van Mueller, that was right and then we've got sheep and beef and sheep and lamb's got an advocate in there as well?

A. Yes, Ms Ford was it from Port New Zealand.

UNIDENTIFIED MALE SPEAKER: (14:52:04)

That's Ms Aitkins I think.

5

MR PAGE TO THE COURT:

Q. Ms Aitkins didn't present. She sent one of her other staff.

A. Yes she did.

Q. Was it Ms Ford?

10 A. Mhm. So all of this could have been (inaudible 14:52:16). You know, the priority issue will affect their client base as well.

MS WILLIAMS:

A. My understanding Ma'am it doesn't affect Mr Van Muello's client and I
15 didn't think it affected Mr Reid's client either.

THE COURT TO MR PAGE:

Q. You might be right there but there'll be some horticulturals where it does
affect. Could you do me a favour and just contact those four anyway to
say that – I mean I'm happy for the opinion to be released but subject to
20 the embargo, it's not to be publicised until tomorrow morning at 9 o'clock
is when we'll uplift it and you might – if you could just relay to them the
discussion that we've had in Court today, yes. Is that all right?

A. Yes.

Q. Thank you Mr page.

25

THE COURT:

All right, anything else I need to do? I don't know that I need to release a minute
because I think my minute was good enough if anybody wanted directions to
get them in and really it's just now a lot of work for Mr Cooper and we've
30 confirmation that at least the two TA witnesses can come on Tuesday morning
from you Mr Page so if you can get that through to Mr Cooper. How does that
sound?

MR PAGE:

Thank you.

THE COURT:

Very good, all right, so now we truly are adjourned like I thought yesterday but
5 we are actually adjourned now until Tuesday morning. Thank you and we'll
distribute the minute, the opinion, thank you.

COURT ADJOURNS: 2.54 PM

COURT RESUMES ON TUESDAY 25 MAY 2021 AT 9.30 AM

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Notes of Evidence Legend

National Transcription Service

Indicator	Explanation
Long dash –	Indicates interruption: <p>Q. I think you were – (<i>Interrupted by A.</i>)</p> <p>A. I was – (<i>Interrupted by Q.</i>)</p> <p>Q. – just saying that – (<i>First dash indicates continuation of counsel's question.</i>)</p> <p>A. – about to say (<i>First dash indicates continuation of witness' answer.</i>)</p> <p>This format could also indicate talking over by one or both parties.</p>
Long dash (within text)	Long dash within text indicates a change of direction, either in Q or A: <p>Q. Did you use the same tools – well first, did you see him in the car?</p> <p>A. I saw him through – I went over to the window and noticed him.</p>
Long dash (part spoken word)	Long dash can indicate a part spoken word by witness: <p>A. Yes I definitely saw a blu – red car go past.</p>
Ellipses ... (in evidence)	Indicates speaker has trailed off: <p>A. I suppose I was just... (<i>Generally witness has trailed off during the sentence and does not finish.</i>)</p> <p>Q. Okay well let's go back to the 11th.</p>
Ellipses ... (in reading of briefs)	Indicates the witness has been asked to pause in the reading of the brief: <p>A. "...went back home."</p> <p>The resumption of reading is noted by the next three words, with the ellipses repeated to signify reading continues until the end of the brief when the last three words are noted.</p> <p>A. "At the time...called me over."</p>
Bold text (in evidence)	If an interpreter is present and answering for a witness, text in bold refers on all occasions to the interpreter speaking, with the <i>first</i> instance only of the interpreter speaking headed up with the word "Interpreter": <p>Q. How many were in the car?</p> <p>A. Interpreter: There were six.</p> <p>Q. So six altogether?</p> <p>A. Yes six – no only five – sorry, only five. (<i>Interpreter speaking – witness speaking – interpreter speaking.</i>)</p>
Bold text in square brackets (in evidence)	If an interpreter is present and answering for a witness, to distinguish between the interpreter's translation and the interpreter's "aside" comments, bold text is contained within square brackets: <p>Q. So you say you were having an argument?</p> <p>A. Not argue, I think it is negotiation, ah, re – sorry. Negotiation, bartering. [I think that's what he meant] Yeah not argue.</p>