

**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: 12 April 2021 held in Cromwell

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

NOTES OF EVIDENCE TAKEN BEFORE THE ENVIRONMENT COURT

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COURT RESUMES ON MONDAY 12 APRIL 2021 AT 9.33 AM**THE COURT: JUDGE BORTHWICK**

Good Morning everybody. I'll just do a brief call through just to see who is in the room and then a couple of matters that we need to discuss, first being the joint witness statements and secondly the minute that I released regarding (inaudible 09:33:45) priorities, so Mr Maw and Ms Melhopt for Regional Council, good morning to you, Ms Baker-Galloway, good morning, Ms Irving. Any party who is here who wishes to be introduced? Like Landpro, I'm sure you're here, you should be, so Ms Perkins is it? All right, anybody else?

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MS BRIGHT:

Good Morning (inaudible 09:34:10) from Landpro.

THE COURT: JUDGE BORTHWICK

Good Morning to you. Very good. So two things, we've got four joint witness statements and which represents (inaudible 09:34:22) of work and I understand both from reading the technical joint witness statements and also the last planning statement, but that work's not complete, so we need to talk about what directions do we put in place to ensure that it is completed, that people give over the time required to get the job done and done well. We had done a brief audit ourselves of the joint witness statement, the technical briefs and noted a number of things that needed to be finished, not sure that they are all finished in the planning statement, didn't have the time to do the equivalent task, so how do you see this working? We can again offer the services of now Deputy Commissioner Ross Dunlop so he's formally joined the ranks, re-joined the ranks, or so we can offer his services or is it the case that people ought to be making best efforts to sort those matters out themselves and fall back is Commissioner Dunlop?

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MR MAW:

(Inaudible 09:35:34) the experts to do some work without troubling Mr Dunlop, Deputy Commissioner Dunlop, without troubling him for the next probably week or so to see whether some of the loose ends can be tidied up, and if not then

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scheduling some further conferencing for the period of time between the end of this tranche of hearing and the next Cromwell week. I think there's a two week gap between those two tranches and we'll know probably later this week as to whether we need to get some formal directions in place to further facilitate that conferencing.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. So you're not seeking a direction now for people to pull finger and continue with the work that they've done or are you satisfied that they will do so?

10 A. I need to engage again with the Council's plan a bit more particularly the Council's technical team because there has been some further discussion as I understand it, directly between parties and/or their experts to say, well I understand there has been and I just don't know whether that has concluded yet.

15 Q. So how about his? We'll let the technical team and planners confirm it over the next week, but if progress is not made or if one party considers progress is not being made such that a further joint witness statement can be lodged in three weeks hence so that's two weeks in Cromwell plus another week, if there's any doubt about that, parties are to ask for direction and all witnesses will be referred into direct conferencing at short order which means the witnesses are to be available. I want to know what progress is being made by the time we rise next Wednesday. I think by then, next Wednesday, you will know or you will not know, you'll have a good idea whether people are actually committing themselves to the process and if they can't, I will direct them to, yes, okay?

25 A. Very good.

THE COURT: COMMISSIONER BUNTING

Q. Is that both the technical people and the planners?

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MR MAW:

A. Yes I think it is both. There's, yes. Yes and it looked like significant progress had been made but each of the statements concluded with some texts saying that not – that they ran out of time to do almost the concluding piece of work and I think both groups would benefit from a little more time.

THE COURT: JUDGE BORTHWICK

Good. So report by next Wednesday. Actually, I'll ask you to report to the Court because you're going to be here next Wednesday.

MR MAW:

Yes.

0940

THE COURT: JUDGE BORTHWICK

And I will probably issue a short minute to say that if the report is that insufficient progress has been made by next Wednesday, Court will refer technical and planning witnesses, to expert conferencing in the adjournment between the Cromwell sitting weeks. So priorities. So we issue the minute about priorities because still at this point in time we do not have a sense as to the significance, if any remaining significance of priorities and so we'll be asking questions of farming witnesses and also the experts to come on behalf of farming interests which are not generalised questions where the answer is, tossed off, yes they're important or yes there will be chaos or whatever, but we are really trying to dig into what is known if anything about the exercise of those priorities. It seems to us that the government had a transitional provision for deemed permits for a period of 30 years, which is to finally expire on 1 October 2021 – that is obviously a matter of submission – but that the government had assumed that, when it did expire, that there would be a fit-for-purpose water plan, which would take over those priorities in the form of minimum flows, allocation limits, and so forth. Well, that is not the case, and so there is a potential gap, but is that significant or not? Do we even know whether these priorities are being

exercised or not? Are these priorities taken over by water-share agreements or by some other methods that we are just simply not aware of? Because what this plan change is seeking to do, as I understand it, is to ensure that there is an orderly transition from the (inaudible 09:41:08) water plan to something else, which is the (inaudible 09:41:11) water plan, compliant with the MPS for freshwater management 2020, so we are bridging a gap, and so the focus of the Court's particular interest is on are there any missing elements within that gap, accepting, as we must, that there is no new plan in place or fit for purpose plan in place that necessarily enables the determination of minimum flows and allocation limits. So we are not best assisted by generalised statements. We are looking to or testing the witnesses to see what it is that they can provide the courts so that the Court can factor that into our thinking in terms of are there any elements which can and should be brought forward which have not been brought forward today. So that is our particular interest in it. Now, it may well be that permit priorities survive 1 October 2021, and that is fine, but should they just simply be brought into the plan by citing the name priorities as if that meant anything to any decision-maker in the future? Suspect not. Suspect that that would have been insufficient in and of itself, so we need to talk to people about that. What other? If it is to be brought forward because they have survived, then what should we be doing to recognise those? If priorities don't survive 1 October 2021 but are important, then what other methods are available to us to recognise the work being done by priorities as between abstractors, and should our interests be as between abstractors only, which is what we think priorities are about, or should it have an environmental focus, which is a particular interest in dock, Director General, Conservation. So we will be, again, looking to our alternatives, if priorities don't survive, but there's a gap, how can the gap be bridged, how should it be bridged? So that has our interest in this, and I cannot emphasise enough that the Court is simply not assisted by generalised statements about priorities or about water permits. There is way too much at stake to continue to give evidence like that, so it is a terse word, a terse note, but there is far too much at stake for the farming communities to be continuing on in that vein. All right? So we think we've got the right people in the room, particularly also when we start to hear from farmers, because they

should know. Anything arising? Good. Okay, so we are back with Ms Dicey for the Court's questions.

MS IRVING RECALLS**SALLY DICEY (AFFIRMED)****THE COURT: JUDGE BORTHWICK**

Q. Thank you, good morning, Ms Dicey.

5 A. good morning.

Q. Good to see you back again. We are going to hand you over to Commissioner Edmonds for her questions.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

10 Q. Good morning. I've had the benefit of the transcript, so I'm going to take the opportunity to ask you some follow-up questions on a number of matters that I am unclear about, and I will be looking for more than just a restatement of what you said in the transcripts.

A. Sure.

15 Q. I'll be looking to get some more information out of you. So I'd just like to start by exploring your experience with preparing resource consent applications. So would you be able to just briefly explain to me, in terms of your experience, what is your experience with that in recent times, particularly as it relates to deemed permits?

20 A. Sure, so in recent times, a lot of the applications that we've been working on, actually, we started work a number of years ago. Often the applicants, the permit holders will contact us and say, you know, we need to replace our application and it was a number of years out from 2021, from this year, and our work, particularly, has centred on group applications, and that started with the (inaudible 09:46:34) and then the Lindis were the two
25 main group applications initially, but a lot of smaller submission-catchments as well, so the Pig Burn is an example, a group of private permit holders in the Poolburn, and then, more recently, the Manuherikia are some of the main ones that I've been involved in, and so the early days is establishing who wants to be part of that group and establishing
30 principles for the group, and the evidence of Ms McKeague goes into that in some details, kind of the principled approach, because it is a huge shift for a lot of these permit holders to go from often individual competitive

approach, potentially within the water space, to actually shifting to a group approach, and the group approach was something that was promoted quite strongly from the regional council. There was a plan change, and I forget the number of the plan change, I'm sorry, a number of years ago now to facilitate the shift from deemed permits to resource consents, with expiry in 2021, and that was seen as a helpful approach, both in terms of managing the effects effectively, but also transitioning from priorities and an individualistic approach to a shared approach to water management, both for the users and for the environment, and so we start with the principles, and I could refer to those in Ms McKeague's evidence, if that's helpful, but it's generally along the lines of understanding what the environmental needs are and then nobody gains to the detriment of another water user, and then working through what that means, and so very much starting with the science and understanding the ecology, the hydrology, the stream. In the past, it also involved a lot of engagement with stakeholders, so in particular, DOC, Aukaha, and Fish & Game, and often, it was requesting input from those parties as to their values in relation to the particular waterways, and sometimes running field days with those parties as well. More recently, that has become challenge, because we have had a strong indication from both Aukaha and Fish & Game that they would not give written approvals for more than a six-year consent, and so it became more difficult to actually engage on the particular effects of a waterway, or else we had trouble, particularly with Aukaha, getting the representatives, except for a science represent, to come on-site and actually view the stream, and then it was about just preparing the application, working through how water had been used on the property, and for a lot of these applicants, it was the first time ever sometimes that a really comprehensive understanding of their system of water use have actually been kind of documented, some of them have already replaced deemed permits or mining rights into the deemed permits or water permits, so they still had the status under the regional plan as primary allocation because they were originally granted prior to '98. Sorry, I just lost my train of thought there, so yeah it was the first time that a lot of them had been comprehensively documented, so for the

5 large irrigation schemes, Ida Valley Irrigation Company is an example of that, the Manuherikia and their Irrigation Co-operative Society as well is another good example, very large complex systems of moving water around, a lot of permits covering activities, sometimes, discharge, retake, retakes and actual takes covering the same locations, so there's a whole lot of detail to kind of shake out and try and put into a clear kind of story if you like.

0950

10 Q. And so how many of those have there been developed through with the application stage?

A. To application? Ooh I'd have to do a count up.

Q. Well just a rough estimate?

A. Twenty or more.

15 Q. So are those individual applications or sub-catchments or catchments you're talking about when you give me that number of just individual applications?

A. Some of them are individuals and some of them are sub-catchments, the Manuherikia is an example where one application or one applicant can represent, so that with the Manuherikia Care Irrigation Co-operative Society, that represents in excess of 300 water users I think.

20 Q. So you've worked on that one and got it to the Resource Consent Application stage?

A. Yes so in the Man-

Q. And it's now been lodged I understand?

25 A. It's been lodged and so Manuherikia's a really interesting example actually, I don't think, I'm not aware of anything quite like it in the country. We've worked co-operatively with my company and two other companies, Landpro and Opius or WSP have worked co-operatively as consultants with clients throughout the Manuherikia to develop a joint process for the Manuherikia and that was really because of the vacuum in terms of limit setting –

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Q. Oh well that was going to be my next question. These examples that you've been involved with, how many of them are in catchments in

Schedule 2A that actually have allocation limits and minimum flows, or, well most of them do, how many in that situation?

A. So the Manuherikia, it's a bit of an odd one because there is a Schedule 2A limit but it - and that bites in terms of allocation, so the allocation cap exists where the sum of consented is greater than the Schedule 2A limit and that applies to the whole catchment. There is a minimum flow set at Ophir but that has never I think been reached, the minimum flow and I think that's because of augmentation from Falls Dam partly, so it's a very complex catchment from a hydrological level, perspective sorry, and it's recognised that new flow limits have been worked on and we had requested repeatedly to the Regional Council to develop an MPS compliant framework for the Manuherikia head of the deemed permit expiry. At one stage the Regional Council was only going to set a minimum flow and we asked specifically of the Council, did that include an allocation limit, because it had to be a fully MPS compliant framework. Because that framework was not being developed, the catchment (inaudible 09:54:41) that – and this is before PC7 was even on the radar, had been thought about, that the applicants would basically have to fill that gap themselves and so the catchment came together and this is a big catchment where the water users don't all know each other, and come up with a cohesive approach that was s MPS compliant as an applicant could possibly do and I know there are always going to be shortfalls with that coming from an applicant, but it was an attempt to fill that gap as much as possible. In other catchments, the Pig Burn is a tributary of the Taieri and so there is a minimum flow and a allocation in the Taieri and so that one was about setting residual flows, the same with the Kyeburn, so that had a minimum flow and an allocation limit and then several tributaries to the Clutha and now they're a bit funny because they also have an allocation limit, they're not the sum or the consented max, but they're the other default in the primary allocation policy.

Q. Oh the policy –

A. The 50% -

Q. The policy which, I think there's been some criticism of the policy?

- A. In terms of – yes, well it's the how you determine what the primary allocation is. So all the trips going into the Clutha are also subject to an allocation limit, and no more water is available to be granted in those tributaries either, so that's, you know, that's an awful lot of waterways with an awful lot of deemed permits sprinkled along them, although the majority are not in those tribs, I would say, the majority of deemed permits, the Manuherikia, the Taieri, Arrow, Cardrona, I think, are the biggest concentration, but these other tribs are subject to an allocation limit, but no scheduled minimum flow, and so there, it was about residual flows, and on some of those tribs, there may only be one water user or there could be several.
- Q. So have they all got, the ones you've worked on, do they all have residual flows proposed where there's no allocation limit?
- A. So there's an allocation limit in almost all of those.
- Q. Sorry, with or without an allocation limit, do they all have residual flows, or only those ones with the allocation limit?
- A. So in terms of our applications, every application we've worked on, we assess the need for a residual flow. In some cases where the waterway dries up naturally below the take and the hydrology supports that, we haven't always proposed a residual flow, because leaving a residual flow, and then it's going to drop to ground anyways, the river naturally, or the stream, wouldn't naturally support values downstream of the take anyway, so sometimes, that's a consideration or a factor, but in every case, we assess the need for a residual flow, and so that's one of the considerations that's critical in the development of those applications. That's one of the key mechanisms to manage the effects of takes.
- Q. So you're also doing applications outside of the schedule 2A water bodies, are you?
- A. Yeah, so those are the tributaries that feed into the Clutha River, and so Long Gully is an example there. We've done the Bannockburn, which is an incredibly complicated system of using waterways and retakes and then private rights being taken at the some location as company water, and so that's a very complicated, probably the most complicated one I've seen, and again, that's being done at a group scale, and a range of

residual flows proposed as part of that application, and so that's not a two-way catchment.

Q. Not a two-way catchment.

A. Yeah.

5 Q. I suppose I was just trying to understand whether there was a difference in approach, given that you've got the allocation limits and the minimum flows in the schedule 2A ones, but you haven't in the ones outside that. So you've mentioned residual flows, but what about other mechanisms?

10 A. Other mechanisms is the flow-sharing agreement, and that is, as Mr Hickey said, that's one of the mechanisms used to help transition away from the priorities. In the Manuherikia, we've proposed a minimum flow for the main stem of the Manuherikia, and a system of integrated residual flows, so not only take-specific residual flows, but residual flows at the downstream end of key tributaries feeding into the main stem, and so
15 there's a whole system of kind of integrated water management that's proposed with the Manuherikia catchment, and that's focused on where critical values are, understanding, say, fish passage, understanding, you know, where the particular habitat values are for particular species, and also considered water quality effect, so all of those reports have all got
20 kind of detailed analysis of water quality and trying to link those back to land uses and what may need to shift in the future to address that. I think Mr Hickey talked in detail about the hotspot, identifying hotspots within the catchment, with the Thomsons Creek wetland project, and so they're probably some of the key. Other facts are the drive to improve efficiency in terms of water use, and that's been a response to both the operative
25 plan and the national policy statements, and so on farm commitments to on farm changes, particularly in the past, we've seen a slowdown of that recently with PC7 where it's much more just about holding steady because of the uncertainty.

30 Q. I guess that was a question I had, I mean, you've talked about the bigger process that you're working on, and then PC7 comes along.

A. Yeah.

Q. So is it capable, then, of being addressed in terms of controlled activity in terms of PC7?

A. All of those wider matters?

Q. Well, I'm not sure all of those wider matters are. That's the purpose of my question. I mean, what could be achieved, I suppose I'm asking you, through the controlled activity status that's now being proposed?

5 A. I think, in my opinion, it has to be a controlled activity, and I guess this reflects the evolution of my thinking from the permitted activity, now a simple controlled activity pathway, is a very process-orientated pathway. Because all of those other considerations, they're complex, they're not necessarily agreed with by other stakeholders, you know, the first
10 proposal is not something necessarily that all stakeholders will agree with, so that's a complex process of assessment by the regional council, input from other stakeholders, and they require, often, as soon as there is a change, a loss of reliability of supply, which comes with residual flows, adherence to a minimum flow, then that requires changes on farm, and
15 that can be putting in storage to address loss of reliability of supply from the river source, or changing your infrastructure on farm, and as soon as you trigger any kind of change like that, then a short term of consent, there's just a complete mismatch there between the two. I think this process is incredibly hard on the permit holders, and so I think the
20 simplest approach possible to allow them to get through this stage and for everybody in Otago, all stakeholders, to actually focus on the limit-setting, would actually, you know, be the most helpful in terms of, you know, we're talking about the controlled activity rule.

25 Q. So can you just run that past me again? I lost the thread of what you were saying at the end. So I've asked you a question about the controlled activity pathway and what that may be capable of achieving over the short term, and I wasn't clear about your answer.

30 A. I don't think it can achieve anything environmentally or from an efficiency perspective. I think it can only be a simple process, or it should only be a simple process rollover, because if you require anything else, that can require on farm changes, which requires investment financing, which won't be possible to obtain because there's only a six-year permit and a lot of uncertainty about the future, so I think there's really, through the

controlled activity pathway, I think it's process orientated rather than process plus. Is that a more helpful answer?

Q. Yes, I think that is, thank you.

A. Sorry.

5 Q. So the next area I wanted to understand a bit better, from looking at the transcript, is this whole question of priorities. We haven't had anything very definite about priorities, we've had a lot of –

A. General?

10 Q. Yeah, well, also quite a lot of speculation as to what may or may not be happening. We've had no actual examples provided of where priorities have been exercised, and reasons for their exercise, and even the methods for the exercise. You had talked about dial-up and that in a general sense, but in terms of some concrete examples of priorities, presumably, when you're working towards these applications and on these applications, the discussions that you're having are surely going to have the word "priority" mentioned more than a little, and people coming to the table probably take it that, well, I've got these priorities, that actually puts me in a better position. Would that be right?

15 A. Yes, absolutely, and that, again, goes back to those principles and the fact that, with a lot of these groups in particular, we've been working with them for years now, and partly the reason for them coming together as a group is because there are priorities and they understand that priorities are going to finish and what then? And so an example where priorities have been used is the Kyeburn, and that was one of the earlier applications that went through, and I can give you a little bit more about that one. The other one is the Pig Burn, and that is actually one of the examples I included in my supplementary evidence was from the Pig Burn, and in that one, it's quite an unusual system of the order, because I think some of the lower priorities are downstream, and the highest priority is the second most upstream water take, of the kind of downstream reach, there's one way up in the hills that doesn't really affect anybody else, and so their priorities were used, particularly between priority one in a lower priority who was situated higher in the catchment, so between those two water-users, and then further down between

another two water users, and so working with the group, many of the early meetings were about things such as priorities and access to water, and they were critical. You know, throughout Otago, I think where priorities have been used and where people have held higher priorities, it's affected land values. That's how critical they were, and so with the Pig Burn example, as part of that proposal – and this is something else that we've done with applications – another way to address environmental effects from water takes, not just residual flows, but also reconfiguration of takes, and so the Lindis is probably the, you know, the largest-scale example of that, closing the three races and having a dispersed system of small takes. With the Pig Burn, three of the water users were actually going to move their points of take and put them to one point of take. Because of that that particular location we'd identified, it was identified it was a gaining reach, they would have less impact on the values in the river, and so that's a big reconfiguration, because two of those water users had exercised – my understanding – had exercised priority, one against the other, and so moving forward, they were letting go of that and actually having a shared piece of infrastructure going forward. Two of the other water users which have used their priorities in that example and it's actually written in the application that they had had the priority 1 had exercised priority over priority over priority 5 and that they were going to enter into a side agreement to acknowledge that they have those priorities, that those priorities had been utilised by priority 1 and that they were entering into a legal side agreement outside of the consent process to try and address that to protect that priority holders, you know, priority 1's access to water and so and that, that was the example in that case.

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Q. So sorry, I've lost – was that the Pig Burn you've just been talking about?

A. Yes that was the Pig Burn.

30 Q. And then you mentioned the Kyeburn?

A. Yep, so the Kyeburn was another example, in that case again we had a system of residuals throughout the whole catchment with the key kind of residual at the bottom of the catchment before it enters the Taiera River.

There was also a water supply agreement. They formed a company, was

it a company or a – some kind of legal entity and that had with it, not just its constitution, but a water supply agreement or water sharing agreement as to how those water users within that catchment and from memory, it was a few years ago now, but there might have been 16, 18 different water users were going to manage the flow sharing within that catchment down to the residual at the bottom of the catchment so the-

5

Q. So that flow sharing agreement was that a formal agreement and part of the consenting process or was that outside of all that, a side agreement?

A. It was a side agreement, yes, so I'm not, from memory I don't think it was mentioned in any of the conditions of consent, I'd have to go back and check, but from memory I don't think it was and so Ms McKay is more involved in the detail of developing those supply agreements with clients than I am, so she will be very well placed to talk you through the details of that.

10

15 Q. Sure. So just going back to that principle that you said drove a lot of the work which is that, I think it was nobody gains to the detriment of another water user and I was just trying to understand that a little bit better, is that water user in the sense of an abstractor of water?

A. Yes, yes. So that's very much - so the first principle is about, well the environment, looking at what the environment needs and that means, the assumption there, is that everybody, all the abstractors will be losing something, they will be losing reliability, a supply or access to the water to some degree because you start with how much the environment will need and so when you're then looking at people's loss of access, its trying to do it in a fair way that takes into account historic access including priorities, but it might also not be a priority, it might be that one person was just lucky enough to have their take in a gaining reach or was upstream and there wasn't a priority, so could get access to water, but it's very much about, yes, just trying to be as fair as possible so that everybody's going to lose a bit, but not to the detriment, or, yes, nobody's going to gain at the detriment to somebody else as well.

25

30

Q. So it's a negotiation process is it? So you might –

A. Very much so.

Q. – might think of it –

A. Very much so.

Q. – that way. So I guess trying to understand the extent to which there are priorities in all of these areas, is there a sort of go to source for that, that you've used when you've been doing your work or does that just have to be done on an individual basis going through the historic permits and things?

5

A. So it's very much conversation with the permit holders themselves. So some permits will have a priority on them, but they have never been used, so you can start with the permit but that will only tell you so much, that one, that illegal right exists, but so of the two examples that I put in my supplementary evidence, the first, the priorities is the Pig Burn and priorities have been utilised there, the second I think was in Lauder and those particular priorities between those two permit holders, my understanding is that they haven't been exercised so it completely depends on the permit holders what –

10

Q. And you have to ask the permit holders –

A. Yes.

Q. – whether they've been exercised and if they –

A. Yes.

15

Q. – haven't owned the land particularly long, they may not actually know?

20

A. They will, not so much about the length of land ownership because often that's part of the due diligence in buying a property is not just the face value of your permit but also actually your access to water under that permit and that's very much informed by the priority on the permit and whether – so if you're a lower order, if you're 2 or lower, whether the higher priorities have exercised their right and whether that restricts access, so, you know, and we, our company has done due diligence in terms of purchasing properties and that's very much a factor in understanding that access to water is whether the priority has been utilised.

25

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Q. But, I am just a little unclear about that, if it hasn't been exercised, that doesn't necessarily mean that it couldn't be exercised in the future?

A. That's right, that's true.

Q. Yes.

A. Yes.

Q. So it might be a red flag sort of issue?

A. Yes, yes absolutely.

Q. Yes.

5 A. And so if some of it, so if there's a property with a higher priority than you, you and your neighbour have a very stable relationship for years, your neighbour hasn't exercised their higher priority, they sell their property, the new owner is entitled to start exercising it and I'm sure there are examples of where that's happened. I'm not actually aware of where
10 that's happened, but I'm sure there are examples.

Q. So if you're working with a group as the example that you have given of some other group –

A. Yes.

15 Q. – and so they all agree that, okay, well if there are issues about priorities, we're either not going to worry about that or we're going to do something on the side agreement that isn't going to damage the overall basis that we're proceeding on –

A. Yes.

20 Q. – if you're doing applications, do you mention the word "priorities" at all? Do you set out – is there anything in your AE that talks about priorities?

A. There might be passing reference but I mean we do a section on in our AEs in terms of affects on other water users. Often because we do them as group applications in the sub-catchment basis, so that is within a tributary, a contained kind of system of priorities, then that's already been
25 addressed in the proposal internally, so it won't always be explicitly recognised in say that section of AE. In the Pig Burn we did mention it very briefly and pretty much to say that the – the other priorities have been set aside, but the priorities between, I think it was priority 1 and 5, were being addressed in a side agreement, I can't actually remember if we
30 specifically mentioned it in the Kyeburn, so a lot of the time it forms part of the background work within the group and it's about the group coming to an agreed position after the kind of the environmental aspects, the other, all the other environment aspects looking after the waterway being addressed.

THE COURT: JUDGE BORTHWICK

Q. Can you say that again? I'm sorry I lost the thread of what you were saying?

5 A. So it's very – so it's often contained within the proposal, but it won't be explicit so it's part of – it very much forms part of the development of the proposal in terms of the management between themselves, whether it's the water supply agreement, but it's probably, I don't think we often mention it explicitly in the application in detail, how it's being dealt with, often if there is a water supply agreement we'll mention that there's a water supply agreement. That may reference back to the priorities, or it may just be “this is how this group proposes to flow share down to these limits and manage to the limits,” and perhaps that reflects the fact that it's very much been something between water users, historically, and that the council hasn't been involved in managing, so quite possibly, that's a, you know, reflection of that.

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Q. So I have noted, your evidence is: “Often, albeit that the applicants for resource consent will have proposed a new take and use of water, taking into consideration existing priorities, how those priorities are managed as between water users is often not mentioned in a resource consent.”

20

A. Application.

Q. Yes, application, and secondly, you may or may not mention the existence of a water share agreement in an application for resource consent.

25 A. No, sorry, I'd reframe that to say we do mention that there will be a water supply agreement, but that might not reference back specifically to how it replaces priorities, so we do note where there's going to be a water supply agreement or a water-sharing agreement.

Q. So what's the difference between a water-supply agreement and a water-sharing agreement? You're using different terminology.

30

A. Sorry, sorry, I should just use one. I'm just using them interchangeably there. I suppose, more technically correct approach, water-supply agreement is more about an irrigation scheme and its supply agreement to its shareholders, and a water-sharing agreement is an agreement

between abstractors to how they are going to manage their access to the water body.

Q. So you have been referring to water-sharing agreements?

A. Yes.

5 Q. Yes.

A. Sorry.

Q. So some of these applications that you're involved with, presumably, it may not be possible to get everyone in the tent, some people may have got new water consents already, for example?

10 A. So in the Manuherikia, yes, there are some outside of the tent. Some went through earlier, although one of the main ones to go through earlier in that example was the Hawkdun Idaburn scheme, which reconsented in 2001 and were granted long-term permits, but they are still formally part of the Manuherikia catchment group and have been active members of
15 that group. There are a few, or maybe three, five, permit holders, I think, that I can think of off the top of my head that aren't formally part of Manuherikia catchment group approach, which I think is quite remarkable, considering just how many permit holders there are and the geographic spread of them.

20 Q. So how do you deal with that, the fact that not everybody's in the tent?

A. So we anticipate that whatever minimum flow limit will be imposed, they will also have that imposed on their permits.

Q. You mean that the regional council will review their permits and do that, even though you're not the council setting the minimum flow and the
25 allocation limit that you've got your group working to?

A. Yeah, so I was actually referring then to people who had current applications who were replacing their permit, so if, you know, there's a minimum flow proposed for that catchment, we'd anticipate that it would be, you know, a condition of their consent as well.

30 Q. But you're relying on the regional council –

A. Oh, absolutely.

Q. – to review those –

A. Oh, well, if they're a current application –

Q. – other permits if they're not current applications.

A. Yes, yes. We have no control over that, yeah.

Q. As a matter of interest, how many permit holders are there in the Manuherikia who have consents which are still running and are not going to be expiring before 2025?

5 A. I couldn't tell you that number off the top of my head, I'm sorry. I know the Hawkdun Idaburn company takes water above Falls Dam is the key one. I'd say I think there are very few.

Q. When you say Hawkdun Idaburn?

A. Hawkdun Idaburn.

10 Q. Hawkdun. They are the key one in what respect, what do you mean by that? Because they have got a long-term consent which is still running beyond 2025?

A. Yeah, they're the only one I'm aware of, and because they're an irrigation company, rather than a single-permit, you know, a single landowner, so they're supplying water, and they transport it all the way from the top of the Manuherikia Valley over into the Taieri catchment, but they're the only one I actually know of in terms of surface water abstraction. That's not to say that there might not be a few others, but if there are others, I imagine that they'd be, you know, small individual landowners. There were some, there was the Jopps, I can't remember the name of their station, that were replaced maybe four years ago, but not ones that I've dealt with myself.

20 Q. And is your assumption that if Manuherikia is processed according to the application and granted, that the Hawkdun Idaburn Irrigation Company will be reviewed in line with whatever is set on the application or applications which are now before the regional council for Manuherikia?

25 A. I wouldn't say it's my assumption.

Q. Does that need to take place or not?

A. I think a separate assessment of their impacts would be helpful.

30 Q. Does it need to take place in the sense that it is important to review that existing water permit to enable whatever has been proposed for the wider Manuherikia catchment to take place?

A. I don't think it's critical for the health of the water body in the Manuherikia itself.

Q. No, I am talking about abstractor interests only.

A. I think it would be useful to review it, definitely. I think it would be a good thing to do, to bring things into line, yes.

Q. Is the exercise of the new proposal for the Manuherikia, contingent upon a review of the Hawkdun Idaburn?

5 A. No.

Q. That is all I was getting at.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

10 Q. So the work you've been doing, you've just factored that consent that's outside the tent in as a given?

A. That's right, yeah.

Q. So having done that, that would have effected everyone else in terms of the work that you're doing?

15 A. Not hugely, because they're above Falls Dam, and so because it is such a complex catchment with, you know, storage of water at the top of the catchment that then can augment flows downstream in summer, and that take's above the dam, so it has a lesser impact in terms of what – yeah.

Q. Sure, but there must be other examples where –

A. They've already been granted?

20 Q. Yes.

A. Yeah.

Q. That could have quite a major impact in terms of the principle that you've been working too if they were in the tent as well and being reviewed.

25 A. I can't think of another example in terms of a permit that would either undermine the proposal, or they would be scattered amongst tributaries, and I know, so I'm thinking of one example, the other one I mentioned, and I'm sorry, I can't remember the station name or the actual applicant's name because it wasn't one I dealt with, they've still been part of the discussion about the future of water management within that tributary, so
30 they have still been brought into discussions about flow-sharing within that particular at the bottom of that, you know, meaning the residual flow that we've proposed for that trib.

Q. So they've been brought into the discussions, but with what outcome?

A. I'm not actually familiar with that specific, I haven't worked on that tributary, sorry.

1030

5 Q. So most of the applications that you've been involved with and are aware of, do you have an expectation in terms of review clauses?

A. Yes and we've got much more specific detailed review clauses on recent consents granted for water abstraction in Otago and I think most permit holders now with this process are aware that if they got granted a permit now, that, I say if they were in the Taieri, that the minimum flow could possibly change as a result of the limit setting process under the MPS, as part of the FMU process and that that could very well result in a review of their permit, so I think that's now much more an accepted part of it.

10

Q. So is that, there was explicit review clauses that signal that future re- well the MPS FM review and the likely change to the plan and those sort of things –

15

A. Yes.

Q. – triggering a review?

A. Yes.

Q. But it still requires the Council to –

20 A. It does.

Q. – undertake the review?

A. Yes. And that has been something that's been –

Q. Or trigger the review, yes –

A. – that's - yes that's right and that has been foreshadowed in Otago, that was the approach that was going to be taken under the current, the operative plan in terms of those 2A, the schedule 2A catchment where there was a minimum flow set in the Taieri as an example of that we were getting new permits issued but no – the minimum flow isn't a condition of consent on those permits but people know that - or anticipated because the plan said it would happen, that once all deemed permit applications were in or at 2021 the minimum flow for the Taieri would be applied to their permits, so we've actually had some permit holders who have been voluntarily flow sharing in anticipation of that to meet the minimum flow even though it's not actually a current condition of their consent.

25

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Q. Sorry, I just need to switch horses, I've just got a few other things that
so the – you may or may not be able to help me with this, tell me if you
can't, but where you might have an irrigation that's supplying a variety of
purposes, so you might be providing stock water, drinking water for
5 people, and then you've got your standard sort of irrigation to support your
pastoral activity or your particular horticultural activities, are all of those
things broken down in the different activities and the different allocations
that are being sought?

A. In the applications?

10 Q. Are all of those separately broken down in an application that you're
involved with?

A. So for those large schemes, what we do, is we undertake a mapping
exercise and identify and we utilise Aqualinc as a bit of a template here
because everything has been assessed against those efficiency
15 requirements and Aqualinc uses at a kind of a broad level using water for
pasture, viticulture and then I think it's cherries but we apply – so the
cherries one is applied to horticulture in general and then market
gardening which is really a North Otago thing in terms of how Aqualinc
have developed it, so those are the kind of the high level categories in
20 terms of land use, the pasture, the viticulture and the horticulture and then
on top of that we identify where it's required, stock water and the needs
of stock water, frost fighting and there are either requirements based on
kind of a his- you know, frost fighting requirements in an area and some
allowance for distribution losses. A domestic – a lot of schemes don't
25 actually supply water as potable water, so there may be some users who
utilised water for domestic supply but that's not actually part of their water
supply agreement, so we haven't factored that in for the larger schemes,
for an – on an individual farm level, or a much smaller focused application,
again it's identifying whether they're using their water for pasture,
30 horticulture, viticulture and so sometimes it's quite complex, depending
on the application and their water use where people also have some
amenity areas that they might water or lifestyle blocks and so we try to
acknowledge that and group it in to say pasture or horticulture, or one of
those two. So try to acknowledge the use and then the application itself

will detail, if it's a smaller application specific to private permit holders, it goes through and outlines what they do on their farm and the breakdown of what they're doing with the water, in terms of area what infrastructure they're using, so we do try to give that specific information as possible in terms of what's happening on the properties.

THE COURT: JUDGE BORTHWICK

Q. So we've heard either cross-examination suggesting to the contrary and we have, and evidence of a highly generalised nature also suggesting to the contrary that it's not possible to understand what is the area under irrigation, is it your evidence that that is wrong because that information is being supplied now by applicants for water permits?

A. So I think just trying to understand what – in terms of your reference, so we do know the irrigated area at the moment, absolutely, and property owners can identify that, I think the concern was about the providing proof based on a certain date of particularly retrospectively of an irrigation area, so being able to prove categorically one way or another that an irrigation area was in by a certain date, so it was that more the date reference that was the issue, but...

Q. Why's that an issue?

A. Again that was within the context of the controlled activity rule and keeping the process very simple.

Q. Why's that an issue? In the context of a controlled activity rule –

A. Yes.

Q. – why is it an issue for any irrigation company with a water supply- any irrigation company supplying water or alternatively any farmer taking water and using water to establish what area of land is under irrigation?

A. At a particular date?

Q. At a particular date?

A. Yes.

Q. I don't understand what the issue is?

A. And I was thinking particularly about the Manuherikia there where they have 300 shareholders, over 2000 hectares and land being subdivided, sold, irrigation is not static in terms of –

Q. Just pause a second, if we're taking Manuherikia as the example –

A. Yes.

Q. – the 300 shareholders to – what's the name of the entity, the company there?

5 A. Manuherikia Irrigation Co-operative Society.

Q. The Co-operative Society, 300 shareholders to that, those shareholders are party to a flow sharing agreement?

A. A water supply agreement.

Q. A water supply agreement?

10 A. Yes.

Q. That water supply agreement doesn't note or it is agnostic, it doesn't note at all, what the area of land is to be irrigated?

A. It does but that's based on a very outdated Ministry of Works calculation which isn't actually accurate in terms of what's happening on the ground?

15 1040

Q. Okay, so the water-share agreement for Manuherikia co-operative society is inaccurate in terms of what is actually happening on the ground, that is your evidence?

20 A. Yes, in terms of there is a mismatch there between how the supply agreement works in terms of what they've signed up for, in terms of their shareholding and then the water that they received from the company, compared to what they might actually do on the ground. On the ground, they might irrigate less, and they might not take their full allocation from the company. The water supply agreement just speaks to their
25 entitlement, so they might only irrigate half of that, or some of them may be able to spread that water further, because, as I understand it, the calculations, the old Ministry of Works calculations, probably wouldn't be something that – well, might be amended, in today's terms. So that's really about that legal entitlement in terms of the supply that the
30 landowner can ask for and then the payment that they give to the company as well, or to the society.

Q. If the regional council is interested in understanding what the area of land is under irrigation, what information should it be supplied as part of a controlled activity?

- A. It starts with a number, but I always numbers have to be supported by something, so then it would be mapping to support that number as well.
- Q. And that mapping applies to, obviously, an area of land which may or may not be the whole parcel of land under irrigation in any one year. And that would be very normal, some blocks are irrigated, other blocks are rested, and that changes year in, year out.
- 5
- A. Yeah.
- Q. And it depends on what crop rotation is happening, and it also depends on what stock has been put to the land. Is that not so?
- 10 A. Yes, or if you're in the process of changing your setup, and I think the date and the rule – was it 2018, 2019? So my concern was more centred about going back to a particular date and just going through that process, and, you know, targeting a specific date retrospectively and saying, okay, on this date, what was your irrigated area, and give us proof that it was that on that date or in that season.
- 15
- Q. And you are saying that farmers would not have a record available from 2018?
- A. Or some kind of proof specific to that date. It's not insurmountable.
- Q. No, it is not insurmountable, and that is the point, is it not? It is presented as insurmountable in this case, but I do not think it is, and so I am trying to draw out of you what, if this is an important control, should the regional council be looking at?
- 20
- A. So I definitely do not see it as insurmountable. My concern around that was more focused on keeping the controlled activity pathway as simple as possible, and so –
- 25
- Q. Understood, but now we are driving into the detail.
- A. Yeah.
- Q. So what is the detail that the regional council would look for in order to establish what is the area under irrigation?
- 30 A. Yeah, and so I think, again, it's a number supported by maps and, you know, whether that's current irrigation area at the date that it's lodged is the line in the sand, or, within, you know, a span of a particular number of seasons may be helpful, one of those options.

Q. Presumably, that area under irrigation, there is a date line in the sand somewhere, would reflect the setup or the irrigation systems as of that date?

A. Yeah.

5 QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

Q. So I just wanted to understand, you talked about a water-sharing agreement, so how does that relate to a low-flow management regime – I’ve forgotten the actual terminology at the moment – or a rationing agreement?

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A. A rationing, low-flow sharing agreement, a sharing agreement, all pretty similar things. So all of them require as a starting point a limit, and so setting the limit is the critical thing, because all the background work goes into that, actually what is the limit? What does the limit need to be? What are the values? What is required to protect those values? What is appropriate?

15

Q. So when you say “limit,” what do you mean?

A. So a minimum flow limit or a residual flow limit. So what are we managing the abstraction down to? And so –

20

Q. Sorry, finish your answer.

A. And it’s in an abstractor’s best interest not to hit the limit and then be turned off, so what they try to do is to reduce their take as they approach a limit so that they’ve still got some access to water. Some small access to water is better than complete turn-off once you reach a limit, so the limit is an incentive, so that flow-sharing begins as flows drop down towards the limit, so that’s, you know, people reducing their take down to that limit, and in a kind of co-operative sense, and I’m not the one within our kind of team that has, you know, actively developed these. Mr Hickey and Ms McKeague are more involved in this than I am, but it may be proportional reductions, you know, across the different abstractors as flows start to drop, so everybody drops back to 80% of their take, or, you know, and then down to 60% and down like that, or it can be turnabout, you have water one day, I have water the next day, again, at a reduced

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limit, and then, yeah, with the aim of keeping some abstraction available while not, you know, hitting that limit, whatever that limit may be.

Q. So you've given me the minimum flows and residual flows, but you haven't mentioned primary and supplementary allocation, so how does that mesh with this?

A. Okay, so supplementary allocation is not even in the picture at that stage, so we've got the two bands of water, the supplementary allocation are when flows are higher in the river, so by the time you're even really getting down to any kind of flow sharing as flows are dropping, we've only taking about the primary allocation, so sharing within that primary allocation block, down to the residual and minimum flow limit. So there are flow limits set for supplementary, but the supplementary allocation is allocated in bands, and the access to water is not so critical, it's not at a time when, you know, you've got your crop going, dry conditions, flows are dropping, it's about accessing water when it's available to full storage, so it's a whole different scenario. So, really, these flow-sharing agreements are within primary allocation only.

Q. And to go back to my question, you talked about limits, but you didn't talk about primary allocation limits, so how does that fit into what you're talking about?

A. So these water users or abstractors, all these permits are within the primary allocation block, and so they have the ability to apply for their permit because they qualify as being within that primary allocation block. The policies that are, you know, talked about as the sinking lid policies apply and are a factor in terms of when we're developing the application. Water that they haven't had a history of accessing, they know they're not going to be able to apply for it under those policies, and so it's that lesser of their history of use and the Aqualinc calculation of what's efficient that they will be able to re-consent as or seek replacement allocation for under the operative plan. That's a very long-winded answer.

Q. I'm just not sure whether the environmental purpose of these allocation limits is coming into it. You've mentioned efficiency.

A. The key factor, and, you know, we're working within the framework of the current plan in terms of these current applications. In my opinion, the key

mechanism at the moment to look after instream values and other values that, you know, aren't abstractor values is through the minimum flow limits and through the residual flows, because those sinking lid policies do reduce down the allocation, but at the moment, they only, in terms of environmentally, they speak to efficiency, only being able to take the water that, you know, is efficient or reasonable for your purpose of use and that you've historically been able to access, so that's how the current plan is set up. So we have seen, in some of the applications that have been granted, we have seen some quite significant drops in allocation across a sub-catchment or a catchment, and that's beyond just a reduction in paper water, but actually a reduction, even, to their actual abstraction as well, so below their history of use, and then that's further affected as well in terms of their reliability of supply, with the setting of minimum flow limits. So setting the minimum flow or the residual flow, that essentially keeps the most reliable water for the water body, and other values that have been identified.

Q. So I think we did have some evidence about how allocation limits can have environmental benefits. You weren't here for that, presumably, or you don't agree with that, or because you're working within what you see as the current framework of the plan, you don't see that allocation limits have an environmental benefit other than in the efficiency of use sense?

A. I think they can. I think the key, in my opinion, the key mechanism for that, though, is the setting of a flow limit, so not an allocation limit but a flow limit, whether that be called a residual, a minimum, or, you know, it's called other things in different regions, so I think that if you get that right, then you've set aside that most reliable flow in the waterway for values. Once that's done, the allocation is still relevant, but it has a lesser impact if you get the flow limit right.

Q. Yes, I think the evidence related to fluctuation of flows are not necessarily driving things down to the minimum flow, so you don't get that variability.

A. That's right, and so that is something that we look at with our applications. We do look at things like flushing flows and the variability. I think there's some strong information in the Manuherikia that there was a very limited effect on holding flows down in terms of abstraction had a very small

effect on that variability. I think it was, in terms of flushing flows on periphyton it was a change for three months' duration by an additional three weeks, so that is something that we look at in terms of the applications, and it's important as well that the flow sharing agreements, because there's an incentive for water users not to hit the minimum flow, so then they all have to turn off to try and keep it above and so what tends to happen, it's I think very difficult from what I understand to keep it at a static level and so they'll drop their rate of abstraction and then it's really about sharing amongst themselves their access, the more, abstractors you've got, it's really about them having to share that as they drop it down and try to keep above that minimum flow and so the flow will drop – will bounce around a bit because there's so many variables.

1055

Q. Well –

15 A. Yes.

Q. – sure understand, but that's within quite a confined band if your aiming for the –

A. Yes.

Q. – minimum flow or to be above the minimum flow, anyway I don't feel I need to explore that anymore, so I guess my last line of questioning relates to this vexed issue of duration of consent and the situation where people claim that they need to be doing X and Y and Z and this is going to be very costly and so they need a long duration to their consent and I think you did have a number of questions relating to your drafting proposition for that, but I really wanted more to know about your experience with the durations that are being given with one of the reasons being advanced, the work that needs to be put in and the cost of it and those sort of things, so are you able to briefly explain your experience with –

30 A. Sure.

Q. - durations and that work that needed to be done, and argument for a -

A. Yes.

Q. - lengthy period of time is part of the decision making in the end?

A. Sure, so because we're developing the application, because it's in the round with all the different factors and because we have still some historical, these are kind of long-held permits rather than say in other parts of the country where they're new schemes, long held permits used for many, many years on these properties and we're setting for the first time, flow limits in terms of residual flows particularly as well as minimum flows, then often as soon as you change that access, that and effectively reliability and supply, then it does result in requirements to change what you're doing on the farm very frequently and so people have been investing in storage in the past years and also the very strong messaging about needing to be efficient have been investing in efficient infrastructure but there's also a large group of people, it all depends on your appetite for risk, your financial status, there's – it's huge variation, other people haven't done that yet and have been waiting for the outcome of their permits before they do that and been wanting to know what those limits were going to be in terms of just how much access they might lose, how much reliability and supply was going to change and so it's very much about the on farm changes that they were anticipating having to make and then getting financing for that and I have been to hearings recently where there's been evidence from the permit holders banker saying that they need 15 to 20 years in terms of – that's what the bankers are looking for in terms of security for their investment.

Q. So you have a group of people who've gone ahead –

A. Yes.

Q. – been more proactive, been getting things underway –

A. Yes.

Q. – and you've described another group of people who have been sitting back and now saying, oh I need a much longer period of time in order to be able to do these things and then you've got the potential for the NPS process for the fresh water that's the payout that's going to put quite a different complexion possibly, potentially, less than some places –

A. Yes.

Q. – on the regime that they will be working within, so I mean there's a lot of factors at play here isn't there?

- A. Oh it is, it's hugely complex, it really is and, yes I think it's incredibly stressful on people, both those who have invested already and had the expectation based on what they could see happening around them in terms of long term permits being granted and so had gone ahead with investments on that basis and then other people who yes, had for whatever reason wanted to wait and see, so it – it's a very complex situation from that respect.
- 5
- Q. And then you've also got to look at the paradigm shift –
- A. Yes.
- 10 Q. - and the need to make sure that you're not going to compromise that, so –
- A. Yes and I think one of the most complex kind of examples in the mix potentially are some of the large dams, where I think they do need to have work done on them and probably that's important from a health and safety perspective and from a risk perspective and I'm not sure how they're going to manage that with the six year permit, those large dams, whether that work just goes on hold and those, I don't know the legalities of that in terms of the potential exposure of the often volunteer kind of directors that sit and are responsible for those large dams.
- 15
- 20 Q. So in terms of duration and setting some better guidance or parameters around that, have you given that any thought, because it's very easy just to talk about future investment –
- A. Yes.
- Q. – and the work that's going to be required, I mean that would be pretty universal I'd imagine across the deemed permit areas, have you given some other thought to how duration might be better directed other than an absolute figure like six years or –
- 25
- A. Yes.
- Q. – 10 years or whatever?
- 30 A. I think in my evidence-in-chief I made some amendments to the current policy on term in the operative plan and I'm just trying to recall what I put in my supplementary about that, can I just have a look?
- Q. Sure.
- A. Yes.

Q. Whether there's scope for such thing is another question but we won't go there at this stage.

A. So I didn't address that specifically in terms of – I had the no more than 20 years but also discussed in the section 32 evaluation about where the fifth, it's hard to land on a number but that 15 years might be appropriate as well and so I guess where I was trying to go with that rule was to try and do exactly that, to try and indicate where it might be acceptable or appropriate or the things that you might try and think about in terms of justifying longer than six years at the moment with all the complications that we've just discussed and so that was really about, are there factors where there are critical environment effects that could or should be addressed now and that was the threatened species, a clearly degrading waterway and linking that in to requirements to try and ensure that was done in a manner that was as consistent as possible with the MPS requirements and that those kind of circumstances tied in with the investment, the need for investment, so really it – trying to build into that where the considerations might be that you might consider a longer term than six years.

Q. Okay, thank you.

20 THE COURT: JUDGE BORTHWICK

Right, we'll take the morning adjournment and then come back to the rest of the questions from the Court.

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Before we do, Ms Irving, Court's asked you to provide details as to the – either the District Court rules or section that you're relying on, you haven't responded, you are to respond?

A. Yes. We're working on that, I've got a dictation with my secretary, so it shouldn't be too far away.

Q. Well even if it's an email, it's just that it requires a decision from the Court.

A. Sure.

Q. And I don't see why I should be chasing through the District Court rules to figure out which provision you're relying on –

A. Yes.

Q. -it's just good Court craft, okay?

A. Yes.

Q. Thank you.

5 COURT ADJOURNS: 11.06 AM

COURT RESUMES: 11.23 AM**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

- 5 Q. I've got some questions and at least initially these questions are directed at the controlled activity rule or the controlled activity pathway and I understand your counsel, Mr Page to say that (inaudible) is accepting that they might be a controlled activity pathway and I think the thrust of your evidence is that there should also be a controlled activity pathway. And you're nodding?
- A. Yes.
- 10 Q. So nodding means yes. Okay, very good for the record.
- A. Sorry.
- Q. All right and I know that in your evidence you've also proposed a discretionary pathway and there is also a non-complying pathway and are you continuing to pursue the discretionary pathway? I just want to check that off?
- 15 A. Yes, although, as I stated in my supplementary evidence, in that section 32 Evaluation and Appendix C I do acknowledge that could equally be framed as a non-complying activity so –
- Q. Your discretionary pathway could be non-complying?
- 20 A. That's right. So I stated there and I think in the body of my evidence, talked about whether there was value having something like my discretionary activity rule as I proposed it, as a non-complying activity, and then I guess why I went back to a discretionary, I didn't actually know when I started drafting it, whether I was drafting a discretionary or a non-complying activity rule, and I landed on the discretionary activity in my
- 25 evidence because of the utility, whether there's that much utility, I guess I was questioning whether there was that much utility in terms of the gateway test because the no more the minor is unlikely to be available accept for a very limited number of takes which may be a very small take out of a lake. With that Ngatirunga test in the mix and cumulative affects in the mix, so that gateway is shut pretty much for most applications ,so
- 30 then it's the policy gateway and if we're writing a policy specifically, then

actually maybe it's – what is the actual merits of having it as a gateway because here is the one policy that's providing that pathway.

Q. Okay. Now I'm going to ask you to put all of that to one side and let's just focus on the controlled activity pathway?

5 A. Yes.

Q. Okay. So we have Mr de Pelsemaeker in his 14th of March document making suggested revisions to that pathway and I think that those revisions are picked up in the joint witness statement filed by planners on Friday and there may or may not have been because I haven't done the comparison, some additional changes to that pathway, correct?

10 A. Yes I think that most of our changes in the joint witness statement were actually to the restricted to discretionary role.

Q. Yes, okay. So I am interested in what are the gaps for the – if any, there may not be any, for the controlled activity pathway. Should applicants elect to go down a pathway where they are guaranteed to get a water permit and Mr de Pelsemaeker has noted various conditions being rolled over. What is he missing, and this has I suspect, everything or something at least to do with priorities or water share agreements and you can't ignore it.

20 A. No.

Q. If there's something missing there, you cannot, because you are favouring a full discretionary pathway, and you know that is where your clients wish to go, you cannot ignore the controlled activity, not if you're an expert planner giving independent evidence, so I need to close out the controlled activity rule.

25 A. Yeah, and I actually think that a lot of people might pivot, potentially, depending on the outcome of PC7, we might see a lot of applications actually pivot towards the controlled activity pathway, depending on how it lands, if it lands, as a controlled activity pathway, if it's a process-orientated and simple one, so I do think it's critical.

30 Q. So process-orientated and simple, you said, take out the environmental drivers or imperatives and take out efficiencies. That is where you started. Okay, so I have taken them out, they are not there. So what now is missing in that pathway?

A. So, yes, I agree, the kind of glaring one is the priorities and how we deal with the priorities.

Q. I do not know that it is clearing. Why do you say that?

5 A. That's the first one that springs to mind with me. If we're trying to make a simple process orientator, then I can't think that there are other gaps. My concern with the priorities, I think that the lawmakers did anticipate that when priorities expired, there would be a full – I don't know if they thought that far ahead, in terms of 30 years – but we've certainly anticipated that there would be a full assessment of the activity that
10 allowed for an understanding, as I described this morning, of how, in any given set of circumstances, those priorities have or haven't been exercised, and how the exercise of that both affects other water users and their access, but also the water body and the values in the water body, because as we've stepped through applications over the last few
15 years, it has become clear that, in some cases, it can have an impact on the in-stream values as well, and so to do that is a comprehensive assessment of all the factors, and they're so interlinking in terms of the behaviours and the interactions and the placement in the catchment, and to what degree they've been used, and then, if you're going to replace them with something, what do you replace them with? What's the limit going to be? What infrastructure changes? There's a whole lot of interconnected, complex factors, and so that's what we've been working with and working towards to date, and if we simply roll over without that opportunity to undertake that full assessment, then to simply just stop
20 priorities overnight, there is a risk, I think it's a very real risk, it's both a risk to –

25 Q. I do not know how you come to that statement that there is a risk and a real risk, and we are in the business of looking at risks, so you now need to help me understand, either catchment by catchment, based on your own experience, whether those priorities are being exercised, if they are,
30 by whom and in what circumstance, or is it the case that the exercise is ad hoc and therefore can't be, I suppose, communicated in a series of principles.

A. So, yes, I was going to say a risk is twofold, it's in terms of – so I'll come back to how I, you know, say that there's a risk. Twofold, I guess it's a risk of – chaos is a bit of a strong word.

5 Q. But it has been used, and it was unhelpful, so how do we get to chaos, whatever that means? Firstly, define what chaos is, or, if that is not your term, you should just disabuse the term and move on to something which is more helpful.

10 A. Yeah, I'll try to think of an alternative term while I'm talking about it, but if you have – so this is between water users, initially, I'm talking now, and then there's the environmental stuff as well. So between water users, if you have priority one, who has actively used his – his or her, excuse me – priority, and over a lower-order priority, and they've actively used it, they bought the property or developed their property on the basis of that access to water, and those priorities just disappear overnight. Will
15 someone with a lower priority than them, situated higher upstream, just suddenly start taking more water because the priority no longer exists?

Q. Okay, so that is the first proposition, so an upstream lower-order priority user takes more water than what they have done historically.

A. Yeah, and so when flows are dropping –

20 Q. Yeah.

A. Yeah.

Q. Okay.

A. Yeah.

25 Q. How could an upstream lower-order user take more water than what they have done historically under the method which is proposed in this plan for regulating on the basis of historical use of water?

A. So it's the timing.

Q. Right, go on.

30 A. I guess it's the timing of the abstraction. So they've got that history of use cap, yes, but the critical factor in terms of the first priority holder is about being able to tell the lower order priority order to turn off or to reduce their take as flows start to drop. So number one says: "Hey, you know, you've got to turn down because I'm exercising my priority," at the hottest, driest month, say it's a hot, dry, January, so it's about the timing of that access.

So in the past, the lower-priority holder upstream might have taken significant amounts in spring and flood irrigated and there was plenty of water, so they might still have a history of use to justify that taking, but now, they switch, if their priorities disappoint overnight, they could still be within their history of use, but they're accessing water and they're not turning off for the person further downstream when flows are critical, so they let go of some of their water in the spring.

5

Q. And is this where you've gotten to or where the technical experts have gotten to in their joint witness statement, but now history of use is one thing, but the use now becomes quite – the use in different months is no longer reflected in terms of what the pattern of usage might have been.

10

A. I don't know if we got to the – we certainly didn't get into the specifics of that in the –

Q. You see, I need to flag it because I need to close out the controlled activity rule, because it seems most people are wanting to go (inaudible 11:35:53) in that place, unless, of course, we reject the whole thing. So what are you recommending be done next by the technical people? Firstly, how do we know – and when you have that recommendation, you have also got to keep in mind, do we know anything about who is actually exercising priorities, and I have got to move away from the anecdotal and generalisation.

15

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A. So I guess the problem with priorities and why they are so vexing is because we don't know until we start working in a comprehensive fashion with a particular set of applicants how they've been using them, so the face value of the permit only tells you about the entitlement, not how they've been used and to what degree they've been used. In terms of the technical experts, sorry to put a question back to you, but are you meaning in terms of some kind of methodology that looks at history of use across months, so you can't shift your –

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Q. I do not know. You are the planner and you are not opposing, in principle, a controlled activity pathway, and I am asking you are there gaps, and you are saying potentially, and now I would need to know how to bridge those gaps, because otherwise you've supported a controlled activity rule

which you have loosely said that could be chaotic. Is the Court likely to go there?

A. And my proposal had been that priority simply got carried over, and I understand that you have got concerns with that from a legal position.

5 Q. Well, that is twofold. If you can carry them over, how do we carry them over? Just assuming you can carry them over, what does that look like in this plan? I suspect it does not look like just saying the word “priority” and everything follows, I think much more is required. You know, this drafting, that can be done. If you cannot carry them over, and so there is
10 a policy gap now, then what do you fill the gap with?

A. So for the first part of that, in terms of if they can be carried over, I had anticipated that it would simply be a mirror of what was in the existing permits, bringing notes up into the conditions if they exist in notes, and then they are something that simply sits there and are available to be
15 utilised between the consent holders and, you know, with the regional council as the backstop to that.

Q. So what I imagined, if they can be carried over, is that you would need to have a definition or deemed permits so that we would know what was being caught, which is deemed permits which continue exist, I guess,
20 31 August.

A. Yeah.

Q. So it is not all deemed permits because some of those have been replaced already, so it is just that bunch which are currently in effect now, and you may or may not also require a schedule of those deemed permits,
25 and we may or may not also require for this plan change a notation for that schedule as to what were the orders of priorities. I would hope that’s not too difficult, because region should have that information to hand, but it is not just a case of saying the magic word, priorities, and it all happening, I wouldn’t have thought, in terms of plan drafting. Do you
30 want to comment on that?

1140

A. So I’m trying to think through, that transition and scheduling that, and I’m trying to recall off the top of my head, whether there is a definition in the Act around priorities, so beyond the wording within the sections, I don’t

think there is, so I think that would be, workable with some kind of – and I don't know if you would actually need to even define or link it specifically to deemed permits because many of them – they're not necessarily have a deemed permit title at the top of them now, as you say, some of them have been replaced with priorities, so whether it's actually just a schedule of specific consents with priorities, whether as part of the controlled activity rule, part of that process is to look at sets of priorities and specifically require the applicants to identify whether they utilise their priorities within that subset and whether they want them to carry over as part of the application process and so that would allow some kind of reconciliation and sifting out of areas where they're not being used, so only those where they're being used and the applicants want them to carry over, then they would be carried over. Does that make sense?

Q. Mmm.

15 A. And so that's almost part of that controlled activity process is, the onus is on the applicant then to identify the use of the priority and whether they want them to carry on going forward and it may be that we need to have groupings of those controlled activity applications by those priority subsets.

20 Q. I understand and I set this out in the minute and I am assuming that you have seen the minute –

A. Mhm.

Q. – dated the 7th of April –

A. Yes.

25 Q. – dealing with priorities – oh deemed permits, okay and I say at paragraph 8 that the exercise of priority to water is limited to cases where water is flowing in water course, mean a water body, is insufficient to supply fully to races that are connected to the same, so that's coming straight out of the legislation in terms of drawing and definitions I think from the Water and Soil Conservation Act. Is that – and then a race is defined also under
30 the same Act as meaning any artificial channel, ditch for the conveyance of water or into or in which water may be diverted, conveyed or for any authorised purpose, so that's what it's about, it's about supplying water to races. Is it your understanding that – or in your experience, for those

persons exercising priorities, that they are indeed exercising priorities to unders- to ensure that water is available to the higher priority user to put into a water race and not for any other circumstance?

A. I did read that –

5 Q. Yes.

A. – and think, ooh I wonder about pipes. Are pipes covered in that?

Q. I don't know. That's what I'm asking you, I don't know.

A. Yes and I'm just trying to think of specific examples where it's been pumped or piped instead of into a race.

10 Q. And by piped do you mean a gallery?

A. Sometimes there's a pipe sitting in a submerged pipe is actually the intake in a waterway and then it might stay in a pipe or it might – the pipe might feed into an open race, galleries, yes, submerged shallow bore and some system of piping involved with that.

15 Q. So that's interesting which is why I reflected this back, this is a definition coming out of the Act, so RMA referencing now into the Water and Soil Conservation Act, very specific definition about priorities and what they mean in terms of ensuring access to water –

A. Yes.

20 Q. – to supply a race, and is it your evidence that you don't know that priorities are being exercised for the purpose of supplying a water race?

A. I don't know if they're only being exercised to supply –

Q. That's the question –

A. Yes.

25 Q. – you don't know?

A. No I can't tell you that categoric- and I, in dealing with priorities had not act- something we just work with day-to-day hadn't actually seen that definition before your minute.

Q. Well you can check it out.

30 A. Mmm.

Q. I mean it's a matter for the lawyers as well but you can check it out, I just grabbed that out of the RMA.

A. And is it – it does reflect what Otago would have looked like at the time RMA came into being.

Q. Yes, yes.

A. Yes.

Q. So you don't know whether or not priorities are only being exercised for the purpose of supplying a superior water supply race?

5 A. No.

Q. Race, yes. Is it your experience that it has gone beyond that?

A. (No audible answer 11:46:20).

Q. Or other circumstances have been applied?

A. I actually just don't know.

10 Q. Don't know.

A. The ones that I can think of off the top of my head are water races but I can't assure you that they're only water races.

Q. So you don't know that and you don't know in relation to the rights of priority which are there, how many of those rights are currently being exercised or in what circumstances?

15

A. I'm sorry but I can't give you a specific number.

Q. But all you know is that some of your clients have?

A. Yes definitely, yes.

Q. And I have described this as being a non-regulatory sort of method because it's not really a method that involved the Regional Council and it's not a method reflected in resource consent terms or permit terms, would that be correct other than reflecting the fact that there's a right of priority?

20

A. Yes.

Q. So it's non-regulatory, it's as between permit holders, correct?

25

A. Yes.

Q. And I also said that that's what a water share agreement was as well, well at least I put it out there because actually I don't know. Water share agreement's a non-regulatory method that's – it's an agreement entered into by two or more permit holders on the same water body and it sounded like, in response to Commissioner Edmond's questions, whilst you will tell the Regional Council about that, in an application for resource consent, you don't invite the Regional Council to impose conditions that mirror or reflect that water share agreement, is that correct?

30

A. That's correct to date, I would note that the Lindis there was a specific condition which referenced that a water sharing agreement was required but it did not go into the detail of what that should look like.

Q. Was that an initiative of the Court or of Lindis as an applicant?

5 A. It was the applicant and that evolved out of negotiations right before going to Court and then it got refined through the process as to what the wording was.

Q. So why is that not reflected? The existence of a water share agreement, why is that not reflected in consent conditions?

10 A. The specifics of it?

Q. Yes?

A. Because it can, with the example of the Lindis, it was because it hadn't been trialled yet, so the abstractors wanted to retain some flexibility about how they might carry out that flow sharing, so whether it would be – what exactly would be the trigger flow, the amount that they might drop down on, the percentage that they might drop on, so just to allow for some flexibility and some adaptiveness and learning along the way and also that every season is slightly different, so that was the basis for that.

15

Q. So besides from the example of Lindis, has any other resource consent decision that you're aware and that reflected in the conditions of consent, the existence of a flow sharing agreement in the terms of that agreement?

20

A. Not the terms of the agreement, no, not that I'm aware of, I know that there's a water allocation committee in the Kakanui, but I'm not at all familiar with that, so I can't speak to that. Ms McKeague or Mr Hickey would be able to speak to that. Consents, and we propose a condition of consents with application which refer to the applicant agrees to be party or a member of a water management group for this catchment, and that is about as much as usually gets in the consent, so the Lin-

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30 Q. Why is that?

A. Again, for the reason of allowing - the rationale has been for allowing the abstractors to come up with an adaptive approach that they can kind of work through and adjust if necessary. It's kind of a learn-as-you-go process, I guess.

Q. Okay, so your evidence is that of those water share agreements, the fact of their existence may be noted in the consent conditions, either as a fact they exist, or be a requirement to be a part of a water-sharing group, but that the terms of those water-sharing agreements are not recorded in consent conditions, and the reason for that is that that is a method, again, a non-regulatory method as between abstractors, where controlling a matter is to enable abstractors to retain flexibility over water use.

5

A. To retain flexibility about how they reduce their takes as it approaches a flow limit, yes.

10

Q. Water-sharing agreements, are they contingent on a minimum flow, however that is calculated?

A. So not just a minimum flow, sometimes, they can be on a residual flow. So in the residual flow, the trigger residual flow may be at the bottom of the catchment, and so that's what we've proposed for the Manuherikia, within those applications, that there are trigger residual flows, but because those are just proposed, you know, they are not an actual flow limit at the moment, and we don't know if that's what would actually eventuate at the other side of a process.

15

Q. All right, well, getting back into the controlled activity route, is there any utility recognising either priorities or recognising water-share agreements? Start with priorities.

20

A. I think there is utility in recognising priorities, and –

Q. What is the utility?

A. The utility is twofold, both in terms of retaining existing access between water users, so managing effects between water users, and the second one being the potential retention of flows over a longer length of a waterway, resulting from a higher priority being further downstream and exercising priority over a lower order priority, so they have to turn off, and so the potential for environmental benefits there. Sorry, there was a second part to that question, wasn't there?

25

30

Q. Water-sharing agreements, we will get to it. You have not addressed, other than the naming of priorities, you know, because of the fact they are named in the plan somewhere, you have not discussed that I can recall – but then we have got about 10,000 pages' worth of evidence, so you will

forgive me – you have not discussed whether or not the policies in particular need to talk to the dual purposes of priorities, whether they are retained, you know, because you can retain them after 1 October, or whether that is a new tool created to speak to that gap.

5 A. So the policies in PC7?

Q. Yes, and should you have?

A. Yes, I should have, yes.

10 Q. Okay, so I am not asking you to draft on the hoof, but what should have been reflected in the policies of PC7, such that the priorities, or a new tool reflecting mimicking priorities, were brought forward?

A. So, yes, I think I'd simply added the words –

Q. Priorities?

A. Yes, into, yeah, yeah.

15 Q. If it helps, the Court trying to problem-solve in this place talks about possible ways forward from para 24, and in particular para 24(a), allowing some recognition in this plan of allowing other permit-holders to continue to take water, so there, we were thinking that is either a new tool, or it is the old tool, priorities. Either way, that is the space you are working in, but, in saying that, something much more may be required, so I am really
20 wanting you to reflect on that and tell me what your thoughts so.

A. So that's right, I was just checking back on where it had been mentioned in the policies, and so it was very much just an add-on, you know, an extra comma, so potentially, it's separating that out into a separate subparagraph of 10A.2.1, because that's really the controlled activity
25 policy, and having it as – it's difficult to simply insert that, because that policy is very focused in terms of where it's acceptable to just grant, so something along the lines of where a priority has been exercised, either to protect access to water or may retain in-stream flows, but the difficulty with that is then that requires an actual substantive assessment.

30 Q. It requires evidence, does it not?

A. Yeah.

Q. And if you think irrigation areas are difficult, frankly, I struggle with that, but anyway, if you think irrigation areas are difficult, how do you think they are going to come up with proof of that?

A. In terms of retaining in-stream flows for –

Q. Well, in terms of evidence as to exercise.

5 A. Mmm, and so again, it would have to form part of the application, and in terms of evidence, if it was brought in and it was a whole subset and you did have, say, you know, number one saying: “I exercise my priority,” and number two saying: “Yes, this has been done,” again, it’s reliance, really, on the applicants’ statement, and when we develop applications, that’s exactly what we’re doing, is we’re, you know, we’re talking to those consent holders.

10 1200

Q. What would the control look like if a new method or a new tool is required because in fact you just can’t bring down priorities because they are a creature of statute and because they will cease on the 31st of August so you need a new tool, so what does that tool look like?

15 A. So if we can’t simply carry priorities over?

Q. Yes? Or if you have to recreate priorities in some way, because I, yes?

A. At best, I think a take cessation condition again or a take reduction and cessation because it’s not always simply about turning off, it’s about turning down -

20 Q. Down, yes.

A. – condition, linked to other permits and so if priority 1 is above four other permits, so if you’ve got five priorities, priority 1 would have a take cessation and a reduction condition that is linked to four others. Priority 2 would have one that’s linked to three other permits, etc until you get down to number 4 that’s only linked to number 5. That would be about the only other way I could see it and again that would require information from the applicants. I do not see and this gets to the other part of your question that you posed earlier, with the flow sharing, I don’t see –

25 Q. No I don’t want to go there, just part that up?

30 A. Okay, so –

Q. I’ll go there next, all right. I’m trying to problem solve.

A. Yes.

Q. On priorities.

A. Yes.

Q. And I suspect you need to problem solve on priorities even if they survive after 1 October or can survive after 1 October, I think it's quite probably the same issue will need to be addressed other than the recital of the word "priorities", what does that actually mean?

5 A. Mmm.

Q. Yes. So again you see that as a non-regulatory method or do you see it as a method where Region gets involved and starts to enforce the cessation or reduction on behalf of the superior permit holders?

A. I think that's the ultimate back stop when it's a condition of the consent.
10 As with a lot of conditions of consent, self-regulating, we expect them to be self-regulating, and that's what I think would have to happen in this case and that's the history of deemed permit operation in Otago, that it has been a self-regulated with going to an enforcement agency, Regional Council as a very last backstop and the Regional Council had given strong messaging throughout the years is my understanding that they were interested in getting involved between the parties and I think that's consistent with the evidence of Mr de Pelsemaeker, that it hadn't been something that the Regional Council wanted to get involved in but I think if they're brought in as modern conditions, then I think that would
15 have to be part of it. I don't think it would be utilised very much because priority holders are very used to dealing with it between themselves.

Q. So can you have policy support for a non-regulatory method in a plan, regional plan?

A. We currently do, we currently have policy support for water management
25 groups, a shared approach to water management, so it would be around supporting the retention of historic systems of priorities, maybe not the word, "priority" if that's going to be moved on from, although that word is very well understood amongst Otago water users.

Q. And in your view, I mean I know you talk about, well that's your ultimate,
30 not sure actually whether permit holders would think it was its ultimate, their ultimate goal to have the Regional Council enforcing priorities, but anyway, should it be something that is enforceable or should it be something where there is policy support for the recognition of priorities

but priorities remain a non-regulatory method, exercise of priorities remaining a non-regulatory method?

5 A. That's an interesting question because I think potentially having a legal back stop over the years has given them weight and so if you take that away altogether, is there a risk of undermining them, but yes I acknowledge they are essentially a non-regulatory matter between, so I think it would be useful to keep that regulatory back stop there if possible, just as there has existed in the past.

10 Q. All right. The purpose of priorities are what, going forward? If they are recognised going forward, is that ensuring that water remain available for permit holders with a superior priority or is it environmental?

15 A. I think it's both. I think yes definitely to the first one because that's the clear and obvious in terms of the history of priorities and development on farms and the value of the water, the permit that they hold, but we do know that in cases particularly in the tributaries, that they have resulted in water staying in stream.

Q. But are they being exercised for that purpose?

A. No.

20 Q. No and so that's again, what we're driving at, you say this is process only, it's not process plus, it's not environmental and it's not efficiency, okay, I've taken that on board. Why then are we defaulting to there's an environmental benefit that needs to be recognised in the priority? To me that's a side wind for what has only been a tool which is available to meet abstractor demands?

25 A. You're absolutely right, I think in the plan it will have to be about retaining that access because this isn't a full assessment under the controlled activity, not even a part assessment of the environmental factors and if you only look at one aspect, then all those interconnected parts won't work or won't be properly assessed, so I think that's a potential benefit of recognising priorities with regard to abstractors' access, maybe that we
30 retain the status quo as much as it is a status quo, over those six years and potentially reduce some environmental risk, but it can't, you're right, it can't be the purpose in the controlled activity pathway because that

suddenly brings in a whole lot of assessment that we just can't do through that pathway.

1210

5 Q. And does that reflect also that the exercise of priority may have had an incidental environmental benefit, but that those benefits might also, themselves, be an expression of wider things happening within the water body?

A. Yes, very much.

Q. Not solely attributable to the exercise of a priority?

10 A. The environmental benefits?

Q. Yes.

A. No.

Q. No.

A. No.

15 Q. Okay, all right, flow-sharing agreements. Anyway, you have clarified something which is very helpful for me is that while there are policy recognise flow-sharing agreements, and I talk about that in the minute, this is a non-regulatory method, so it does not get picked up and expressed in conditions of consent.

20 A. Yes, that's correct.

Q. I understand from evidence which is to come that those flow-sharing agreements, where they have been entered into, replace, if you like, the exercise of priorities.

25 A. Yes, and sorry, I'll just say again, I think the Kakanui might be an example of a flow-sharing agreement which is actually recorded on consents, but I'm not familiar, so, yeah. So the ones I'm familiar with, I haven't seen any flow-sharing agreements specifically set out in consents, and sorry, what was the –

30 Q. The flow-sharing agreement, the evidence to come, farmer interest evidence, is that on some occasion, these flow-sharing agreements replace deemed permits.

A. Yes.

Q. Is that the case always that flow-sharing agreements replace deemed permits?

A. No, it entirely depends on the situation, so if in some cases, we have deemed permits which are a single permit on a tributary going into the Clutha, so there is essentially no one else to flow-share with in terms of, you know, downstream users on the Clutha, it's not linked in terms of those hydrological conditions experienced on that one trib.

5

Q. There is a flow-sharing agreement in that case?

A. No, there's not.

Q. There is not? Right, okay, sorry.

A. Sorry, sorry, I'm saying we've got examples where there are deemed permits that are replaced without a flow-sharing agreement.

10

Q. Without a flow-sharing agreement because there is no one there to get into a group with.

A. That's right, and in other cases, they can be replaced simply by a system of residual flows and a flow-sharing agreement hasn't been developed, and I can think of a group of applicants on the Poolburn mainstem, where, actually, it wasn't seen to be necessary to have a flow-sharing agreement, it was just a series of residuals, and that was actually seen as sufficient.

15

A flow-sharing agreement didn't add anything, so it's about the hydrological connections and conditions between those users, and again, the Pig Burn, the bulk of the applicants have gone forward with just their residual flows, complete, you know, restructure of take infrastructure for three of them, and it's only between two of them that a flow-sharing side agreement would be developed, and that's just for the priorities between those two. So it can vary even at a sub-catchment level, and again, they're always predicated on that full assessment of, okay, what is the flow limit that we are sharing to, and at the tributary scale, where a lot of these priorities are kind of critical between each other, it's about developing that flow limit first, to then get an understanding of how that affects people's access to the water.

20

25

30 Q. So again, we have heard lines of questions in cross-examination that there are flow-sharing agreements everywhere and that they always have an environmental benefit, I mean, that is really the driver for them. Do you want to comment on that? Every catchment you were led to believe would have a flow-sharing agreement and that every flow-sharing

agreement, the outcome, principally, is one that benefits the environment. That is what is driving it.

5 A. I think there are a lot that will have flow-sharing agreements. I think particularly in the Manuherikia, there will be, for the main tributaries where there are permits being replaced. There will be internal kind of flow-sharing and there will be a broader flow-sharing agreement across the catchment. There are pockets of either tributaries or areas on a mainstem, where, as I said, either residual flows or minimum flows mean that they might not have a flow-sharing agreement, or they might become party to one further down the track. It will, anticipating, be a little bit iterative like that. More people might join, or other people outside of the tent may get a condition on their consent requiring them to be part of a catchment flow-sharing agreement. In terms of there being environmental benefit, the key environmental benefit is, first and foremost, the setting of the flow limit and adherence to that, and then also the motivation of the abstractors not to reach that flow limit and be cut off altogether, and so again, it's about fairness and equity between those abstractors as they move down towards that flow limit, and that creates, in itself, an environmental benefit, because it keeps flows above whatever the flow limit is.

20 Q. You mean the minimum flow?

A. Minimum flow or residual flow, and so it will reduce the flatlining effect by its very nature.

25 Q. Question for you: many catchments have them, their principal purpose is to ensure equity and fairness as between abstractors where the flows in the river are now moving towards a minimum flow, however that's being calculated. The minimum flow itself, and recession flows, are there to benefit the instream environment. So, with that in mind –

30 A. There's just one part of that questions that's not quite right. Many catchments have them. Quite a few catchments, we're anticipating, and have a draft based on a draft-proposed flow limit, say, in the Manuherikia, but they don't actually exist yet. Some of those details haven't been fleshed out, they were anticipating potentially trialling them, refining them, so if we'd gone right through the consent process under the operative

plan, yes, I think we would have ended up with a lot of flow-sharing agreements, a lot of which the detail might have been developed alongside that application process once there was greater clarity around where the flow limit would actually land, because we've only just proposed them, but whether or not that's what gets through is something else entirely. So there was a lot of water under the bridge still with a lot of those, to use the –

5

Q. Right, so talking about the first case, many catchments will have them. Is it your evidence that for any catchment that does have a flow-sharing agreement, that that agreement will reflect minimum flows, at least, which are consistent with policy, I think it's 6.4.2, of the operative plan, you know, the one of three ways of calculating the limit.

10

A. That's the allocation limit?

Q. Yeah, yeah, no, that is the allocation limit, so that is not quite right, the minimum flows.

15

A. So schedule 2A minimum flows?

Q. Yeah, so outside schedule 2A what's the method in the operative plan to calculate minimum flows?

A. I don't know, I'd have to go back and have a look.

20 **THE COURT: COMMISSIONER EDMONDS**

Q. Policy about that? Minimum flows hidden somewhere, some useful matters that you might consider when setting a minimum flow, and maybe that doesn't only relate to schedule 2A, that might relate to something you want to put forward in an application. I'm sorry, it's sort of coming back to me.

25

A. Yeah, I'd need to have a look at the plan.

Q. I think it seemed an odd place to have it in the plan because it had a lot of quite useful things in it.

A. Yeah.

30

Q. Probably can't find it in five minutes.

THE COURT: JUDGE BORTHWICK

Q. We will do that over lunch, we will direct you to have a look at it over lunch, and I know we have gone beyond 45 minutes, but if we do not close this out, we are going to have a lot of problems

5 1220

A. Yes sure.

Q. And I know we've gone beyond 45 minutes but if we don't close this out we are going to have a lot of problems with this plan change should the plan change be confirmed? So many catchments have them and they're
10 working towards a minimum flow and the question for you is that minimum flow set as between irrigators or is that minimum flow something which comes out of a policy or a methodology in the water plan? The (inaudible 12:20:30) –

A. So where there is no two way minimum flow –

15 Q. Yes where there's no two way, yes?

A. – then it – there's not, from memory and I will check this, there's not actually a kind of a default minimum flow that applies, there is a default process called a supplementary flow setting, it's more an indication in those policies that if one is set, then that will be inserted into two way and
20 applied by review and so other than that if there is no two way, so in all the tribs coming into the Clutha which are dealt with as their own kind of primary, little mini primary allocation block and are all fully allocated, pretty much, then it's about setting, we try and develop a residual flow as part of that application process. If there -

25 Q. Again I need to bring you right back to your water share agreements which is the only thing I'm interested in.

A. Yes.

Q. Your water sharing agreements, for the catchments that have them, are going to be matters of fairness and equity between the abstractors will
30 have come up with a minimum flow or alternatively perhaps a recession, residual flow depending on the water body that you're in or both, but what the – whatever's in those agreements are, if they're outside of Schedule 2A then these are matters which the abstractors have come up with themselves as opposed to any consent process or plan change process?

A. Yes very much so, so until it's been through the whole consent process –

Q. For Schedule 2A?

A. No, if it's a residual flow, then if it's been right through the consent process and we're out the other side, we get agreement decision, it's, we've proposed 100 litre, a second residual flow and everybody agrees, then that's the flow limit or 150 if that's what comes out of the other side and if you're not in a Schedule 2A minimum flow catchment, then it will again be something that we've proposed and it has to work through the system to actually know if that's what ends up landing on the other side.

10 Q. So those minimum – those flow sharing agreements outside of Schedule 2A, any, are there any flow sharing agreements which exist in any water body or in any catchment which are not – the flow sharing – where the minimum flows or residual flows are not yet part of any condition of consent. In other words, farmers have got together and have said, "Look to make this work, this is what we've got to do with minimum flows and residual flows. To make this work, ie, to ensure that I have water, I can continue to abstract, this is how we need to be managing ourselves.

A. So flow sharing without a limit, no.

20 Q. No. So flow sharing agreements have only come into being where there is a general need I guess within a catchment or on a water body to go through a consenting process?

A. Yes.

25 Q. Then there's a flow sharing agreement, in terms of the flow sharing agreement, the fact of their existence is noted in the consent conditions if that it is, if there's a minimum flow or if there's a residual flow, that is tested and to that extent only those two provisions come down into a resource consent?

A. Yes.

Q. So ...

30 A. So they're very much a child of the full consent process.

Q. That's what we're getting at.

A. Yes.

Q. So that's like, that's new and important. Flow sharing agreements are a child of a consenting process?

A. A full assessment, yes.

Q. A full assessment, yes because you're getting your minimum flows and you're getting your –

A. Yes.

5 Q. Yes. So that's not this?

A. No.

Q. So is there any utility –

A. No.

Q. – to be recognising flow share agreements?

10 A. No -

Q. No.

A. – not in a controlled activity pathway.

1225

15 Q. All right, that is helpful, because we have been talking about outside of schedule 2A. Inside of schedule 2A, again, outside of a full merits-based assessment of water permits, is there any utility on recognising flow-sharing agreements?

A. No.

20 Q. No, and is that simply because you are not going to have folk put up minimum flows and residual flows without a full assessment?

A. Full assessment, that's right.

Q. Okay, that is helpful.

A. And then also understanding the drop in reliability, what that means for on-farm changes, et cetera. There's the whole big complex.

25 Q. Yeah, and so when the regional council says, look, if you have got a residual flow and minimum flow already as a condition of consent, if you bring that forward, that is actually all that really needs to be done, you do not need to be noting the existence or otherwise of a flow-sharing agreement. From the regional council's perspective, you have got the
30 two drivers of environmental outcomes.

A. Yes, that's right, unless there are, you know, the Kakanui, unless that does have it actually in the consents, unless that is an outlier, and again, I'm not familiar with that one.

- Q. Okay. Checking my other questions from some responses that you have given. So it seems to me, from what you have said, particularly in answers to Commissioner Edmonds, what is critical under a controlled activity pathway is that you are not changing the reliability of supply, and you are nodding, so that is correct.
- 5 A. Yes.
- Q. Because to change the reliability of supply such as that, that is less reliable. Farmers will need to start to take measures to respond to that, including on-farm storage or changing irrigation systems to become more efficient, correct?
- 10 A. Yes.
- Q. Okay.
- A. Well, to offset that loss of reliability.
- Q. To offset the loss of reliability.
- 15 A. Yeah, yeah.
- Q. So aside from recognition of priorities, either as they exist or some other new tool that does the job, what other tools are needed to ensure that there is not a change in reliability under the controlled activity pathway?
- A. So it's really what you don't do, it's really that you don't introduce new flow limits, you don't reduce actual access to water, and again, I think where the schedule has now landed, with maximums rather than the average of maximums, addresses that. So, yeah, I think it's just really what you don't do.
- 20 Q. Okay, so the gap, if you like, is the gap which we've been talking about in terms of priorities.
- 25 A. Yeah.
- Q. That needs further discussion and further thinking. Flow-sharing agreements doesn't sound like it's going to result in any benefit here.
- A. No, no.
- 30 Q. Otherwise, where the regional council has come to, especially, I guess, through also expert conferencing, we're meeting your concerns about what it is that you don't do in terms of impacting that reliability?
- 1230 A. Yes.

Q. Okay. I was interested, and I took the time to read over parts of the Lindis decision – both the plan changes and also the resource consents – and quite decision.

A. Yes.

5 Q. But as I understand it, there was a proposal there for the Lindis catchment to move away from races to a series of galleries and boards. Is that right?

A. Mhm, that's right.

Q. That is right?

A. Dispersed infrastructure.

10

COMMISSIONER EDMONDS:

Not entirely.

THE COURT: JUDGE BORTHWICK

Not entirely.

15

COMMISSIONER EDMONDS:

Some races remained.

THE COURT: JUDGE BORTHWICK

20 Q. Some races remained as well, okay, but that for the first five years, in recognition that there was a change to infrastructure, am I right in thinking that the rates of take, or volume, expressed on a deemed permit remained for the first five years, to ensure that the race systems which were being replaced could continue to take sufficient water and distribute it. Am I right in thinking that?

25 A. Yes, that's right. So for the first five years, they could continue accessing what they've historically accessed because they were still utilising the races.

Q. Using the races.

A. Yeah.

30 Q. Yeah.

A. And then within that five-year period, they had basically five years to transition away from the use of the races, acknowledge that it's going

from a company supply to dispersed private takes and that they each needed to obtain, you know, to actually put in the infrastructure to deal with that.

5 Q. From those applications that you have been involved personally, how many of those applicants are seeking something similar in terms of at least for an initial period of years where new infrastructure is being proposed, the higher rate of take of volume on a deemed permit continues until the infrastructure is in place?

10 A. I don't think any. I think for some applications, we may request, say, a five-to-10-year period for new infrastructure to be put into place, but I think in all cases, it's not the full deemed permit, definitely not in terms of volumes that is replaced. It is brought down to that history of use cap, or the lesser of the history of use or the Aqualinc responsible use assessment, and that was really in the Lindis in recognition, and I would
15 have to go back and check to whether we applied for the full – I think we still only applied for, in the first five years, the history of use cap and then, potentially, bringing that – I'd need to check the details. So it wouldn't have been the full deemed permit extrapolated volume, which is, you know, just –

20 Q. Huge.

A. Huge, that's right, and it hadn't been accessed, so there's no point in replacing that, but, yeah, the focus in other applications is really about requesting some time to transition for structure.

COMMISSIONER EDMONDS:

25 I think there was a another element, which was after the five years, it was pivoted activity to continue using those three major races as a sort of belt and braces, as the only lever you could pull to make sure that somebody didn't apply to continue on using those. That's my memory of it.

JUDGE BORTHWICK:

30 All right, those are my questions, and that has been really helpful to our thinking.

COMMISSIONER EDMONDS:

So I don't think looking at the business about the policy on minimum flow is needed, I don't think it's any help.

JUDGE BORTHWICK:

5 Anybody got any questions arising?

1235

QUESTIONS ARISING: MR MAW

10 Q. I want to stay with the vexed topic of priorities and I use that word carefully, when you're having your discussions with current permit holders and you're working through the process of preparing applications and I have in mind these group applications, is it the understanding of the current permit holders that their priority will expire on 1 October 2021 or is the expectation that though priority will continue on re consenting?

15 A. No they're very much aware that they will expire and that's part of the motivator to come together as a group and work through the process together as a group I think.

20 Q. So staying with the priorities now and let's say they roll over for the next six years and that the Plan Change 7 can be crafted in a way to bring the existing priorities down, the fact of whether or not the priorities are actually implemented or not, isn't particularly relevant, would you accept that if they simply come down it leaves the ability open for them to be exercised?

A. Yes.

25 Q. And so an assessment wouldn't need to be made as to whether or not the priorities have been exercised because permit holders are not required to exercise a priority are they?

A. Yes, potentially that would be okay.

30 Q. Now there's been quite some discussion around irrigable areas and we had some questions about that a couple of weeks ago and I just wanted to understand in terms of the applications that you have been involved in with respect to the Manuherikia, have you specified or do those applications specify the current irrigable area?

A. Yes they do and I have no issue with an irrigation area as such. My concern really rests on proof at a certain date retrospectively and what proof may or may not be accepted, so it was really around clarity around that.

5 Q. So with respect to those applications, how have you specified the existing irrigable area?

A. As hectares, total hectares and that's based on mapping.

Q. Thank you, no further questions.

QUESTIONS ARISING – NIL

10 **WITNESS EXCUSED**

COURT ADJOURNS: 12.38 PM

COURT RESUMES: 1.48 PM

THE COURT: JUDGE BORTHWICK

15 Q. Now I want to hear from, not from you, but from your technical witness first, okay? Because your technical witness is giving the inputs into your evidence. So is that Dr Chrystal?

MS BRIGHT

(Inaudible 13:49:15).

20

MS PERKINS

Let's just do the opening first.

THE COURT: JUDGE BORTHWICK TO MS PERKINS

25 Q. Your, so firstly, sorry, Ms Perkins did you want to make an opening address which was not evidence, is that what you are doing?

A. Yes –

Q. Or did you want to give your evidence, which is what we heard from Madam Registrar?

A. No, so what my intention was that there is an opening, kind of summary of who we're representing, so just summarising who Landpro is and who the parties are that are being represented by us, so I have that drafted, but my thinking was that potentially questions you may have for me that may come from that and the planning evidence might kind of be sort of one and the same, so it might be easier if I just did both together.

Q. Yes.

A. But happy for Ms Bright to be up first and then I can kind of do the opening and technical stuff together because they probably do merge a bit.

Q. I think, that's right. Yes. I think we should go with Ms Bright, not Dr Bright, or Ms Bright?

MS BRIGHT:

Ms Bright.

15 THE COURT: JUDGE BORTHWICK TO MS PERKINS

Q. Ms Bright. I think we'll go with Ms Bright.

A. Sure.

Q. Because she's providing foundational evidence for your brief.

A. Sure, yes.

20

MS IRVING

(Inaudible 13:50:19) the witness confirm her evidence your Honour.

THE COURT: JUDGE BORTHWICK

Q. That would be good and if Ms Bright is a signatory, and I should have done this with Ms Dicey, but I forgot. If Ms Bright is a signatory to any joint witness statement, she is to confirm that as well.

25

MS IRVING

Certainly.

30

**MS IRVING CALLS
CHRISTINE ELYSE BRIGHT (AFFIRMED)**

THE COURT: JUDGE BORTHWICK TO MS BRIGHT

Just bear with me and I'll find the correct folder of evidence.

5

MS BRIGHT:

That's okay. If it's okay as well your Honour, I was anticipating Clare providing her summary, so I just need a moment to find my papers too.

THE COURT: JUDGE BORTHWICK TO MS BRIGHT

10 Find her evidence, very good.

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. So we'll review, Ms Irving, have you got everything you need?

A. Yes I think so. I am traveling a little lighter this week so I'm just having to bring some of the things up on my computer.

15 Q. That's all right.

EXAMINATION: MS IRVING

Q. Ms Bright, so is your full name Christina Elyse Bright?

A. Yes.

Q. And you are employed as an Environmental Scientist at Landpro Limited?

20 A. Yes.

Q. And you have prepared a brief of evidence dated 5 February 2021?

A. Yes.

Q. And you also participated in two joint witness conferences or expert conferences?

25 A. Yes that's correct.

Q. And were a signatory to the planners joint witness statement dated variously, the 8th or the 9th of April?

A. I believe I was only a signatory to the primary sector –

Q. Right, sorry.

A. – JWS, but assisted in the capacity of a technical advisor on the – what we’re referring to as the planners conferencing.

Q. Thank you. And you were a signatory to the joint witness statement in relation to the primary sector Schedule 10A.4?

5 A. Yes.

Q. And that is dated the 25th of March 2021?

A. Yes.

Q. So can you please confirm for the Court that to the best of your knowledge and belief those documents are true and correct?

10 A. Yes, although in the summary of my evidence that I’ve prepared I do have a paragraph in relation to some corrections.

Q. Right, can I perhaps get you to take the Court through those please?

A. Certainly. In relation to my summary of evidence at paragraph 2, I have made comment that I have updated the tables that were originally included in my evidence-in-chief, dated the 5th of February. This is in response to some editorial or typo related issues that were identified in Mr Leslie’s evidence, so I thought that – I saw it relevant to update those tables and append them to my summary for consistency if they were going to be referred back to.

15

20 **THE COURT: JUDGE BORTHWICK TO MS BRIGHT**

Q. Do you want to just read that, because I haven’t read this, so ...

A. Yes, yes. Of course. I wasn’t sure if – I can start at paragraph 2 and then when I come to the summary we can just go through other –

Q. And we’ll just make sure we’re all on board, it’s a new – it’s a supplementary evidence (inaudible 13:55:44). Why were you filing supplementary?

25

A. Ooh, if the word “supplementary” has been used, that would be incorrect. That would be an error.

Q. Okay, oh “summary”, “summary” it is, yes, no it is.

30 A. “Summary.

Q. Okay, good. Good. This is your summary –

A. Correct.

Q. – of your evidence, including a correction?

A. Correct.

Q. Okay, got it.

A. And just because the correction is technical in nature I wanted to write it down –

5 Q. Yes, than -

A. – rather than just verbally –

Q. I think that's the best way, yes, okay.

A. So paragraph 2, under the heading "Corrections", reads: "In reference to errors identified in Mr Leslie's evidence in reply, dated 19th of February, I have reproduced Tables 1 to 5 from my evidence-in-chief with corrections made. Those corrections pertain to paragraph 45 and 61 of Mr Leslie's evidence in reply. Tables 1 to 5 are contained in Appendix A to this summary of evidence. Consequential changes to the text of my evidence-in-chief may be required due to corrections to Table 1 to 5. Given the technical nature of these changes and the fact that Plan Change 7 and Schedule 10A.4 has moved on, I have not updated the text of my evidence-in-chief."

10

15

Q. Okay. Do we know what paragraphs may have needed changing or consequentially or not?

20 A. I could provide that.

Q. Or at - you could provide that. Maybe you should, but I think you're saying that things have moved on quite considerably?

A. In terms of the time that it may have taken me to fine tooth comb check?

Q. Yes.

25 A. I think things have moved on sufficiently enough that it wouldn't be valuable time spent.

Q. Okay, all right, thank you. Paragraph number 3.

A. Is it okay if I start at paragraph 1 or would you like to just take that?

Q. Oh we'll take that as read.

30 A. As read, okay, thank you. "Summary of Evidence, starting at paragraph 3. My evidence-in-chief sought changes to Schedule 10A.4. I note that conferencing on Schedule 10A.4 has occurred since my evidence-in-chief was prepared and both Plan Change 7 and Schedule 10A.4 have moved on from the notified version. My evidence-in-chief

presented a series of data analyses completed using both the proposed Landpro method for calculating historic water use and the Plan Change 7 Schedule 10A.4 method. These analyses highlighted that there were risks to using the Schedule 10A.4 method and could mean that water users may not be allocated water at a rate and volume that reflects their historical use and could leave water users not able to run their irrigation systems reliably. Subsequently, my evidence-in-chief sought changes to the notifiers schedule 10A.4. Schedule 10A.4 should only be used to determine historic water use and be supported by an assessment of the efficient water volumes needed for the intended use. For example, for irrigation, a model like the Aqualinc guidelines for reasonable irrigation water requirements in the Otago region should be used for informing replacement water allocation. All available water use data of suitable quality should be used. Data auditing steps are needed to assess data gas, exceedances and whether these can be accounted for in water use records. The instantaneous rate, daily, monthly and annual volumes should be based on the historic maximum, not the average maximum. Schedule 10A.4 should include provision for the volumes determined as reasonable for replacement allocation, be the lesser of the historic maximum volumes or the volumes determined by an assessment of the Aqualinc reasonable water requirements. Recent proposed amendments to Schedule 10A.4. In light of the planners conferencing, and I'll refer to that the planner's JWS, on Schedule 10A.4 and the subsequent joint witness statement, and attachment 1 to that joint witness statement, I provide the following additional comments on points (a) to (f) that I just read earlier. I still support the use of an assessment of the efficient water volumes needed for the intended use of water, so that water is allocated on the basis that water meets demand. This is reflected in para 426 and 54 to 57 of the primary sector JWS that I participated in. The amendments in attachment 1 of the planner's JWS somewhat address this via the proposed amendments to the restricted discretionary activity rule in attachment 1 of the planner's JWS. I wish to acknowledge the comments at paras 4 to 5 – sorry – 4 to 9 of the primary sector JWS, and that allocating water based on efficient use may encourage or promote

the upgrade of less-efficient systems. In my opinion, this cannot be achieved under a short six-year consent term, therefore, I now believe that assessments of efficient water use are relevant only where schedule 10(a)(iv) does not represent historical water use. Aqualinc is an appropriate assessment tool to demonstrate efficient water volumes for irrigation, and I agree with the position reached in the primary sector JWS and paras 7, 25 to 26, and 54 through to 57, that tools like Aqualinc have a place in plan change 7, but not in schedule 10(a)(iv). I also acknowledge there are other methods available to demonstrate efficient water use, and historical water use where there is a need for additional data. Refer to para 5 of the primary sector JWS and para 7 of the planner's JWS. The amendments made in attachment 1 of the planner's JWS with regards to the restricted discretionary activity rule allow for other methods to be used where the entry conditions to the controlled activity rule in relation to schedule 10(a)(iv) cannot be met. I support this. I still support that every full year, 1 July to 30 June the following year, of available water data should be used. With regards to data auditing steps to assess data gaps and exceedances, I support the primary sector JWS at para 28. Data gaps do not need to be filled if using historical maxima. I support the proposed amendments to schedule 10(a)(iv) with regards to data exceedances as included in attachment 1 of the planner's JWS but acknowledge there is some remaining drafting work to ensure this meets the intended outcomes of schedule 10(a)(iv). I support the use of maxima for the rate of take limit, daily, monthly, and annual volume limits, as included in attachment one of the planner's JWS. As schedule 10(a)(iv) is intended to provide for a simple to apply, objective, certain, and low-cost process, I no longer consider that schedule 10(a)(iv) needs to include the proposed schedule 10(a)(iv)(5), included as appendix A of Claire Perkins' evidence-in-chief. I support the proposed amendments to the RDA rule in attachment 1 of the planner's JWS that allows for other methods or data to be used where water use records may not be representative of historical water use.

1400

CROSS-EXAMINATION: MR MAW

Q. Good afternoon.

A. Good afternoon.

5 Q. Ms Bright, for the next month or so, and then you'll have your PhD confirmed.

A. Yes, that was an additional correction. Unfortunately, I'm still not allowed to be referred to as Dr Bright, but I will be very shortly.

Q. Right. I wonder whether you could help me understand what daily volume limits might seek to achieve.

10 A. In the context of whether there should be one or not?

Q. Just put to one side whether there should be one or shouldn't be one. I'm interested to understand what a daily limit, what it does, what's its purpose, as you understand it?

15 A. Its purpose would be to limit how much water you can take daily within a 24-hour period.

Q. So when you think about patterns of water use in the Otago region, you accept that applicants or consent holders or deemed permit holders, as the case may be, don't necessarily take their instantaneous rate of take for a full 24-hour period?

20 A. That's correct in some cases.

Q. And so when we think about replicating the current patterns of usage, a daily volume limit would, to a certain extent, pick up those patterns of usage.

A. Yes, in theory.

25 Q. I want to understand now monthly volume limits. Can you explain what the monthly volume limit is and what it reflects?

A. It is how much water you are authorised to take during a month. Depending on how the monthly volume limit has been determined will define whether it is based on historical use or something else.

30 Q. So if the monthly volume limit is reflecting historical use, it may well be that the monthly volume doesn't reflect precisely the number of days in any given month times the daily volume?

A. That's correct in practice, yes.

Q. So it may be less?

A. That the daily volume multiplied by 30.4 could be less or more than the actual monthly use? Yes.

5 Q. So, like the daily volumes, if what we're trying to do is to reflect existing or historical patterns of use, then the monthly volume limit is one mechanism by which the pattern of use at a monthly level is reflected.

A. That's correct.

Q. I want to look at the annual volume now, and again, what's your understanding of the annual volume?

10 A. Much the same as the monthly, that it is the amount of water you are authorised to take during a certain defined period. It could be a calendar year, 12 months, or a predefined period of time reflecting the irrigation season, and its determination would be based on, to my understanding, historical use or some other reasonable method.

15 Q. So where the annual volume is reflecting historical use, again, it, in a sense, might be a limiting factor in terms of the volume of water that might be taken under a consent?

A. Yes.

20 Q. So looking at each of those, and I'll call them limits for present purposes, they are all, in the context of plan change 7, seeking to reflect existing patterns of usage.

A. That's correct.

25 Q. Now, there's been some debate as to precisely how those volumetric limits might be calculated, and I understand that has been considered in the expert witness caucusing that has taken place, and that the agreed outcome, if I understand the joint witness statements correctly, is that, with respect to the daily volume, monthly volume, and annual volume, those should reflect the maxima in terms of historic data, as opposed to averages of maxima, which was a previous position or previous articulation in the schedule.

30 A. That's correct in relation to schedule 10(a)(iv) being applicable to the controlled activity pathway.

Q. Yes. Now, I haven't yet mentioned the calculation of instantaneous rates of take, but in relation to the instantaneous rates of take, my understanding, again, is that the experts jointly recommend that it should

be the maximum rate of take expressed in terms of historic use, as opposed to an averaging of maxima.

A. That's correct, with the specific caveats that the experts discussed in relation to data auditing steps.

5 Q. Yes, that's a convenient segue. So the agreement in relation to the use of maxima was conditional upon there being a satisfactory way by which to remove what is described as atypical data?

1410

A. Yes.

10 Q. So perhaps if I can put that in terms that I sometimes can understand, if I look at a picture, the spikes on a graph that might just look well out of place in terms of a hydrograph showing typical usage?

A. Correct.

15 Q. And in terms of dealing with what is described as atypical data, my understanding is that a step, and I recall it's step 4, has been introduced to deal with the atypical data.

A. Yes, step 4 is currently in a proposed format.

Q. And just so that we're all looking at the same thing, have you got the –

A. The 1st April version?

20 Q. I'm looking at the joint witness statement from the planners which has the planning appendix attached to it.

A. Oh, sorry, yes, it has the date, 8th of April, on the coversheet.

Q. It's attachment 1 to the planning JWS.

A. Yes. I believe I'm looking at the right thing.

25 Q. Very good. So when we look at schedule 10(a)(iv) and the methodology set out, in relation to the rate of take limit, step 4 has been introduced into the methodology.

A. Yes.

30 Q. And that's the process by which atypical data is to be managed when calculating the limits.

A. It's an option that, at this point in time, I believe is a good option, but it has only been heard by both Mr Wilson, myself, and the planners involved in that planner's conferencing, not any of the – sorry, correction – and any other witnesses at the planner's conferencing that was involved in the

hydro and community, but there are experts who have only received this via the Court communications process and have not necessarily provided commentary on it.

5 Q. Now, you were in court this morning, I recall, when I was tasking with reporting back to the Court the matters on which the experts might need to do some further work.

A. Yes.

10 Q. Now, my understanding is that step 4 in the methodology is a step that the technical experts might usefully consider in terms of whether that appropriately addresses the concerns addressed in the technical joint witness statements in relation to atypical data.

A. Yes, and if applicable, I would also like to stress, that is summarised in my evidence in relation to meeting the objectives of 10(a)(iv).

Q. What do you mean by that?

15 A. The three key outcomes that ORC stipulate as being the intended outcomes of schedule 10(a)(iv).

Q. I understand. Have you had an opportunity yet to test the step 4 with some actual data?

20 A. Not any of my own data, sorry, data that's available to me via my clients, other than what Mr Wilson and I had the opportunity to look at during conferencing.

Q. So in terms of further testing this step, my understanding is that the scenarios that have been used in the conferencing might be a useful set of scenarios.

25 A. It would be where I would start.

Q. And at a principal level, assuming that step 4 does appropriately address the way atypical data is managed, you are not comfortable that schedule 10(a)(iv) is reflecting those three outcomes.

30 A. As currently drafted, we have amendments to 10(a)(iv)(1). As long as those same matters are repeated in the additional parts of the schedule, then, yes, we are at a place where I believe this is going to reflect better the outcomes that schedule 10(a)(iv) was intended to achieve.

Q. Yes, and just to be clear on that, my understanding is that the planners had time to make the changes to the rate of take limit, but not the other calculations of limits in the planning conferring.

A. That's correct.

5 Q. And so that's a task that the planners need to invest a little more time in to track those changes into the balance of the schedule.

A. And/or direct the technical experts to make those changes, and then plan is reviewed. I believe that is where we landed, that Mr Wilson and I had a high-level conversation about whether we had capacity within the 48
10 hours following the conferencing to achieve that. We both had to be here today, myself, in this capacity, not as an expert with time to make those amendments, so I believe that it is in progress already.

Q. Very good. I want to talk to you now about the date range for data to be used when conducting calculations using the schedule. Now, as I
15 understand it, your evidence is that all available data should be used for that purpose.

A. Yes, that's correct.

Q. And that would include future data, or data beyond the June 2020 date that was recorded in the earlier version of the plan.

20 A. For permits due to expire prior to 2025, as per defined in plan change 7 as being the permit that it applies to, all available data should be used.

Q. Now, not all planners agree with that change. Is that your understanding?

A. From the joint witness statement and being in the room, there are some potential reservations.

25 Q. And those reservations relate to, amongst other things, concerns that the data, colloquially, could be gamed in terms of higher usage being adopted for a short period of time just prior to a consent being renewed.

A. I appreciated that those were concerns about those people's reservations, but I didn't see that as a potential problem, with some other
30 caveats around that, I didn't see that as a potential true risk.

Q. So when you think about this issue from a risk perspective, and I want you to think about it using two scenarios. One is that the data range stops – I'll get the date right – on 30 June 2020, and the second scenario, there is no fixed end date, so any data available up until reconsenting. So when

you think about the risks of either providing a fixed date versus not, the risk could be conceptualised as in relation to that first scenario, where there's a fixed date, so a past date. It's the risk on the abstractor, the abstractor bears the risk that they might have wanted to take a greater
 5 either instantaneous rate or volume of water after that date, but before consent renewal.

A. It's possible there are very legitimate reasons for that being the case.

Q. And if you think about the risk of extending that date out, that risk is one borne by the environment in the sense of further water being abstracted.

10 A. Not necessarily, because abstraction is controlled by reliability of supply, which doesn't change that dramatically. The current reliability of supply is the current reliability of supply. If the water's not there, it wouldn't be taken beyond the current litres per second limit.

Q. I mean, you think about the changes that have been made to the schedule
 15 in relation to using maxima as opposed to averages, doesn't that heighten the risk of greater volumes being taken for short or temporary periods of time artificially changing the historic use pattern?

A. The historic use pattern may differ between 2020 and some other date into the future, yes.

20 1420

Q. But that risk is heightened with the shift to maxima as opposed to the use of average values?

A. Oh sorry yes, sorry, misunderstood your question. Yes by using the maxima, the maximum that has occurred in that period of time could in
 25 theory be applied for as a replacement allocation.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Was that your question?

A. Sorry?

Q. Was that your question?

30 A. Yes it gave the answer –

Q. You were looking for?

A. Yes.

Q. Oh okay, right, all right.

MS BRIGHT:

I can - would you like me to rephrase or?

MR MAW:

5 No, no.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. So let's just make sure I've understood this, the opportunity to – or the risk of – it's not a risk, the opportunity to increase the maximum amounts taken is higher with a single use maxima used as opposed to the average of maxima over a longer period?

A. Yes but there are those very legitimate reasons when that may occur.

15 Q. So if we hypothetically track forward into the future, assuming that there was water available, an abstractor of water could take at a much higher rate on a one off occasion and that would have the effect of influencing the maximum then historic rate of take on consenting?

A. Yes with the caveat that they would not be exceeding their currently authorised consent limit.

20 Q. Yes and when you look at the range of existing permits, there's a broad range of usage in terms of existing permits, not all applicants are taking up to their maximum amounts?

A. Correct.

25 Q. I want to talk to you now about the restricted discretionary activity pathway and you mentioned in your supplementary evidence that there might be other methods that could be used in relation to the restrictive discretionary activity pathway. Putting the drafting to one side, is it your understanding that the restricted discretionary activity pathway is a pathway to apply when there is no technical information or water metering data available to run the calculation in the schedule or something different?

30 A. Not just no data, but there might be data available that is not representative of the historical use.

Q. Can you give an example of where you think that risk might eventuate?

A. There are many examples we – would you like something in particular?

Q. You give me one that best represents or best reflects where the data doesn't reflect the historic use?

A. The most obvious and commonly referred to example in our conferencing was due to limiting factors in getting water meters installed across Otago.

5 Some people have very short water use records or the good sections of their water use records beyond when they maybe had a manual record initially and then turned to telemetry or a logger could be short and only capture water use characteristic to incredibly dry years where reliability of supply was so low they couldn't access the water they would need or
10 could be incredibly wet years when access to the water wasn't necessarily needed as farmers only typically apply water when their soils and crops require it.

Q. So when you read the wording that's put forward for the restricted discretionary activity and on the staying in the Appendix 1 to the joint
15 witness statement, you'll see matter of discretion A under the restricted discretionary activity?

A. Yes.

Q. Refers to – through consideration of water meter data and other relevant methods and data. What do you understand those other relevant
20 methods to be?

A. Sorry, could you please point me to the –

Q. Yes, sure.

A. I'm not sure if... (inaudible 14:24:51).

Q. Have you got "Restricted Discretionary Activity Rule 10A3.1A?"

25 A. Yes.

Q. And then if you track down there, you'll see that the Council will restrict its discretion to the following matters?

A. Yes.

Q. And then matter of discretion A? You'll see some new text has been
30 recommended for insertion?

A. Yes but I'm – this is now where I'm wondering if I'm not looking at the same version, because I'm aware of the text you're referring to, but it's not in the version I am currently looking at.

Q. What precisely are you looking at?

A. I'm looking at "Matter of discretion A being within the limits of historical use."

Q. Yes, keep reading?

5 A. "The existing water permit conditions, the volume and rate water taken, dammed, discharged or diverted."

Q. No, we're looking at two different versions. Do you have the planning joint witness statement with you?

THE COURT: JUDGE BORTHWICK TO MS BRIGHT

Q. That's dated 8th of April 2021?

10 A. Yes I believe I printed the right copy but it's now apparent I potentially haven't printed the right copy.

Q. No, it's okay, we've got a copy.

A. I'm sorry, I do have it. I was looking at the wrong version, my apologies.

CROSS-EXAMINATION CONTINUES: MR MAW

15 A. Yes, "Matter A".

Q. Right, we're on the same page?

A. Yes.

Q. So there, this is picking up on the reference to other relevant methods and data?

20 A. Yes.

Q. Now just so I'm really clear, this matter of discretion is still in your opinion, seeking to reflect historic use?

A. Yes.

25 Q. So when these other relevant methods are used there, what are the methods that immediately spring to mind, so if you were asked to do a calculation where there was an issue with the underlying record, what are some of the other methods you might use?

30 A. We would employ a range of and in combination, but this is on the assumption also that a water meter does exist, so what available data there is, in comparison if for irrigation we would look at Aqualinc potentially. There are frost biting regulations, stock drinking water regulations, the ability to create synthetic hydrological flow records and/or

take records, we could assess physically, site visit and complete gauging of a system during irrigation to understand the capacity of a race network to know whether under average conditions over Summer, when things are dry, how much water is physically going through a race.

5 Q. So I want to stick in the first instance with the Aqualinc guidelines, so the Aqualinc guidelines, those guidelines don't reflect historic use at all do they?

A. They reflect historic climatic conditions.

Q. The Aqualinc guidelines though don't reflect historic actual use?

10 A. Not water use, no. It represents the demand that would have occurred.

Q. So some care would need to be shown when looking at models such as or methods such as Aqualinc in the context of this RDA and because Aqualinc simply doesn't reflect historic use?

A. No but in combination with a water use record, we can line things up fairly
15 accurately with anecdotal evidence from a potential irrigator and land on a replacement allocation that would be reasonable.

Q. Reasonable or reflective of historic?

A. Reasonable and reflective.

Q. When you read "Matter of Discretion A" as a hydrologist, do you read that
20 as applying or referring to historic use? Is it really clear in that drafting?

A. It is to be me because of line 1.

Q. So within the limits of historical use, you're reading that as saying the methods that are adopted here are to reflect historic use or within the realms of historic use?

25 A. Correct. This was a topic that was discussed at length and the planners sought advice from both Mr Wilson and myself being in the room and that was my assumption based on the drafting. I felt comfortable with that knowing that within historical use, you could use those methods.

Q. Right and so in terms of if there are any improvements that might usefully
30 ensure that that outcome is achieved, you'd be comfortable with that, the overarching principle being that it's within historic use, that's what this matter of discretion's driving at?

A. I believe, yes, there – in light of Plan Change 7 being simple, cost effective, I believe that that wording is appropriate. In a perfect world, you

might have an additional schedule that describes how stock water regulations, frost fighting regulations, Aqualinc, hydroelectricity, community water supplies, all other possible uses, would be defined based on responsible need and/or could address both historical use patterns, but in the context of keeping this simple and putting as least words as possible, and you're not having another schedule, the direction from within limits of historical use satisfies that for me, and counsel obviously has discretion.

1430

10 Q. Yes, I think that's helpful in terms of the understanding about what that manner of discretion is driving at. The wording's probably going to be an issue for the planners to make sure that that is accurately coming through in terms of the wording.

15 A. There may be additional drafting, yes, although, not being a planner, I wouldn't want to put that back on them right now.

JUDGE BORTHWICK TO MR COOPER

20 Q. Forest and Bird representative is not here. Mr Cooper put a (inaudible 14.32.00). Go back to Forest and Bird and ask them to confirm their interest going forward for cross-examination because we are according for them in the schedule, aren't we?

A. Yes, your Honour.

Q. Right.

25 A. We did have an email from them last night saying that they wouldn't make it for the next week and a half in Cromwell due to other environment court mediation commitments.

Q. Right, okay.

A. So we aren't anticipating that they'll be here this week or next week.

CROSS-EXAMINATION: MS IRVING

30 Q. I just have a couple of questions, Ms Bright, for you to assist the Court in relation to the matter of priorities, and her Honour, this morning, expressed an interest in some more detailed examples of how priorities may have been exercised or not within the region. Do you have any

examples that you could usefully talk through, perhaps, to assist the Court with that?

A. Yes.

Q. Could you do that, please?

5 A. Yes, of course. I have read the latest minute from the Court and familiarised myself with the questions related to priorities, and there are some in there that I think an example could provide context to, primarily, the one where priorities are being exercised but there are not necessarily conditions on a consent to that effect in a new water permit where a
10 deemed permit has been replaced. This particular example, a water user has the highest priority take in a small catchment with other water users in a tributary that flows to the Clutha River, so it's a very small, short-order catchment, and they exercise their priority over downstream users. They have recently gone through a replacement process where the intent was
15 for them to continue exercising their priority access to water, and they are doing so under the authorisation of their new water permit, but there is no condition or water-sharing agreement condition on the consent to cover that. The council has not imposed a condition that reflects that a priority is being exercised. The exercise of that priority means that other water
20 users in the catchment have altered their water-use behaviour in terms of the sources of water they are accessing, but also the infrastructure to ensure they have reliability of supply, for example, storage, for when that water user is exercising their priority, so I think that is an example where a priority on a gentlemen's handshake is continuing to occur.

25 **THE COURT: JUDGE BORTHWICK**

Q. What is the name of the permit-holder?

A. Smallburn Limited.

Q. All right, we will direct that we obtain a copy of that consent. Was the regional council – are you familiar with the application for a water permit?

30 A. I was the hydrologist who was involved in the hearings process.

Q. And do you know whether or not in the application for resource consent the applicant stated, you know, we have this existing priority, which we

intend to continue to exercise as between ourselves and everybody else on the small tributary, or was the applicant silent?

A. To the best of my knowledge, the council were aware that the priority was being exercised and would continue to be.

5 Q. And how would have they been aware?

A. There was an affected party approval letter provided by a downstream water user.

Q. And the affected party approval said what?

A. To the best of my knowledge, along the lines of: "I'm aware that so and so is using all of the water upstream, and I support their application."

10

Q. So you are inferring from that statement what? That there was a continuing exercise of priority notwithstanding the replacement consent?

A. In essence, yes.

15

Q. All right, so I will not only get a copy of that resource consent, but together with the application and a statement, I think, from your planner, one of your planners, as to whether or not there was disclosure as to an assumed continuing exercise of a priority, and this is a non-regulatory method, though, isn't it?

20

A. Correct. The way I understand it, they have on their new water permit a scheme management plan.

Q. What does that mean?

25

A. Another term, yeah. So a scheme management plan, to the best of my knowledge, is a condition that is being imposed on many new water permits that relates to the management of the system and any efficiency upgrades that are required by council as a condition of granting the permit, for example, conversion of flood irrigation to spray, and there might be some time constraints that go with that. I have not seen, in a quick search of a few recent ones, anything under these scheme management plans that relates to water sharing. They are primarily about the infrastructure and the irrigation area.

30

THE COURT: COMMISSIONER EDMONDS

Q. And are they also about if you don't use the water within a certain therefore, or basically upgrade the infrastructure, you forgo some of the water that you might have had access to otherwise?

5 A. I'm not sure of the answer to that.

Q. Yes.

A. No, I wouldn't, I'm not – yeah.

Q. I may have seen something of that nature.

THE COURT: JUDGE BORTHWICK

10 Q. So anyway, here, the permit holder has presumed that a priority could survive, if you like, after the application and grant of a replacement consent. Your evidence is the regional council was informed of that in the application, and is it your evidence also that – what is your evidence in terms of any minimum flow or residual flow as a consequence of this understanding?

15 A. So as part of the hearing process, residual flows were proposed on some points of take in the larger complexity of the scheme. The particular permit that exercises priority has, I believe, a visual residual flow condition, meaning there is no numerical limit on how much flow is to be left so long as visually, there is water at a defined point some distance downstream, so that is the current residual flow condition. I may have that wrong, apologies if I do, it may be numerical. It's a complex system.

20 Q. So anyway, the new take has residual flows at different parts on the water body is what your evidence is?

25 A. A single point some distance downstream.

1440

Q. A single point, so residual flows at a single point some distance down? No minimum flow presumably?

A. No minimum flow being a tributary to the Clutha that naturally has drying reaches.

30

Q. And the residual flow, what was the purpose of it?

A. I cannot recall. Often a visual residual flow is to provide for some value that is immediately downstream of a point or take or is simply to ensure that not all water is taken.

5 Q. Now you may have already said so, but so forgive me if I ask this again, your, the permit holder, did they find themselves upstream or downstream in terms of the tributary (inaudible 14:40:43) yes?

A. The effected party?

Q. No, the person with priority?

A. They're the highest in the catchment.

10 Q. They were the highest person in the catchment?

A. In that particular catchment yes.

Q. Oh and the affected party being somewhat down or the lowest person –

A. Yes.

Q. – and said, “That’s all right if they take all the water”?

15 A. Yes.

Q. Yes. And you don’t know whether they said that’s okay because of the priorities or for some other reason?

A. No I have not, I cannot recall the specific wording of it, but my understanding of the situation going into that process was that a downstream user had given approval for the upstream user to continue their status quo. I think it’s recall- I’ve just recalled that their visual residual flow may be based on a 50/50 flow share between the point of take and the creek that they must leave visually half of the flow in the creek which is another complex version of a visual residual flow.

20

25 **THE COURT: JUDGE BORTHWICK TO MS IRVING**

Q. Were you going to ask other examples?

A. Can I just flesh out this one?

Q. Yes that’s fine, yes, go further.

CROSS-EXAMINATION CONTINUES: MS IRVING

30 Q. You referred to Small Burn Limited as being the applicant that exercises the priority, as part of the replacement of the permits and I think it was on

the Park Burn, were there other water users seeking consent at the same time?

A. Yes.

Q. And were they downstream of Small Burn?

5 A. Not necessarily. There were some users in an adjacent catchment that had to some extent were affected by the activities in the neighbouring catchment due to bywashers, race networks, re-takes, discharge permits.

Q. So in essence, was there a bundle of consents in that instance that were considered together?

10 A. Yes there were multiple water users.

Q. Can you recall what the other permit applications were referred to?

A. Commonly there were three that were bundled and held together as a joint hearing. Smallburn Limited was one, Pisa Holdings Limited was a second and the third was Rockburn Wines Limited and they weren't necessarily the sole applicant, but that was the common naming. I believe the Pisa Holdings Limited application covered more than five.

15 Q. Yes and I think your Honour might recall, but there's an appeal on foot I think in relation to Pisa Holdings and Rockburn?

THE COURT: JUDGE BORTHWICK

20 Yes there's, sorry, Rockburn and Pisa both under appeal.

MS IRVING:

And Pisa Holdings, yes.

25 **MS BRIGHT:**

Sorry, I should have made that clearer.

THE COURT: JUDGE BORTHWICK

That's okay, no that's all right.

30 **MS IRVING TO THE COURT: JUDGE BORTHWICK**

If I may, it would probably be helpful for the Court I think if it received the bundle of documents rather than just the Smallburn.

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Why would that help the Court?

A. Because it was a comprehensive bundle.

5 Q. But why would it help the Court? The Court is really trying to understand and I thought it was important for (inaudible 14:44:16) that we do understand whether or not priorities continue to be recognised on a replacement consent, now we have heard evidence in Dunedin, they're not. Now we're hearing evidence they are, so we know for Smallburn something may have been recognised. Now whether that was lawful or
10 not is an even more interesting question, but it's interesting. It's about all I can say really, it's interesting at this stage, what on earth's going on?

A. Yes, no I suppose I'd suggest –

Q. But Pisa, why would am I interested in Pisa?

A. Well what I'm saying –

15 MS IRVING TO MS BRIGHT:

Q. Well would you like to answer that question?

MS BRIGHT:

20 A. Yes I could add, yes apologies, to understand how Smallburn Limited operate their system including their priority, the context that surrounds that is linked to the Pisa Holding and Rockburn Wine's Limited applications.

THE COURT: JUDGE BORTHWICK

25 Q. Well if you give me that paperwork, how many pages are you likely to give me and ask me to then analyse and understand what the relationship is?

1445

A. Many.

Q. Many.

A. It's possible that –

30 Q. And is that going to be helpful in terms of the Court speedily understanding what's happening with priorities? I accept your evidence at this point that priorities are Regional Council is continuing to recognise

priorities on replacement consents and does so after 1 October 2021 would be your evidence, is that right?

A. (No audible answer 14:45:51).

Q. Yes, Smallburn?

5 A. Oh sorry yes I thought you might have been directing a question over that way.

Q. Yes looking, yes, I'm –

A. I think what I understood from –

Q. That's right?

10 A. – one of your comments was that we could, if we could provide you with the detail of that and an accompanying comment from the planner involved and that might just be able to give you enough high level understanding of the total scheme without giving you hundreds of pages worth –

15 Q. That's right –

A. – of application and/or decisions and appeals, so.

Q. – I don't want to hear hundreds of pages. Yes, no that would be – I think that would be helpful because I think I really don't want to receive hundreds of pages and then leave it up to the Court to do its own analysis but question for you, is this just like a one off or not?

20

A. I'm not aware of another specific example –

Q. So it could be a one off?

A. It could be but I don't think it is. I think there would still be people planning onto continue exercising their priorities and it may be more relevant in smaller headwater catchments –

25

Q. Yes.

A. – where there is only three or four users and not 300 water users that have come together as a larger catchment group and/or entity.

Q. I mean, as we've reflected back to Ms Dicey, it may be that the mechanism does extend longer than 1 October 2021. It may be that it doesn't and it may be that this is a gap – a policy gap that needs to be filled, particularly for the an effective controlled activity route. I don't know, but –

30

A. I think there would –

Q. I, but –

A. Sorry.

Q. – what I’m wondering is whether this is an arrangement that the Regional Council is (a) acting inconsistently about or (b) actually hasn’t understood because it hasn’t been properly advised what are the informal -, oh what are the non-regulatory measures or methods relating water use, which is happening on the tribs and I guess bigger body of water than the tribs?

A. Yes.

Q. Have you got any impression about that? Because it wouldn’t be the first case that I’ve come across where I thought, “No, Regional Council has not been told, why should it know?”

A. I think it might be a little bit of a mixture. I think there is a lack of understanding from Council about the current exercise of priorities that maybe then leads to fewer questions asked of those users exercising them.

THE COURT: COMMISSIONER EDMONDS

Q. So did this one come up largely because of the effected party approval situation?

A. That was one component that in this particular case the downstream user provided some approval for the status quo to continue. In this case that would be some of the evidence other than mentioned in the application that a priority was being exercised.

Q. So it may be that people are signing these affected party approvals, but they may have side arrangements in addition that the –

A. Yes.

Q. – the Council may have no idea about?

A. Because a part of this broader replacement process that occurred in these catchments, the particular downstream user in question recognised they weren’t getting water at that location in that catchment, so sought to fulfil their reliability of supply issues from other water sources and I believe they have been able to access water via an alternative.

THE COURT: JUDGE BORTHWICK

Q. Out of catchment source?

A. Is it within the same – it's across catchment.

Q. Well different, cross catchment's in a different water body or –

5 A. Correct, yes.

Q. Yes, okay.

A. A tributary of the water body in question.

Q. Yes. But a different one from Smallburn?

A. It's in the Park Burn catchment.

10 Q. In the Park Burn, yes.

A. I think –

THE COURT: COMMISSIONER EDMONDS

Q. I was just going to say I see that the new controlled activity proposes that these things be non-notified. It basically says there won't be public or limited notifications, so what do you think that might have an effect on the need for affected party approval on some of these things coming to the surface? You might be the wrong person to ask that question of.

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A. I can appreciate the challenge you've just identified because I work in the planning space, but I'm not within scope where I am right now to make comment on that.

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THE COURT: JUDGE BORTHWICK

Q. Because of our lack of understanding of priorities by concrete examples of where they are currently being exercised, a concern that we have is (inaudible 14:50:52) recognised, so were they required to be recognised because they are a policy gap and they cease having effect on 1 October? What needs to be written around that for there not to be unexpected or unattended consequences, particularly if you have got non-notification, because I think it is reasonably unusual that you have users driving outcomes for water plan as between themselves without region having effective control, or more effective control. Do you want to comment on that?

25

30

A. Yes, I think the contrasting point to that is that there are more examples, I would say, where priorities are not being exercised, or are, that would have those unintended consequences if they weren't carried over.

Q. And why do you say that?

5 A. I'm aware of priorities in the Manuherikia where they are not being exercised, for a number of reasons, but if the priority was to exercised, they would have the ability to take whatever they wanted, as they are the highest priority user, and they are voluntarily working with the wider catchment to flow share as per other agreements in place and the wider
10 scope of the catchment. They have not been doing that, so bearing in mind there are other agreements in the catchment, but should that priority be rolled over and allowed to be exercised without the flow-sharing agreement that goes with this catchment, that user could increase their water use and abstract up to their consented limits without consulting with
15 their other water users in the catchment, or there are cases where often, there might be some unintended environmental benefits between priority 1 and priority 2 in a catchment that, should priorities disappoint altogether and water users start taking whatever they want, whenever they want, that flows further decrease and those values are lost.

20 Q. So now we are getting back into the high-level general, and whereas I'm concerned as to the likelihood of that event – say it is species extinction for galaxiids, because that's been the evidence – what is the likelihood of that actually occurring, should priorities A) not be recognised, or B) be recognised, but without any policy around that or without anything else
25 like a water-share agreement around that. What is the likelihood of that? So we deal with risk, how likely is it that that species extinction could occur, or how likely is it that you would have the high priority abstractor de-watering the environment for their neighbours? I do not have a sense of that.

30 A. I can appreciate that.

Q. Well, if I do not have a sense of it, I am not going to carrying it over. That is what people risk in not bringing to the Court good evidence and dealing in generalities. We can only act on the evidence before us, but you have given us an example about Smallburn, you have given us an example

about someone in Manuherikia, and there, you said it is not just a case that the Manuherikia example not rely on existing priorities, but now involved in a flow-share agreement which ensures something. I do not know, we heard a lot of cross-examination that the flows in the river from Manuherikia are effectively set by resource consent conditions. I have not seen that in evidence, it has just come through in examination. Can you expand on that particular catchment?

5

A. With regards to the client that I represent through their current payment replacement process, or Landpro represents, and their current priority status, they have the highest priority permit in the catchment, they are a dairy operation and have spent vast amount on infrastructure to upgrade that system and run a profitable dairy operation. They do not exercise their priority due to voluntarily flow-sharing agreements in the catchment to maintain. They are upstream of Ophir, so they voluntarily work with the catchment to maintain the current 860 litre per second flow at Ophir.

10

15

Q. What set that flow at Ophir?

A. That's a 2(a) flow.

Q. It is a 2(a) flow. It is not on any consent condition anyway?

A. No.

20

Q. No.

A. So this is part of what some other experts have referred to, I guess, as what is actually occurring in the catchment and what the observed flows are aren't necessarily the status quo without those flow sharing agreements in place, example. If the flow-sharing agreements weren't in place currently, the observed flow could be significantly different to what it is currently.

25

Q. Mmm, so I understand from the last witness that there is no utility in recognising flow-sharing agreements because flow-sharing agreements only have impact where work through minimum flows, residual flows, et cetera.

30

A. Yes.

Q. But that is not your evidence? You can have flow-sharing agreements which exist as between water users.

A. Well, this is on the assumption that the group have decided that they are going to work to some flow-sharing.

Q. My question for you is what is happening now in the Manuherikia, not what they are proposing for their long-term consents. What is observed
5 in the river? I was told through Mr Page, through questions, and, I think, responses to the Court it is achieved through consent conditions now, or is that wrong? Is it more like flow-sharing agreements?

MS IRVING:

10 I think you might have got confused with the Taieri.

JUDGE BORTHWICK:

I do not know what I have got confused with because we simply do not have good evidence on this.

15 **MS IRVING:**

The Taieri consents have minimum flow conditions. The Manuherikia consents largely don't.

THE COURT: JUDGE BORTHWICK

Q. Okay, so what drives the flow in the Manuherikia catchment?

20 A. The catchment water users wanting to both have access to water to irrigate and meet their obligations to not inefficiently take water when values need to be protected.

Q. Are you talking about the application which has been filed by the regional council, or the regime, if you like, that they are currently working to now?

25 A. My understanding is that the regime they are currently working to is the same as what is being proposed going forward in those replacement applications.

Q. And so where would I find the detail of that? Do I take it that that is not in any resource consent or deemed permit which currently exists, but it is in
30 a voluntarily flow-sharing agreement, is that what you are saying?

A. It's in a flow-sharing agreement between those catchment users that's in the process of being drafted into a formal –

Q. Okay, so more formal record?

A. Correct.

Q. But it exists? Okay.

5 A. Yes, it is included within, I believe an overview report that accompanied all of the Manuherikia catchment applications that were lodged a similar time. There is an overview report that accompanies those applications that explains, at an overview, higher level, how that all works.

Q. And how long has that been working for?

A. For as long as I've been working at Landpro, which is 2017.

10 Q. So for three years?

A. Yes.

Q. Three or four years.

15 A. And, at various times, other sub-catchments within the Manuherikia might have also decided for a period to voluntarily work in sub-catchment groups on particular flow-sharing agreements to test how they would work in practice should limits be set, and I think Mr Hickey provided some evidence to that, that the observed flows currently in the Manuherikia, as an example, reflect a lot of that voluntarily flow-sharing and collaborative approach that is going on.

20 Q. Right, okay.

A. But I – yeah.

Q. Did you have any other you want to give us of priorities?

25 A. I'm aware of another example that Ms Perkins might be able to talk to a bit more specifically, she was involved, but the water users in the Luggate catchment have new water permits granted recently that have both low-flow rationing conditions and/or scheme management plans, and some of that reflects the previous exercise of the priorities, where they have now been replaced with a flow-rationing system, but I wasn't involved in that process closely enough to comment.

30 1500

Q. But that is, as you would expect, though, the replacement of priorities with something else?

A. Correct, unlike –

Q. And that is what has happened in Luggate.

A. Correct, unlike Smallburn, where they are carrying on as water users on the assumption that those priorities are exercised and there are no conditions on the permits in relation to water-sharing agreements.

Q. But Smallburn is the only example you can give us?

5 A. Correct. There may be others, but to my knowledge.

Q. Okay, anything else? Any other permits that you are familiar with?

A. Nothing that I can bring from the top of my head.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

10 Q. Court has already asked quite a few questions, how about we just finish asking our questions? How do you imagine going forward is the scenario is – which is the regional council’s scenario – you have got a controlled activity or a non-complying activity? So a non-complying activity, generally speaking, we will not have policy support for something being proposed, but nevertheless, on the merits, that ought to be considered.

15 So that is what non-complying means, generally. In the controlled activity law, are there any gaps? That was the question for Ms Dicey, and now a question for you. Are there gaps, and if so, what are they?

A. I would be of a similar opinion that priorities is a clear gap.

20 Q. Can priorities be exercised in some shape or form absent recognition of water-flow or water-sharing agreements?

A. Sorry, was the question can they be exercised?

25 Q. Yeah, can you, if you bring them down, just say you can, the Court should and the Court has got to reach a view on that, but the Court should and does somehow bring them down into this plan change, can they exist independently or any other flow-sharing agreement which may, on a formal or informal basis, exist as between water permit users?

A. In a procedural-only sense, the controlled activity rule does not contain any other environmental considerations.

Q. Yeah, take environment off it.

30 A. Then you could just roll the priority over.

Q. Yes, but can they be usefully exercised?

A. Between water users?

Q. Yeah, without actually recognising that there is also flow-sharing agreements present, because I thought you said they could not.

A. Well, where there is no flow-sharing agreement –

Q. Then that is all you have got.

5 A. – then the priority is all you've got between water users to ensure that whoever had priority had got first access.

Q. Yeah, yeah.

A. But there are many more cases where flow-sharing agreements are being proposed as a replacement of priorities, so I'm not sure what pathway forward we have if flow-sharing agreements are not to be a part of plan change 7, because we do not have limits, or ecological or hydrological or all other values, to define those, then no, a flow-sharing agreement can't come first, in a sense.

10

Q. Meaning that – meaning what, sorry? You lost me.

15 A. That you need all of the other information in relation to all values to set a limit, which then defines what flow you have available to share.

Q. So you could not have a flow-sharing agreement which is dealing with abstractor access to water, if you like, regulating as between abstractors only?

20 A. Oh, sorry, no, yes, you could.

Q. You could? Okay.

A. Yes, well, a priority could just become a flow-sharing agreement between user A and user B that user A gets first access.

Q. Yeah, something like that.

25 A. Yeah, yeah.

Q. Okay, that is a useful way of looking at it.

A. But more often than not, a flow-share agreement is developed quite tediously with users on the basis that we have well-informed science, so it would be a shift in the use of that term to define it that way.

30 Q. Yes, no, understood, okay, I understand the language difficult. So in your example of in the Manuherikia with the permit holder – and can you tell me who it is, the one who has got first priority?

A. Barley Station,

Q. Where is that?

A. Barley Station.

Q. Barley Station.

A. Commonly known as.

5 Q. Yeah. So Barley station was to apply for a permit that, under a controlled activity rule, granted – because it must be granted – recognising its priority, then what? Then recognising its priority must also be a drive to, as part of that recognition, because the word priority does not mean a heck of a lot, it needs, I suspect, to be flashed out.

A. Yes.

10 Q. That would be in the form of an abstractor-only water-sharing agreement, so not talking about environmental stuff at all, we are talking about regulating the take of water as between abstractors. There would need to be some mechanism setting that out, what that meant.

A. Yes, there would be.

15 Q. Otherwise, if Barley was taking on the basis of historical use –

A. They would essentially get the use that reflects their exercise of the priority.

Q. Yeah, and what is the downside?

A. Not, sorry, not exercising of their priority.

20 Q. And the downside to that is what, if anything? So they are just taking historically, but now, they could apply that out of season, or they could apply that in –

A. They would not be able to, due to agreements with Falls Dam Company. There are other agreements in that particular catchment that would limit the exercise of them going back to square 1, full mining privilege, taking whatever water they want would not occur, but in their particular case, if we consider, hypothetically, that they could exercise their priority, their historical use figures calculated under schedule 10(a)(iv) would never allow them to exercise the priority, because they have been restricted, voluntarily doing so, wanting to work with the catchment, but that use figure would restrict them from being able to fully exercise their priority, I suspect. The timing of their pattern of taking might change, but they also have submersible river pumps that are on pipes, so they are also

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restricted based on their infrastructure. It's not an open channel where the take is less controlled, to a certain extent.

THE COURT: COMMISSIONER EDMONDS

5 Q. One of the maximums, meaning if you're going on the maximums, how would that be limiting?

A. So currently, during summer, lower flow conditions in the Manuherikia. If the river is approaching minimum flow, and the water users, along with the irrigation companies in Falls Dam, are working to manage a water level that hovers above that minimum flow so that we can all continue to take a little bit without hitting the minimum flow, Barley Station voluntarily reduced their rate of take also, so their historical use does not necessarily reflect what they could actually be authorised to take during those periods, because they do not, in theory, have to voluntarily not exercise their priority. So their use is somewhat lower than what it would be had they exercised their priority, because they had been asked to reduce their rate of take, or not take on certain days.

10

15

Q. So how does that get picked up in the controlled activity? How does it?

A. I'm not entirely sure right in this minute, but I could think about that from a technical hydrology perspective, other than some sort of agreement that is the same as a priority but worded differently to make sure it covers the appropriate circumstances.

20

Q. Well, wouldn't the regional council just simply say that that pattern of usage is going to be reflected in the water data for many, not necessarily all, because, you know, some people allude to (inaudible 15:09:37) and so forth, but for those that have a good record, it is going to be reflected in that, in daily and monthly use patterns?

25

A. Yes, sorry, yes.

Q. Yeah, and those daily and monthly use patterns, is that what is being brought forward, once we figure out what the maximum was, does that reflect the agreement with Falls Dam or whoever it is that is driving the voluntarily restrictions?

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1510

A. Yes.

Q. So that's, yes?

A. Essentially yes. Their historic use demonstrates compliance with voluntary –

Q. Measures?

5 A. – measures to regulate flow.

Q. And so if you're looking at your schedule and what comes out of a schedule, what's the product, is it a – I'm not sure what it is, is it a single highest day or a single highest month or are you going to see a pattern of usage over an irrigation season for example?

10 A. A pattern of usage that will have instances of high end use within limits that reflect that there was supply available and there was demand for that water so it was taken.

Q. So over what sort of a time frame are we talking for some of these voluntary arrangements kicked in?

15 A. Do we see instances where we have increasing and decreasing use?

Q. Yes?

A. That could be daily, weekly, monthly, season to season.

Q. But going back how many years were some of these things starting from –

20 A. Yes I would have to –

Q. I'm just wondering about this -

A. Yes.

Q. - all available data -

A. Correct, yes sorry.

25 Q. – provisions, so that –

A. I would –

Q. – you know, lately that might all be reflected in the data that the earlier ones it was a completely different sort of arrangement, so I'm just struggling with that concept?

30 A. And I think this is why having the RDA pathway open to where water use is not representative, is appropriate in terms of being able to demonstrate why use record, however, long it is, is not necessarily representative of use, but it is possible under that controlled pathway using the schedule, if you use all available data, it will show periods of time when priorities are

potentially more or less relevant along with any current voluntary flow sharing agreement because every season is different. So the use pattern will show spikes where water use is higher because water is available and all users might be taking water because it's available or that user might have been allowed to take water because it was available.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

Q. And if it's not available, what does maximum usage tell us about how flows are being managed through non-regatory means?

A. It shows the maximum water that was available to be taken by that user.

10 Q. So the maximum water available to be taken is it saying anything about when in this case, Ida Station was required to dial it back?

A. It's incredibly difficult to see the pinpoint moments when that's occurring, but largely the pattern reflects if lower use is occurring, it is possible if that coincides with what would otherwise be a dry month and flow levels are dropping, that might be the consequence of them voluntarily reducing their rate of take.

15 Q. So how does the maximum reflect priorities if it all, the exercise of priorities, if at all?

A. It would be incredible difficult to see that in a record.

20 Q. So (inaudible 15:13:27) okay. So if priorities are something that – somehow they must be brought down, how would you do that and for what purpose and how would you reflect these (inaudible 15:13:45) agreements that you say are there?

A. Well I think the flow sharing agreements may not be relevant under the simple roll over controlled activity six year term pathway.

25 Q. Why not?

A. Because those flow sharing agreements often are accompanied by infrastructure upgrades to ensure that a flow can be maintained between users if reliability of supply is going to be affected, then storage is often installed or conversion from flood installed or converging from flood or border dyke to more efficient spray methods would be required to give effect to a flow share agreement, so one under a procedural only approach, a priority is the best way to reflect any incidental environmental

gains being provided for by current priority water users sharing on that basis.

Q. How would you apply a controlled activity rule to Manuherikia? Assuming that that's your only pathway, just say it is your only pathway, how does it get applied?

5

A. Assuming that we have a schedule that prescribes the use of historical maxima?

Q. Yes?

A. And you can take into account existing conditions of consent, where those are obviously relevant and the existing priorities if they are being exercised, you could roll that over.

10

Q. You could?

A. I believe so although I –

Q. And there's no gap there? Like if it was Barley and you do that for Barley Station?

15

A. Mhm.

Q. There's not a gap represented by some other formal or informal arrangement for Falls Dam?

A. Well they might as a catchment continue working to their voluntary, their voluntary flow sharing, I'm not sure what would happen in the Manuherikia if we went to a situation where applications were to be considered under the controlled activity pathway as drafted.

20

Q. Well that's what I'm asking you.

A. Yes I don't –

Q. Yes.

25

A. – we would have to revert I suspect away from the proposed mitigations that are currently on the table.

Q. But their proposed mitigations on the table because there's infrastructure change and change in reliability, is that not so?

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A. Yes, because we're applying under both the Regional Plan and Plan Change 7.

Q. So if you're not proposing irrigation upgrade and if you're not proposing to change intentionally reliability of supply, how would the control activity apply to, like, within that catchment?

5 A. You would get the historic maxima, as calculated in accordance with 10A4, maintaining the existing relevant conditions and I suspect be rolled over with a new permit.

Q. And that would be effective without anything more. That's really what I'm driving at.

A. Yeah.

10 Q. Except what I am I missing?

A. In the Manuherikia currently, I'm not aware of how other priorities are being exercised and whether the current on-the-table proposed flow sharing reflects all priorities or not and whether all priorities have to be rolled over but I think the simplest way forward is just to roll priorities over and let water users, admittedly under a non-regulatory method, continue to manage water like that, if we are to maintain the status quo.

15 Q. Well, that's the proposition by the Regional Council, maintain the status quo.

A. It's entirely possible that if Otago-wide priorities were not carried over, that there could be increased water use by some users, not beyond their historical use or limits but rather the timing of that water take, that if a downstream user who otherwise had priority is also taking, that there either isn't water available or a reach of river that has otherwise always been wet or intermittently wet is now permanently dry.

25 Q. Okay.

THE COURT: COMMISSIONER BUNTING

Q. I just had one or two questions if I may. In your joint witness statement, for the primary allocation, there was a statement about the outcome was to provide a methodology that's simple to apply and so on, which you've talked about. It was prefaced with schedule 10A4. Does this also apply to the RD route?

30 A. Yes, but it would be on the applicant's own back to what extent they wanted a, presumed to invest in providing alternative data via other

methods that Council would then have discretion over whether to accept or seek further information on but the intent would be that it would also be simple but it would be on the applicant if they choose to spend a little more resourcing on preparing an application under that pathway.

5 Q. So how would that relate to the process under the existing water plan? Do you have lots of meaningful discussions on these sorts of matters?

A. Every application. The current RDA as the proposed amendments sit, forgive me if I haven't quite got the wording right in my head, I haven't delved deeply into it because I haven't been preparing planning evidence
10 but the RDA feels very similar to the current process where we present other data that accompanies water use data, whereas the RDA is assuming that you are also applying for a six-year permit, whereas that's not the case obviously under the Regional Water Plan but the process to provide that data, have a discussion with Council, potentially provides
15 some additional information to support your water use records because the RDA requires you to have a water metre installed, would be similar but still more straightforward than the current process under the Regional Water Plan.

Q. Okay, because this use of this term "other relevant methods" which has
20 been put into the draft of that provision, but if you go back to your own joint witness statement, the technical one, it talked about frost-fighting guidelines, stock water guidelines or guidance documents.

1520

A. Yeah.

25 Q. And then there's another sort of an umbrella guidance document, that I think it referred to also in the joint witness statement that would need to be updated.

A. Yes.

Q. Can you just speak a little bit to those three guidance documents and how
30 they work?

A. Could you refer me to a paragraph number, just so I can speak specifically?

Q. Okay, para 25 of the primary sector. Have you got that one there?

A. I should do, hopefully no printer issue this time. 25.

Q. If I've got that correct.

A. Oh, yes, it's the second bullet point.

Q. The second bullet point, yeah, yeah.

A. So how that would work in practice?

5 Q. Yes, and what these guidelines are, who's prepared them and so on.

A. So the Aqualinc guidelines, I think, have been discussed.

Q. I think we understand that one.

A. Yes, enough.

Q. Yes, okay.

10 A. Fantastic. So the frost-fighting guidelines are not necessarily formal guidelines, specifically, in terms of the Otago region. There are other guidelines under other regional planning frameworks that I believe the regional council here in Otago looks to as for how we would apply frost-fighting water use allocations in the Otago context, and there is some
15 guidance around a millimetre-per-hectare water requirement to fight a frost of X duration, and you then apply some known information about how likely a frost is in Otago based on your location and multiply that to get a reasonable volume of water that would be applicable to fighting frosts on that property.

20 Q. And do you have agreements or disagreements?

A. I'm not aware of where we've had disagreements.

Q. Okay, so frost fighting is reasonably understood and agreed.

A. I think it's relevantly black and white, the water requirement to fight a frost. I think more issues arise when it is mixed with other water use and how
25 you might be fighting a frost during the irrigation season, quite early on in the irrigation season, and is that indirectly irrigation water for the day, or is it only frost-fighting water? If you've fought a frost in the morning, you are not necessarily then going to go straight into a rostered irrigation day if you were planning on irrigating anyway, because you've just applied
30 water. So it gets more complicated when there are other uses in the mix, but just to determine a reasonable amount of water for frost-fighting purposes, there are some quite specific guidelines that are relatively black and white.

Q. And the next one is stock water guidelines.

- 5 A. Yes, so my understanding in using some of these guidelines is that there are a few documents prepared, also by other regional councils using external consultancy services, for example, that the regional council looks to in terms of defining what an appropriate litres per head is for a dairy cow, beef cow, sheep, deer, vice versa, including dairy shed wash water. So those guidelines inform what is reasonable use for those purposes.
- Q. So if you're assisting an applicant, do you have a fairly clear understanding of what?
- 10 A. Yeah, the Otago Regional Council in their resource consent form number four outline very clearly what the expectation is around stock drinking water and frost fighting. Both have numerical guidance included in the consent form about what you can apply for. There are circumstances, depending on where you might be and the breed of animal. You know, dairy cows is quite general, there are larger dairy cows that require more drinking water, so I presume there is the ability to discuss with council and use an alternative guideline, which often comes from Dairy New Zealand in that situation, on what is a reasonable water requirement for a large Friesian cow, for example, particularly if they're also winter milking, you know, the milking season then strongly affects
- 15 drinking water, so I presume there is the ability to discuss with council and use an alternative guideline, which often comes from Dairy New Zealand in that situation, on what is a reasonable water requirement for a large Friesian cow, for example, particularly if they're also winter milking, you know, the milking season then strongly affects
- 20 how much water would be recommended or is also reasonable use.
- Q. Okay, and the overall guidance document? I think in the joint witness statement, it said it would need to be modified.
- A. Yes, so the Otago Regional Council, not long after notifying plan change 7, produced a guidance document for users of schedule 10(a)(iv) that sets out some step by step, almost a recipe of how to use the schedule, so that needs to be updated with the consequential changes that have occurred to the schedule through this process, but that guidance document exists in terms of helping or facilitating those who want to use
- 25 schedule 10(a)(iv).
- 30 Q. So it's only 10(a)(iv), not the interpretation of the regional water plan?
- A. No, it is only –
- Q. Only 10(a)(iv).
- A. Only 10(a)(iv), and has no relationship to the water plan, operative water plan.

Q. Okay, thank you. Just a couple of other small details, in terms of the water meter data, I think, in the joint witness statement, Mr Leslie suggested that it should be connected to logger or telemetry, but is would that be a requirement to accept that data?

5 A. Well, it is a requirement to a certain extent under the water meter registrations unless an exemption is provided, so in all avoidance of doubt, people who have existing water meters will need to have a logger of telemetry, but there are cases out there where manual records are still collected.

10 Q. And would they form part of your historic record?

A. Yes, in my opinion, they should meet the criteria to enter the controlled activity and apply schedule 10(a)(iv), otherwise, you walk down a pathway, again, where it is not easy to access the controlled activity rule, and people are left to use a different pathway, and that becomes the non-cost effective simple process.

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Q. And so do you have any idea what proportion would fall into that category across the –

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A. Not a proportion. Unfortunately it would be far less than there is loggers in telemetry available but I'm very aware that there is examples across Otago where access and, sorry, access to use that technology where you can have a logger and/or telemetry installed is just not possible right now and a lot of those water users, I know, when the, as part of the freshwater package, the regulations were updated, have been working through what that process would mean for them and how they can best comply with those regulations, obviously with the change in requirement around that, so there are manual records out there that would exist or records that don't meet the current regulations for those purposes but I suspect that in future there will have to be some way of doing that or those exemptions will still apply.

25

30

Q. But the manual records can still form part of the historical record that you take?

A. They could do if it was needed to demonstrate your use. The manual records tend to not reflect your historic maxima, so they would possibly

actually disadvantage an applicant if using the average maximum, because those manual records don't capture necessarily how peaky or variable taking actually can be but by using the maxima, if it is appropriate to include older manual records, it still contributes to your description of what you've been doing for the last 10 years and it would seem unreasonable just to exclude it.

5

Q. So when you say it would be appropriate, is that a matter of contention perhaps?

A. I think there has been, there was discussion around the table around whether manual records mattered or not and at the end of the day, when you're using maxima, I suspect they don't but a water user may still feel that part of that manual record, whether it's, there are various types of manual records, is relevant for them demonstrating what their historical use has been under a 10A4 scenario. It might be more applicable under the proposed amendments to the RDA activity where there is a need to use those records that otherwise not necessarily fully compliant with having some sort of logger or telemetry.

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15

Q. Okay. Thank you. Community water supplies, community water, the take is obviously sometimes shared with other things.

20

A. Yes.

Q. Have you discussed, you know, at your conference how you may take out the drinking water component or how is that dealt with? Is it still just dealt with as an all-in?

25

A. I think during the primary sector conferencing, perhaps unknowingly to the experts in the room, we were referring to it, in a lot of our discussion, about exclusively primary sector examples. There are, where the primary purpose is for irrigation, there are permits that have a primary purpose as being for irrigation that also some water may go for domestic supply but that in a sense, as far as an understanding from the planning conferencing, wouldn't necessarily be defined as a community supply in essence. So I think not being involved in the community supply conferencing beyond what I got from the planning conferencing and reading the JWS, the amendments to plan change 7 reflect the needs for

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community water supplies where the primary purpose is for supplying community drinking water.

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Q. But you weren't at that conference?

5 A. No.

Q. No. Sorry, I didn't realise that.

A. Sorry.

Q. Okay. Okay. I think that's all I had. Just one last comment I noticed. It's a general comment. I would have found it helpful if the pages of the plan change had numbers on them to – when I open them out sometimes I thought when I put them back together it might be the wrong way or something. So that's just a general comment but that's the questions I have. Thank you, your Honour.

10

THE COURT: JUDGE BORTHWICK

15 Q. So ordinarily this would be the time for re-examination. Do you want to take that on or do you want – or not. I mean it is kind of weird asking you actually.

A. I didn't really have anything that I was –

Q. Okay.

20 A. – thinking I'd cover off but –

Q. No, all right. But I guess the question for you, Ms Bright, is, you know, there's been a lot of discussion and obviously the matter is wide open, that controlled activity rule and is there any gaps, how the gaps are going to be filled but there's been questions from Mr Maw and questions from Ms Irving, questions from the Court. Is there anything you want to add or where you felt my answer was incomplete or, yeah, any, reflecting on where you want to be clear that we have understood what your evidence is where perhaps in the discussion you think that we might not have or the questions have been too narrow for you to, you know, have a complete answer?

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A. I would potentially, given the opportunity now, provide some additional context to some of the questions from Mr Maw that I think it's really important to consider in relation to the data that is used in schedule 10A4,

that statistically speaking, all data or more data is always more appropriate and more data between 2020 and beyond for a permit that doesn't expire up until 2025, may be incredibly relevant for them being able to demonstrate their historical use. We don't know what climatic conditions may occur between now and then but we may get use records that help a user demonstrate what the historical use is, in a scenario where there has been no ramping-up, is that common word used, I think it'll be incredibly clear to the Council where a water user has gone out of their way for that to occur and there are provisions that is not under the controlled activity and they may be encouraged to the RDA. The Council then has full discretion as to whether to consider that data or not. If it is justified water use, it should be considered, particularly where investments are being made now and I'm talking about through the ordering of cherry trees and setting down deposits for cherries that are not intended to be planted for two years but there is water available within authorised limits, that investment has been made now and that water user may choose to stay within their authorised limits for the next however long and use that water that they're entitled to take to feed the trees that they've paid for now and plan on planting. So that's an example where justified increased water use in the period extending beyond June 2020 and up to whenever could be incredibly relevant and cutting that water off could be at a detriment to substantial investment. There are other many examples where, I think I said there's lots of examples and we could, you could talk at an arms-length about, you know, storage is a classic example. It takes time for a storage, for a system with storage to adjust and get used to working with storage and using their authorised primary allocation to fill that storage and that may occur, may have been planned for or be occurring across seasons, across that 2020 date and it is important to consider that ramping-up as reasonable use. So that is their historic use because it is justified. So I think it may be that in those cases, applicants are encouraged to use the RDA pathway if that became part of plan change 7 based on the proposed amendments, so that they have the opportunity through other use, sorry, through the use of other methods or other data, to demonstrate why that water use is justified but

I think we can't just assume that all water use between now and 2025, if a consent is not due to expire and is not currently, you know, in the system, that all that water users misbehaviour. So I think there's some important distinctions to consider when assuming the implications or the risk. It's a can of worms.

5

Q. No, no, I appreciate what you're saying. It's just something else to think about. How do you sift between misbehaviour and actually, your storage example is a good example, so storage is sunk infrastructure. It's in the ground. We can see it and the bedding-in of storage systems, a good example but that's an easy example. It's where it's actually, because you've got the infrastructure in the ground.

10

QUESTIONS ARISING: MR MAW

Q. A follow-up question if I may. In light of that, no, it's interesting. So as part of your further explanation, in terms of legitimate reasons to increase taking water in relation to say a permit that doesn't expire until 2025. You said it would be obvious to the Council where there'd been ramping-up versus legitimate increases because of your example, purchase of cherry trees et cetera. When you look at the planning framework as it's currently put forward, the controlled activity wouldn't give the Council any such discretion in that instance, would it, because it would simply be the maxima used up until the date of expiry. So thinking about what you've put forward, if the controlled activity pathway retained its fixed date, the 20th of, the June 2020 date, but the restricted discretionary pathway didn't have that limit, would that perhaps provide the flexibility for consideration of the increased use where Council does have the discretion to consider the appropriateness of it?

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A. That might be a better way of looking at it but I'm not sure if the amendments have since reflected that or whether I've misunderstood what the planners were intending but that would be a more appropriate way potentially to deal with it, but it is again the controlled activity rule is intended to be cost-effective, simple, capture as many water users as possible considering why in this process. If that is the intended purpose of the controlled activity rule, that component of it could just be removed

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but I appreciate there are other planning-related things that go with that but I'm not a planner.

Q. That was all. Thank you.

A. The only other thing I would just say is, the question of priorities, I can appreciate how complexing and confusing they can be, particularly where
5 they are being used or not and then what's happened when a permit's been replaced or, you know, what's the assumption from water users about priorities. I suspect that specific farmers might be able to provide those examples that you're looking for.

10 **THE COURT: JUDGE BORTHWICK**

Q. It's not necessarily that they're confusing. It is the case that there's not a lot of evidence about this –

A. Sorry.

Q. – although there are farmers to come.

15 A. Yes.

Q. But even still, there's no analysis about this, other than they exist and some folk exercise them and some folk don't exercise them and evidently they're important if there's no other regime in place to bridge a gap, okay, so that's fine, so then what is their import? Is it abstractive, regulating
20 abstractive, environment, something else. It's like if people want it, they've got to give the evidence about it and so that we can start to think, well, is the policy there, is the policy framework there, is the rule framework there. But I expect we'll see more of you. Okay. So thank you very much. The next time we see you, will you be a doctor? When's
25 the conferment? You don't know?

A. 9th of May.

Q. You might be, yeah.

A. Yeah. I shall let you know.

Q. Enjoy that day if we see you later.

30 **WITNESS EXCUSED**

COURT ADJOURNS: 3.40 PM

COURT RESUMES: 4.08 PM

THE COURT: JUDGE BORTHWICK

Sorry about the delay. Be seated, I understand the delay is occasioned by parties wishing to swap witnesses around. I've generally no problem provided
 5 that we are given a good reason by the witnesses not available and generally speaking provided also we don't cut across another party's case, though sometimes that's not possible. So when asking to change the schedule it's really important that you give us the reason. The reason is not that the witness is unavailable, why? Why? Are they just prioritising a haircut or something
 10 more important, like they, in this case they've got teaching commitments in Christchurch. So that's reasonable. So provide more information please.

THE COURT: COMMISSIONER EDMONDS

And notice would be good because I like to re-read the evidence before the witness comes on.

15 **THE COURT: JUDGE BORTHWICK**

It's reading as it goes.

THE COURT: COMMISSIONER EDMONDS

Q. So to get a witness for two days or something suddenly in the box I don't think that's very helpful.

20 **THE COURT: JUDGE BORTHWICK TO MS PERKINS**

Q. So, you are in the box Ms Perkins, so we need to swear you in. I know you want to produce a summary, is that best considered as evidence given that we don't want to confuse you with being an advocate?

A. I think in this situation if you just take it as evidence but –

25 Q. It's safest?

A. - I'm trying to talk about it more in summary, it's just that it's safest I think and that's why I thought putting them together was probably the best option.

Q. Yes, no that sounds like a sensible plan. So we will swear you in.

CLAIRE ROSE PERKINS (AFFIRMED)**THE COURT: JUDGE BORTHWICK TO MS IRVING**

Q. Do you want to do your bit? Thank you.

5 A. I'll just bring up Ms Perkins' evidence.

EXAMINATION: MS IRVING

Q. Ms Perkins, your full name is Claire Rose Perkins?

A. Yes.

10 Q. And you are employed as a Senior Planner and the Planning Team Lead at Landpro Limited?

A. Yes.

Q. You have prepared a brief of evidence in these proceedings dated 5 February 2021?

A. Yes.

15 Q. And you have also prepared some supplementary planning evidence dated 23 March 2021?

A. Yes.

Q. Are there any amendments that you wish to make to either of those briefs of evidence?

20 A. No there's no corrections.

Q. And I also believe that you are a signatory to the joint witness statement in relation to planning dated the 8th of April 2021?

A. Yes.

25 Q. So can you please confirm for the Court that those three documents are true and correct to the best of your knowledge and belief?

A. Yes they are.

Q. Thank you, I'll leave you for questions.

THE COURT: JUDGE BORTHWICK

30 Q. I think you want to do two things, you've got an opening and you've also got a summary of evidence, so which way do you want to go first?

A. If I just take you through the opening that just sets the scene for the clients that we are sort of representing here as well. So I'll just read through that and you just let me know if there's anything as you go. "I present this opening summary as a representative of Landpro Ltd, not as a planning expert. This summary is made on behalf of Landpro and other parties. Landpro is a consultancy firm headquartered in Cromwell, Central Otago. We support a significant number of rural landowners and their resource management needs, including preparing applications to replace deemed permits for water take, use and storage, as well as applications for new permits. We have been working with our clients for many years drafting their applications and assessment of environmental effects and coordinating science investigations of hydrological flows and instream ecological values to support these applications. Many of these replacement applications have already been lodged with ORC (to balance the timing and spread of their lodgement as preferred by the Council) , prior to Plan Change 7 (PC7) being notified, and several have been granted. Since making our original submission a number of replacement applications have been lodged. So the expert evidence of myself (Planning) and Ms Christina Bright (Hydrology) who you've heard, is being presented on behalf of the following additional s274 parties: a. Ross Naylor, farmer in the Manuherikia catchment, b. Hortinvest Limited, who manage Deep Creek Fruits Ltd Partnership and develop and operate cherry orchards in Central Otago, c. Knapdale Farms Ltd, farm located in the Manuherikia catchment, d. Lindis Peaks Farming Ltd and Terrace Irrigation Ltd, farm and irrigation company located in the Lindis catchment, e. Earl and Bernadine Attfield, on behalf of the Waikerikeri Water Users Group, farmers located in the Clutha/Mata-au catchment, and Mount Earnslaw Station, farmers in the Earnslaw Burn catchment who run a small hydroelectric scheme. So further details on the parties is identified in paras [20] to [69] below. So why did Landpro submit on PC7? Landpro have invested time and money into submitting on PC7 as we feel strongly about helping shape the outcomes and future of our rural communities, particularly in Central

Otago. Landpro have three key company values – Be Honest, Be Your Best, Be Collaborative. It is these values that helped drive this decision. We concluded that given our strong views on the suitability, or lack thereof, of PC7 as notified, if we did not choose to submit and seek a better outcome for the transition period to a new land and water regional plan, then it would be very difficult to be able to provide the best possible advice to our clients on the best pathway forward now, and over the next 5 - 6 years. In addition, as this plan change has been directed straight to the Environment Court rather than initially proceeding through an RMA Schedule 1 process, and as there is no outside funding being provided by clients (including those which we have offered to represent), Landpro (as a small business) do not have the financial backing to have instructed legal counsel. The time of our experts myself and Christina Bright has been provided at a significant lost opportunity cost to the business. As a result of this funding constraint, we have not been able to be present in Court throughout the hearing, however we have been keeping close and track of proceedings via the audio and visual recordings remotely and participating in expert witness conferencing as required. We consider that through our participation to date we have made a tangible contribution to the process. Although it is disappointing that we and other parties have spent substantial time and money to now be back at the point where the 14 March 2021 version of PC7 has become the much simpler procedural plan change as originally recommended by the Minister. Through our participation in the focus group workshop in January 2020 we raised the cost and time issues relating to the ORC's suggested inclusion of environmental considerations, and advised that if PC7 was required at all then it should be a very simple and straight forward roll over, not the detailed version that ended up being notified and we are now having to apply for consents and be processed under. The issues raised by Ms Gilroy and Ms King in their evidence, in relation to the substantial amount of information that is required in an application in order to pass the s88 test and then further request under s92, are

being faced by our team on nearly every application, even where those are for terms of not more than 6 years and which are intended to be a simple rollover. The application process is requiring a substantial amount of information for what is supposed to be a short term 6 year transition period. ORC Consents Officers have recently advised that they were considering whether two of the applications we have recently filed for 6 year terms should be rejected under s88 due to their view that because there was no substantial hydrology science work undertaken in the subject waterbodies, the applications could be considered incomplete. This is contrary to the argument ORC have been putting forward through this hearing to date that this transition time is needed so that ORC themselves can undertake the science work to be included in the land and water regional plan before a second round of replacement applications can then be submitted. This is supposed to provide for a simple, cost - effective rollover process which PC7 as notified is not achieving in practice. So Landpro's position, in reference to page 2 of the original submission, but further updated as the Court has progressed, the key outcomes that Landpro seek are: a. To introduce a simple rule that enables current permits to be effectively exercised as they are currently until a new land and water regional plan is operative. This requires re-issued consents to be on the same terms and conditions (aside from historical use limits being used as new limits, rather than paper limits), including statutory entitlements, and requires removing the restriction on increases in irrigable areas. b. Remove from PC7 deemed permits relating to the damming and discharge of water so that these permits can continue to have applications assessed under their current RPW framework. c. Allow those permit holders willing and able to lodge their replacement applications before October 2021 to seek the long-term consents that they need, as many have done already, and have duration considered on their merits."

THE COURT: JUDGE BORTHWICK

Q. Just pause there a second, I need to re-read (b) I didn't quite hear it. Oh okay, I see what (inaudible 16:17:35) it.

A. Paragraph 18?

5 A. Yes, slow the pace down?

A. Sure. "In reference to point (c) above, I attended the recent community meetings for the Cardrona catchment (and my colleagues similarly for the Arrow catchment where the flow and allocation regimes that will be included in the future land and water regional plan were presented. At this meeting, ORC's General Manager, Strategy, Policy and Science advised the attendees that this regime takes into account the community's values and vision for the catchment including those of Nga Runanga. She also confirmed that no further work, science or otherwise would be undertaken on this proposed regime prior to the land and water plan being notified. This confirms Landpro's view that where there has been substantial work at a catchment scale, longer term consents may be considered. So I then move onto other parties represented and the reason for their submission. Ross Naylor. Mr Naylor's family own two properties in the Manuherikia Valley that are farmed together. Irrigation occurs on both blocks and is delivered from various sources including private water takes in the Chatto Creek and Thomsons Creek catchments, as well as irrigation company water delivered from the Omakau Area Irrigation Company (OAIC). The irrigation water is currently provided under consents due to expire on 10 15 20 25 30 1 October 2021 through a mixture of deemed and water permits. Significant investment has been made in the last decade on the properties to upgrade the irrigation infrastructure, water storage and water use efficiency. Mr Naylor has engaged Irritech Otago Limited to design pivot plans for the whole property, with water guns in the corners that are set to replace flood irrigation that has been occurring across some parts of the property. Further development of storage on the property has occurred with new storage installed in the 2020/21 irrigation season to increase the storage capacity and therefore increase irrigation reliability on the property, and reduce reliance on instantaneous

creek flows. These additional operational efficiencies (in particular conversions from flood to spray irrigation) will achieve greater water use efficiency but developing storage requires significant and long-term capital investment. Mr Naylor has acted in good faith and has been preparing for these renewals for some years, being mindful of the previously well signalled process and efficiencies that would be required to comply with the existing Aqualinc models and undertaking science work to understand of the effects of his abstraction activities on the instream ecology and hydrology of the Black Bush, Chandler and Devonshire Creeks and as part of the wider Manuherikia Catchment process. Efficiency has been his prerogative with his entire financial outlay. He has planned intensively and invested significantly in all his water development. Mr Naylor was advised by the ORC that he had to have everything in place by 2021 and has invested to do that, the upgrades will be completed this year. A significant investment has been made into freshwater fish and habitat value investigations in these waterways. These investigations commenced several years ago on the understanding that applications to replace his permits would be made under the current RPW planning framework and demonstrating the level of effect on instream aquatic values is necessary when seeking a long-term permit to replace them. Subsequently significant investment has already been made in consultancy, planning and infrastructure. Mr Naylor has recently completed his application in a timely manner and it is through no fault on his part that the goal posts have now shifted due to resourcing limitations at the ORC that have led to an inability to handle the process despite having known about this looming expiry date for Deemed Permits for the last 30 years. Mr Naylor requests that a longer-term pathway remains available for those applicant's applying to replace consents on a whole of sub-catchment or catchment basis (such as the Manuherekia, Chatto and Thomsons catchments) and where appropriate mitigation is proposed based on specific science work. Hortinvest Ltd. Hortinvest Limited (Hortinvest) are a New Zealand based Horticultural Management Company, who manage

Deep Creek Fruits Ltd Partnership. They are involved in the purchase, establishment and operation of cherry orchards and packhouses, and the marketing of cherries for exports. Water for these orchards is sourced from a variety of sources (including groundwater and surface water) and irrigation schemes, some of which are currently authorised as deemed permits, some have recently replaced deemed permits or obtained new water permits. An application has recently been made for the replacement of the final deemed permits that were yet to be replaced. Hortinvest and other irrigation scheme shareholders have been actively developing consent applications. This has involved significant time and input from consultants and considerable science work. These applications were very well advanced at the time PC7 was notified in preparation for a lodgement date in late 2020. Water is integral to the operation and development of horticultural businesses, and without water it would not be possible to produce high value export crops. As part of the development of new orchards, long term and secure sources of water are required to give confidence to investors, especially given that it takes approximately 4 years to reach first production of fruit and a further 3 - 4 years to reach full production capacity of the tree(s). Significant capital investment has been made in the establishment and operation of these horticultural developments. Typical costs for development until point of first production range from \$150,000/ha to \$200,000/ha depending on the planting method, level of irrigation infrastructure, and whether or not the orchard is to be netted. Significant economic benefits arise from these developments, including employment of between 3 to 4 full time staff per orchard, and up to 100 full-time equivalents during pruning and harvest. These developments also rely on local supply businesses for the provision of services, irrigation infrastructure, and other orchard related products such as fertiliser and spray. Where possible Hortinvest endeavour to source locally, which means there is a significant economic flow on effect to local communities from these horticultural developments. Hortinvest are currently looking at further horticultural

development opportunities within Central Otago, although there is a significant risk that such developments may not occur if PC7 limits access to long term secure water supplies. Hortinvest have significant reservations around whether the ORC has fully considered the economic and social impacts of PC7, and whether they have provided due consideration to alternative options other than PC7. Hortinvest request that a longer-term pathway remains available for those applicant's applying to replace consents on a whole of sub-catchment basis." I won't repeat the rest of that, it's the same as what Mr Nayland summarised. Knapdale Farms farm 687 hectares in the Omakau/Matakanui are of the Manuherekia valley as a dairy farm with 750 cows. Irrigation water is provided to the property through private deemed permits from Black Bush Creek and Russell Creek in the Thomsons Creek catchment and through shares in the OAIC. Significant investment has been made to maintain the water take, conveyance, storage and irrigation infrastructure in good working order. Knapdale Farms has already invested heavily in water storage to reduce instantaneous reliance on surface water, with 6 reservoirs/dams constructed in the past 6 years in addition to the existing 2 reservoirs present at the time the property was purchased in 2014. Ongoing expenditure will also be required to ensure all of the water infrastructure (especially the reservoirs) are in good working order and water is used as efficiently as possible. The provision of on farm storage has enabled efficient use of water, so that when restrictions on scheme water arise, private water rights can be used to top up storage and enable irrigation to continue during dry periods. Knapdale Farms has also spent considerable capital making the farm in general more efficient, productive, and environmentally friendly. This has included construction of a state-of-the-art milking shed and effluent management system. Fencing of waterways has occurred, and riparian planting is ongoing. In December 2018 Knapdale Farms applied to the ORC to replace the existing permits to take water. This application is seeking a consent duration of 35 years for both replacement permits. At the time, ORC had actively encouraged applicants to lodge their application well-prior to the

expiry of their permits, in order to ensure the application was processed in a timely fashion. Considerable expenditure has since been made in attempts to achieve resolution with ORC and affected parties, with no real progress made some 18 months later. Knapdale Farms consider it unfair, then, to force applicants to spend additional time and cost to participate in PC7 to ensure the voice of farmers and irrigators is heard, and is financially challenging, when this plan change would see that Knapdale Farms do it all again in 6 years. Like Mr Naylor, Knapdale Farms has been preparing for their replacements for some time, being mindful of the efficiency expectations of ORC and the need to undertake robust science work to feed into the sub-catchment and catchment wide approach. Subsequently significant investment has already been made in consultancy, planning and infrastructure on the farm. Knapdale Farms also request that a longer-term pathway remains available. Lindis Peaks and Terraces Irrigation. Lindis Peaks is an approximately 3,500 hectare extensive sheep and beef operation with irrigated finishing country, that has recently expanded to include a small area of horticulture. Lindis Peaks has approximately 300 hectares of irrigation which equates to around 8% of the total land area in irrigation. Whilst proportionally the area of irrigation on Lindis Peaks is very small, it is integral to the success of the farming operations, without which it would not be possible to finish the stock. This irrigation ensures certainty of production in a climatically challenging location, which would otherwise impact on-farm profitability and production capability. Lindis Peaks secures all of its water from the Terraces Irrigation Scheme and since the scheme starting providing water in 2014, Lindis Peaks has been able to improve efficiency and profitability, as well as now being in a position to explore greater on-farm diversification opportunities. Since the establishment of that scheme, Lindis Peaks have progressed with the installation of a series of centre pivot irrigators, to now enable the full irrigation of around 300 hectares. In addition to the capital costs associated with pipes, pivots and pumps, there have also been extensive costs associated with installing new stock lanes, new fencing, and pasture renewal. On the back of a secure long-term consent for irrigation, Lindis Peaks have taken the opportunity to

commit to the development of approximately 80 hectares into cherry orchard. In 2019, approximately 11 hectares of land was planted in trees, a further 20 hectares is planned and was planted in winter 2020, and a final 50 hectares is to be planted in 2021. Terraces Irrigation Limited currently hold permits to abstract groundwater and connected surface water. Both permits authorise the taking of water from the Clutha/Mata-Au River. Water from both sources is used for irrigation, communal domestic, stock water, firefighting, frost fighting, and industrial use. A transfer application was recently granted to Lindis Peaks to transfer their shares from APL to the TIL that's from one location to another basically on the Clutha River, but because of the PC7 process, the term of consent was reduced by 19 years to only a 15 year term. Lindis Peaks and Terraces Irrigation share the view that this application should have fallen outside of PC7 and should not be subject to the matters of control set out within PC7, especially were no "new" water allocation was involved and the abstraction site was on the same water body. Or primary concern to Lindis Peaks with regards to PC7 is the lack of clarity on how PC7 is intended to apply to applications for new water takes, including the proposed transfer of water from one point of take to another. The transfer that has occurred did not propose any change to allocation, rather it was only to take the same water from a different location. However, the current way in which PC7 is written and the contradictions between objectives, rules, and policies make it unclear how such applications will be processed. Lindis Peaks and Terraces Irrigation consider the PC7 should not apply to transfers of water where there is no new allocation at the proposed transf- and the proposed transfer site is on the same waterbody." Sorry, that "at" should be "and".

Q. So what considerations should apply?

30 A. I think just the same considerations that you'd use under the RPW rather than the change in duration. I think it's the duration consideration that was their concern here.

Q. Yes, so what considerations do apply under the operative water plan?

- 5 A. Whether there is any change in effects in your location compared to the current location and whether, probably that key consideration in terms of in stream ecology and also whether there's any other users that may be effected in the breach between one water take and the other are probably the two key considerations.
- Q. And so on that transfer, their longer term consent was knocked back?
- A. So they had 34 years left and they got dropped back to only having 15 year term, so instead of the 34 year term, transferring over with a new location, they got knocked back down to a 15 year duration.
- 10 Q. Are they going to go with it?
- A. Well they didn't want to go through another whole hearing process to argue that.
- Q. Did they have the option of continuing with their existing consent?
- A. They couldn't access the water for their particular property from that other location.
- 15 Q. Oh okay.
- A. So they had to move it to be able to actually access the water properly.
- Q. To get, yes, okay. Is that a relevant consideration?
- A. I think it is a relevant consideration, it is something that a few applicants are looking at, we've had – talked with a few other current water permit holders that want to make changes, transfer locations in the save aqua for a water body where this duration argument is coming into play.
- 20 Q. And so is that picked up in your – was it picked up in the original submission?
- A. It was picked up in the original submission yes.
- Q. And what was the relief they were looking for?
- A. That – I would have to double check to be honest exactly how the relief was worded.
- Q. And have you picked that relief up in your planning evidence or did you – weren't you required to?
- 30 A. I hadn't at the time, no.
- Q. Okay, but you were acting for them?
- A. Yes to an extent.
- Q. But you haven't proposed relief?

A. No not on that specifically.

Q. Should you have?

5 A. Potentially yes, as I was going through this more over the weekend. It's something that came back to the front of mind, going well potentially that is something that we should consider a bit further.

Q. All right and then at paragraph 54, you talk about new water. What's your problem with new water? I understand the transfer issue?

10 A. Yes, so that was – this is Lindis Peaks' request in their submission, so some of this information is taken directly in terms of representing their view on that. My view as a planning expert is that new water probably should be captured under PC7 in terms of the reflection of duration because it is falling into that transition period. But a transfer is a different scenario.

Q. Okay.

15 A. So briefly moving to Earl and Bernadine Attfield, in paragraph 57, they, "along with two other users, share in two permits to take and use water from Waikerikeri Creek which is a tributary of the Clutha which expire in October. Water under these permits is used for irrigation of pasture using a mix of borderdyke and flood irrigation methods. Significant investment
20 has been made to maintain the water take, conveyance, storage and irrigation infrastructure in good working order including the construction of a new storage dam and plans for a pipeline that will allow for spray irrigation conversion. An application to replace the deemed and water permits was lodged in 2018 but has stalled and as a result of the
25 challenge progressing consultation with iwi to a meaningful resolution. Having prepared and lodged their application some years ago and spent considerable time and money on science work within the catchment, they are now having to spend additional time and cost to participate in PC7 to ensure their voices are heard which adds additional time and cost. It is
30 incredibly frustrating considering the time and money spent over the last 3 to 4 years preparing and lodging their application that they may have to do it all again in 6 years'. The Attfield's request that longer-term pathway remains available. And lastly is Mount Earnslaw Station. Geoffrey Thomson holds a deemed permit to take and discharge water

from Earnslaw Burn for the purpose of hydropower generation, located in the Glenorchy-Paradise area. This water services the small hydropower scheme built and constructed in the 1950s to power the surrounding farms. The race delivering water to the hydropower station also provides stock drinking water, and domestic water for one dwelling. In February 2020, Mount Earnslaw Trust applied to the ORC to replace the existing water permit. Prior to PC7 being notified. Water is sourced from the Earnslaw Burn, an alpine glacial fed river feeding Diamond Lake. The abstraction point is low in the catchment due to the steep alpine topography and is the only water permit on that water body. Water is then conveyed through a well-maintained race to the applicant's reservoir where the hydropower station is located. The power plant has been operational since 1958 and was registered in 1962. The powerhouse holds a 20kW generator but provides approximately 10-11kW of power when generating. Power generation historically provided electricity for the farms within the area and has since continued running for personal use on Mount Earnslaw Station. The powerplant is currently independent of the main grid. Mr Thomson has discussed with an electrician who supported the original development of the powerplant regarding sending surplus power to the local grid of which is possible, and this is being investigated as an option. This is a significant positive of the scheme and of the investment made into the powerhouse in this remote area of Otago that frequently has disruption to the main grid due to severe winters and remoteness. No irrigation is provided by this permit. The primary use is therefore hydropower, stock water and domestic needs. The scheme infrastructure is all in good condition including the diversion that is well looked after by the applicant when all water not required for stock or domestic use returning to the same catchment will be a little further downstream than where it would naturally flow. Significant investment has been made by Mr Thomson into understanding the potential impacts of the scheme on the values of the wider Diamond Lake Reserve. Being an alpine catchment, the abstraction is a minor proportion of mean annual low flows. Written approval has been provided to the application by Department of Conservation and approval from Aukaha, Te Ao Marama

Fish and Game, and Forest and Bird has been discussed in some detail for a possible 10-15 year amended consent term prior to being withdrawn as a result of the current PC7 Court process. Geoffrey Thomson of Mount Earnslaw request that water use for hydroelectric generation be considered separately to those permits where irrigation is the primary use, and a simpler process should be in place for this activity. Geoffrey Thomson believes that the current s 32A report and PC7 lacks a high-country perspective. Although PC7 is worded to be relevant to all Deemed Permits, PC7 does not adequately address the unique situation in this case where the water is used for hydro electricity generation.”

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Q. Did you propose relief in your evidence dealing with hydro?

A. No I didn't at the time originally.

Q. Should you have?

A. Yes much likely (inaudible 16:37:53) is going to come back to those.

15

Q. You may not have a chance, but that's, you know –

A. No it's more when I came back to them, the purpose of summarising this.

Q. How do you understand the term “primary” just as a matter of interest like, you say it's 66, there's no irrigation provided by the permit, so the primary use, therefore, is every other use that they've got, whereas I would have thought “primary” would have a different meaning. It's at least at the primary use is hydro and then the permit holder takes water off for stock water and domestic needs which, you know, depending on reasonable use and effects on environment is permitted anyway under the Act. So how do you understand the term “primary”?

20

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A. I would interpret the term “primary” to be what it is the main purpose of it, the majority of the water is used for. (Inaudible 16:38:40).

Q. Yes and so here, what is the majority of the water use-

A. Hydroelectric generation.

Q. Hydro. I just wish to be clear because I'm going to be asking the same thing about community water use as well. Okay, thank you. Right, and you've got a second statement?

30

A. Yes that's much shorter. Shall we zoom through to start at paragraph 3?

Q. Yes.

5 A. So this is about timing and approach. “I accept that PC7 in my opinion in some form is needed to provide direction towards the transition to longer term sustainable management of fresh water via a new land and water regional plan that fully gives effect to the MPSFM as discussed in paragraph 17 of my supplementary evidence. I consider that the changes to the controlled activity pathway in the 14th of March version better reflect the position I put forward in the original focus group session in January 2020.” I probably don’t need to repeat that because that’s actually in the summary I’ve just gone through.

10 Q. Mhm.

A. If we move to paragraph 5, “In addition, being able to implement many of the changes required through an environmental approach and not simply a procedural approach, are unlikely to be able to be achieved with only a 6 year term of consent as many will require infrastructure and system upgrades on farm. The timing of PC7 compared to the timing of the applications for the majority of the deemed permit replacement applications means that a simple low cost process cannot be followed, as applications have had to be made under both the RPW and PC7 in order to meet the time frames under s 124 and are, therefore, complex and costly. Many of the recent applications outside the larger catchment groups, I or one of my colleagues have lodged for a 6 year term albeit as a non-complying activity as the notified provisions of PC7 cannot be met, have had substantial section 92 requests from ORC consents officers in relation to providing more information on the hydrology and ecology of the subject water bodies and indicating that they will be recommending residual and/or minimum flows. This clearly indicates why the PC7 controlled activity pathway needs to be procedural only in order to achieve a simple low cost and appealing pathway. PC7 also undermines the collective and collaborative approach undertaken by many catchment groups and water users across Otago that have been progressing the development of, as far as possible, MPSFM compliant river flow management regimes for some time. The placeholder consents encouraged by PC7 will prevent any benefits being realised in those catchments for the next at least six years. And just briefly on Scope. In

consideration of the legal submissions of ORC dated 7th of April and the recommendation in my supplementary evidence to include a discretionary activity pathway that allows for some permits to seek a longer term, I have reviewed Landpro's submission which clearly sets out the scope of decisions sought including in particular allowing those permit holders willing and able to lodge their replacement applications before 2021 October 2021 to seek the long term consents that they need as many have done already and have duration considered on their merits. I consider that this clearly indicates to any interested parties the relief that is being sought and that the discretionary activity or longer term approach is a logical consequence of this relief that could be foreseen. The Court, therefore, have jurisdiction to consider this in my opinion."

Q. It may be that counsel is getting at something slightly different than whether you made a submission about it. It's whether it's in the scope of the plan changes notified. So you've got both orders for the purpose of this plan change as an instrument as well as what are folk picking up in terms of their submissions, are you within scope of both? And it could be counsel is saying, well look, this plan change isn't a plan change about supplanting the water plan, chapter 6, chapter 12 regime with something in this plan change, it's not about that, so, therefore, you're outside of scope. So it's a serious question and you might need to come back to it.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Mr Maw is that where you're coming from?
 A. In fairness to the witness, the submissions were not about the Landpro submission, they were about the OWRUG submission, so.
 Q. Yes well I think that's right actually, yes.
 A. So insofar as there may be scope within the Landpro –
 Q. Mmm, within a submission –
 A. – submission for this relief, that may well be the case, we didn't look at scope in relation to parties that hadn't yet appeared but we were to do so before the –

Q. No you didn't, and you weren't asked to, so is there scope in terms of the plan change itself, the notified plan change to be looking at a policy regime for long-term consents or have you not turned your mind to that?

A. I haven't really turned my mind to that.

5 Q. Okay.

A. Although my preliminary view would be yes that would be a submission on plan change evidence, a plan change seeking to constrain the duration of permits, so a submission seeking not to have that constraint would still be a submission on Plan Change 7.

10 Q. You could look at? Okay.

A. I'd need to go back and look at this particular submission and see whether there's a logical connection between the passage set out at paragraph 10 and the precise relief which is now being pursued which I'm not actually clear about yet either, so.

15 Q. Yes, but you will get to in your next question.

A. Indeed.

Q. Okay, all right, thank you. Continue.

MS PERKINS:

20 A. Sure. So then I finally note that further amendments that I recommend in addition to those that have already been proposed through the 14th of March version and changes made through attachment 1 to the Planners JWS. So (a), there is the limitation on irrigation area from policy 10(a)(2)(1) and rule 10(a)3.1.1 being removed, (b) is allowing those
25 permits as I've sort of mentioned a few times to be able to continue with a longer-term pathway where there has been significant work undertaken and see that the application of PC7 for deemed permits related to the damming and discharge of water should be removed.

1645

30 Q. Okay, thank you. I am going to hand you over to Mr Maw now.

CROSS-EXAMINATION: MR MAW

Q. I want to start by understanding what I am to do with your opening representation on behalf of a range of submitters in the context of the

question which I am going to ask you about your planning evidence. Now, just so I am clear, in terms of your opening presentation, are you professionally engaged by the parties listed at your para 5 to provide planning evidence for them?

5 A. Yes, so we prepared the submissions for those parties and then have had discussions with them about whether they wanted to present any evidence themselves, whether they were happy for us, who are providing evidence already, to be effectively presenting that on their behalf as well, so we have had conversations and emails with those parties to say that
10 they are happy for us to take the lead on that for them. They did not want to present anything themselves, so that opening representation is merely a summary, like you would get from any other farming witness, lay witness, turning up to say this is just basically a summary of their key points from their submission and setting out a perspective for the Court
15 as to why it's important for them.

Q. And so each of those submitters has not given evidence?

A. No.

Q. And insofar as you have put forward in your representation information pertaining to those submitters, are you putting that forward as evidence
20 or something else?

A. It's not specifically evidence, it's more re-highlighting their submission points, effectively. None of that is new. That is all just taken from their submissions directly.

Q. Is it fair to say that what you are doing is you are highlighting their position
25 in terms of the position that they have put forward in their submission?

A. Yes.

Q. So in a sense, you're advocating their position for them?

A. Yes, effectively, that was, effectively, a bit more of an advocacy statement, which is why I did try to be quite careful with what went into
30 that versus what I considered to be my planning evidence or summaries of what I have stated to date, as I pointed out to the Judge that I hadn't fully taken into consideration some of those points in those submissions in my original planning evidence.

Q. And so when you sit down and you prepare your planning evidence, you say you've complied with the code of conduct for expert witnesses?

A. Yes.

Q. And you reread that code again?

5 A. Yes.

Q. And you understand that, as an independent expert witness before this court, you are not to advocate for a client?

A. Correct.

10 Q. And yet what you've set out in your opening representation is, essentially, a set of advocacy statements in relation to parties that your company represents.

A. Effectively, and that's why this didn't necessarily need to be presented as an expert witness, but it made more sense for questions that may arise in the Court that were of a planning nature to be here at the same time for both.

15 1649

Q. Well, I understand the line you're trying to tread but it's not as simple as it is simply taking off one hat and putting on another hat as you transition from being an advocate to being an expert planner.

20 A. Sure. I appreciate it may be a blurred line there. It may have come across as a blurred line today for that.

Q. So in relation to the evidence that you've given in your opening representation, are you familiar with the information that you've put forward in this summary? Can you answer questions about that which you have put forward in terms of the factual assumptions underpinning these submissions?

25 A. For some of them, yes, because I am familiar with them as a client, as a separate part of the process but for some of them, I am not any more familiar with them than the information they have provided me with.

30 Q. So insofar as, well, perhaps let's look at your paragraph 5 of that opening presentation.

WITNESS REFERRED TO OPENING PRESENTATION – PARAGRAPH 5

Q. Which of the entities are you familiar with and which are the ones have you just summarised what's in the submission?

A. I'm particularly familiar with Mr Naylor. I prepared his application for the Chatto Creek catchment. For Knapdale Farms, Earl and Bernadine Attfield and Mt Earnslaw Station –

Q. Just slow down for a moment –

5 A. Sorry.

Q. – please.

A. So B, sorry, C, is –

Q. So let's do it in order. B, Hortinvest.

A. No, I'm not specifically familiar with them.

10 Q. Yes, Knapdale.

A. Insofar as I, in my role as team leader, have worked with others in the team who are responsible for it, so, no.

Q. So not really?

A. Not as good. It's like tier 2 effectively of knowledge.

15 Q. Lindis Peaks.

A. Not that familiar, no.

Q. Attfield.

A. Similar to Knapdale Farms. I have some knowledge through others in the team working on that process, their processes.

20 Q. And Mt Earnslaw.

A. The same. I am familiar with the application but I have not been involved in the details of their particular consent.

Q. So when we look down that list there, it's only really the Naylor application that you would be able to answer any further questions on in relation to the information that's in this representation?

25

A. I could answer some further questions on Knapdale, the Attfields and Mt Earnslaw but not on Hortinvest or Lindis Peaks.

MR MAW ADDRESSES THE COURT (16:52:18)

Your Honour, we're getting close to the end of the day and I want to have a more careful read of some of this information that's been put forward to see whether or not I want to take any further questions in relation to the information in the representation statement. Otherwise I'm going to transition away from that into some other material and I may have to circle back to this in the morning.

30

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Yeah, I don't have a problem with that. Ms (inaudible 16:52:47) suggested that we need to sit a little bit later in order to get through who we need to get through for tomorrow.

5 A. Right.

Q. Only going to suggest half an hour more if that's what parties wanted to do.

A. I would suggest we won't, this was the, your economist was it?

10 **MS IRVING:**

Well, it's changed slightly. Mr Patterson –

THE COURT: JUDGE BORTHWICK

Q. Is teaching tomorrow.

A. Yeah. So he will be called later. We've just, we've got Mr Lanam here, who is making a submission on behalf of Central Otago District. I'm just conscious of how much we've got to get through tomorrow and I have likewise witnesses that have some availability constraints that I'm just trying to manage. So I'm wanting to try and avoid, I suppose, to the extent we can, carrying too much over into tomorrow. So perhaps if Mr Maw wants to carry on with his cross of Ms Perkins' evidence, that would reduce what we needed to cover off tomorrow or alternatively, we perhaps deal with Mr Lanam this evening, so that's done.

15

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Q. No. Look, parties have got to be realistic with the sort of hearing that this is and that is that there may be slippage in time and parties saying I'm, you know, witnesses not parties, saying I'm only available on this date and sorry if you don't make it, I've got to teaching appointment, you know, tomorrow, it's really not helpful. It's, you know, you're not at fault or to blame in any way for that but it's just not helpful. So there has to be some ability to move within a reasonable timeframe, which I would have thought if we can't reach today then we can reach tomorrow for most people. We haven't gone more than a half day over, I don't think. So I don't want to interpose another case. This is Landpro's case, Landpro's only opportunity or primary opportunity, it may not be the only one yet, but

25

30

primary opportunity to nail its case. So I don't want to interpose another witness and your witness can come tomorrow.

A. Yes, that's fine. I think in that case if we could carry on a little bit this evening so we get through as much of Landpro's case today would be

5 certainly very much appreciated from my point of view.

Q. All right. Thank you.

MR MAW:

I'm happy to continue, subject to the caveat I'd like to read that carefully overnight.

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

Q. Yes, absolutely. No, I understand that. So we're back with Ms Perkins with you anyway tomorrow morning.

A. Yes, thank you.

Q. You had other questions though?

15 A. I do have other questions.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. I'm going to be heading to your supplementary evidence, which I think was dated the 23rd of March.

A. Yes.

20 Q. Now, I just need to find my copy of that, so bear with me. It's not where I was anticipating it to be hiding.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Do you want us to give you a copy?

A. No, I do, I have – I do have it somewhere because I've highlighted parts

25 of it.

Q. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Here we go. Right. I want to take you to paragraph 17 of that supplementary statement.

**WITNESS REFERRED TO SUPPLEMENTARY STATEMENT –
PARAGRAPH 17**

Q. And in this part of your evidence, you are dealing with the non-complying activity pathway and this paragraph is about providing an extended consent duration for some types of activities and in particular, you have
5 referenced community water supply or hydroelectricity schemes and noted that the duration of 15, 20 or 25 years is perhaps more appropriate but you're not sure which of those numbers might be appropriate. I want to start with the hydroelectricity schemes and I want to stay with the
10 context provided in relation to the schemes that you have described in your paragraph 16.

WITNESS REFERRED TO PARAGRAPH 16

Q. So those are all existing schemes?

A. Yes.

15 Q. So in terms of the need for a long duration permit for an existing scheme, what is it, in your mind, why is a longer term permit required to ensure the viability of one of these activities?

A. I guess when thinking about it, it just gives them some more security that operation can continue for a longer period. We don't know what's going
20 to come out of the Land and Water Plan and whether that particular activity will be able to continue in the same vein that it has been consented and I think there's potentially more drivers in the, a shorter term for something like the primary sector uses where water is being removed from a catchment entirely and used for irrigation rather than
25 being a, I'm not going to say non, it's like vaguely non-consumptive but maybe technically in terms of the interpretation of word actually out of the water body for too long to be officially non-consumptive but those sorts of takes are a lower risk to the environment of continuing for a slightly longer term to give them security that they can continue while other activities
30 may be dealt with in the shorter timeframe.

Q. So it's not about the viability of the activity itself. Well, the infrastructure's already there, isn't it?

A. The infrastructure is already there. I have not discussed with those parties specifically the viability of six years versus longer to understand exactly how the companies or systems operate.

5 Q. So why is it that those activities should be given security of supply in the long-term then?

A. I'm not suggesting it be a 35-year, as has often been granted in Otago in the past. It's more in consideration of the situation we have found ourselves in as planners at the moment of having all of these applications all at once, and that will be the situation we are in again with a six-year term, but if there are some of those activities that might warrant, potentially, a long-term security supply and that might have a lower risk on the environment, then potentially, they could have a slightly longer term as part of that transition process.

1700

15 Q. So in terms of the risk to the environment associated with these types of activities, aren't those the very risks that the new land and water plan is going to be considering?

A. Yes.

20 Q. And so isn't it appropriate to allow that plan to come to fruition, to set out the allocation framework such that all activities are then consented under it?

A. Yes, but I don't think that that prevents reviews or further consideration of these to be able to occur within that timeframe of a consent, that duration that may be granted on it.

25 Q. If you think about security of long-term supply, and if your answer to the land and water plan is to say, well, the council can just review the permit and impose the new regime, the security of supply risk is precisely the same, is it not?

A. Yes, effectively, it is.

30 Q. Except the one point of difference is that it puts the onus on the council to undertake a review, doesn't it?

A. Yes.

Q. And the council may not be resourced to do that.

A. Quite possibly not. I'm not sure what the resourcing levels are.

Q. When you're working with consent applicants and you're putting together these applications for fairly significant durations is my understanding, let's unpack that. You've put together some applications that have been lodged?

5 A. I have, yes.

Q. And how would you describe the consent terms sought in those applications?

A. They varied from six years to 35 years.

10 Q. And if you were to weight the range in terms of where the majority of those applications are in terms of durations, where would you say?

A. I think I need to be clear here, the time with which I've been with Landpro, so I haven't been responsible for preparing as many as other colleagues at Landpro. So, for example, I prepared the last chance applications and I've prepared a couple of the Manuherikia ones, but only insofar as to assist with getting them completed, and then assisted with a couple of other shorter term more recent ones, so, to be honest, it's probably only – the last chance covered 21 deemed permits, but it there was one application, so I would say I've prepared four applications myself.

15 Q. So remind me, last chance, what was the term sought?

20 A. 24 years to tie in with the dams that had already been re-consented.

Q. Thank you. I want to move now to the joint witness statement for planning. Now, you have a copy of that?

WITNESS REFERRED TO JOINT WITNESS STATEMENT FOR PLANNING

A. I do.

25 Q. Very good.

A. The right one, I think, too.

Q. I'll just take you to para 6 to start with. Now, just so that we're clear, your initials there in para 6 are CP?

A. Yes, that's correct.

30 Q. And you support the amendments shown in attachment 1?

A. Yes.

Q. And then at para 13, in relation to whether the data period to be used should extend post June 2020, you support the use of all available water metering data.

A. Yes.

Q. So you're not concerned about applicants ramping up their takes to achieve a single maximum on which to base an application for a controlled activity?

5 A. In my opinion, that is a possibility, that some applicants could do that. I don't consider that that would be the majority that would do that. Part of my view with this as well is the choice of June 2020. I understand it's sort of somewhat linked to the timing of notification, but some of my thinking in that is that I have some clients who have recently purchased properties.
10 They actually got their irrigation system properly underway only this last season. As it turns out, their history of use from a rate of take point of view and a daily volume point of view won't be any different, but this year, they have actually used it across the season far more than the previous owners have, so in that situation, they would be adversely impacted when
15 it was not bad behaviour of trying to ramp up just to secure water as such.

Q. Sure. So, in that example, there is a reasonable and logical explanation for the change in the pattern?

A. Yes.

Q. So wouldn't it be better for that situation to be considered through the
20 restricted discretionary activity rule rather than the controlled activity?

A. I guess it could be done under both. I think it's just more the security to the applicant of a guaranteed replacement for a short term. In this situation, that applicant has applied for a six-year term but had to seek a non-complying pathway because of the schedule that was notified.

25 Q. So staying with that example, and using the schedule as recommended by the technical experts and also (inaudible 17:06:32) the planning statement. How would that application be treated now?

A. It would probably, the way the wording has been included, that does not have 2020 as a limit, it would be under a control pathway. It would fall
30 under that pathway, yeah.

Q. Do you see that there could be a risk of some applicants ramping up their takes to achieve a single maximum spike in, say, an instantaneous rate?

A. It is possible, but I think, when you look at the numbers of permits that have already had to lodge replacements as part of the deemed permit

process, the numbers you're looking at that are water permits, it's probably – I'm sort of just guessing here in a way, but I wouldn't think it would be as much of a risk because a lot of those permits would have been granted more recently. They're not historic deemed permits where people haven't used their water. I would imagine that they're more likely to be in the last sort of 20 years where people had to put a proper application together to explain what they wanted and how much and why, albeit it's not as comprehensive as they are today, but I can't imagine it would be a significant risk, but yes, you may get a few that are still able to do that.

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Q. So when you think about who should bear that risk, is it a choice between the environment versus the abstractor?

A. I guess if that happens, then, yes, it would be putting the abstractor above the environment potentially in that situation.

15 Q. And when you think about the paradigm change brought about in the national policy statement for freshwater management around putting the needs of the water body first, how should that risk be dealt with in the planning framework?

A. I think, at the end of the day, they still would be under a six-year permit, so they're still in a transition phase, it would still then get captured under the NPSFM framework following that short-term kind of rollover of the permit, and so further investigation of the application, their efficiency, and all of the other aspects in the environment under the new plan could be dealt with at the end of that six-year term. This is not people going for a 20-year permit through that process.

20
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Q. So the risk, precisely, that I'm asking you about is the risk of applicants ramping up their take ahead of the point in time that their application is processed so as to achieve a higher maximum rate of take to justify a higher grant of consent on renewal, and whether that risk should be borne by the environment or by the abstractor?

30
A. I just don't see that there's a huge risk that it could occur under that. I would need to see the numbers that are – probably the only way to see it would be to look at the water use records of those permits that are due to

expire up to 2025 and their consented rates and look at what the differences are to actually determine what the real level of risk is.

Q. And just so I understand that, are you saying there simply aren't that many permits out there that have the headroom available within them within which to take at a higher maximum rate, say, on a one-off occasion?

A. I couldn't tell you exactly the number, no.

Q. I want to understand next your opinion in relation to the restricted discretionary activity pathway that's been recommended by some of the planners and I should caveat that. It's not all planners that have recommended that that pathway change in the way that the joint witness statement has changed it. So when you think about the restricted discretionary activity that had been put forward by Mr De Pelsemaeker in his 14 March rendition of plan change 7, the restricted discretionary pathway applied only to the situation where there was a technical reason as to why data wasn't available. Is that your understanding?

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A. Yes, I'm just going to just quickly have a look at it again but from my memory, that is the reason that basically there was an issue with the water metering data. There was a technical issue or missing data.

Q. Yes. Now, the version of the RDA that you and some of the other planners recommend has broadened out its application. Is that right?

A. Yes, that's correct.

Q. And can you explain to me how it's been broadened out to pick up what types of situation?

A. So I think Ms Bright mentioned a couple of the types of situations that were sort of discussed as who it might apply to, those parties that haven't had water meters in for as long enough period to actually represent their historical use, so they might have only had a really accurately operating meter for the last two or three years. They might have had one in place but I am well aware that there has been a number of issues across Otago with water meters and their accuracy, learning to cope with the climate that we have in terms of, you know, freezing and thaws and the flood flows and flushing flows that come down from the high country takes. So they have had meters in place maybe since they were required to but they

haven't been working very well. So in that situation, you've had a meter in place and it might not be that there's any data missing or that there was necessarily a technical issue. It's just it might not have been the right setup. They wouldn't be captured or ones that just had manual records and didn't have a meter until the last couple of years, that's not a technical issue as such. So there was quite a number of potential applicants that might then fall outside, go straight to non-complying and we thought that there needed to be a pathway for those. We did, however, note that we didn't want to allow for just those people that went, oh, water meter regulations, can't be bothered putting in a water meter, not going to do it. Those people that have clearly flouted the rules, we catered for the fact that there needed to have been a water meter put in place so that they had to have actually committed to some metering and regulation of their take and not just the ones that just didn't want to put something in. So they wouldn't be able to be captured by this.

Q. And when you think about the restricted discretionary activity, do you still consider that that, only to enable volumes and rates of take that reflect historical use?

A. Yes, it just to reflect historical use.

Q. And so the other relevant methods referred to within a matter of discretion A shouldn't be used in a manner that seeks to elevate or increase above historical use?

A. No.

Q. And insofar as there might be a risk of that occurring, that risk should be dealt with in the drafting?

A. Yes. If other interpretations of the way that's been drafted view it such that, you know, with a legal interpretation that that's not the way it could be interpreted, then that's not the intention. The intention was always that it reflects historical use but that there might need to be other information be able to be put forward to further explain what was historically taken if those water meter records don't give you enough picture.

Q. And when you look at the wording then that's been recommended and the phrase that I've highlighted as: "and other relevant methods and data", do you accept that's a very broad phrase?

A. It is and we spent a number of hours going over this and I don't think we ever managed to reach – we could, we just didn't have time to take it any further. The intention there is that it is relatively broad so we didn't think you could effectively go through and list every single possible type of data that could be used off the top of our heads potentially with more time and more investigation that could happen, but in that timeframe, there was no way of us getting an exhaustive list that could capture everything.

5

Q. Do you see that there could be a risk with the way that this matter of discretion is currently worded, that an applicant might choose to apply under the RDA and point to, for example, the Aqualinc Guidelines as another method and say well, that's another method shows what my historical use could be? Is the wording here tight enough?

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A. The wording allows for something like Aqualinc to be used as part but I don't think you could just – I think it's tight enough that it couldn't be just Aqualinc because it does still have to be within the limits of historical use as established through these methods, so within the limits of historical use is still set aside as the initial part of that matter.

15

Q. And this is perhaps where the challenge arises in terms of using the likes of an Aqualinc model to demonstrate what historical use is because that's not what Aqualinc does, does it?

20

A. No, it tells you what is needed for your property at any, you know, for nine out of 10 years. So, no, I recognise that and I don't think that just having Aqualinc would be sufficient and I think because we did discuss this and considered that it was still a full matter of discretion, it's not a matter of control and you have to grant consent. The Council still have full discretion here that they can, it can be probably evaluated. We're still talking about a six-year term, recognising we don't want people to increase beyond their historic use but there's substantial matter of additional work if an applicant wants to go down this pathway as opposed to controlled activity when really the only difference is that their water meter and records don't accurately reflect historic use because that's the only real difference in this RDA rule as opposed to the controlled activity rule.

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Q. I have some questions now for you about the recommendations that you have made in terms of changes to plan change 7 and the version that I am reading from is the version that you've attached to your supplementary statement of evidence.

5 WITNESS REFERRED TO SUPPLEMENTARY STATEMENT OF EVIDENCE

A. Yes.

Q. Now, I'm a little unclear as to precisely what your opinion actually is in terms of the provisions of the plan change and that's perhaps a reflection of the fact that this thing has moved iteratively along the way and you've also participated in some conferencing. So it may well be that some of the drafting you'd put forward in your appendix, you've moved on from as a result of the conferencing. So –

A. Sure.

Q. – you might need to tell me where that has actually occurred and in fact I'll start with that. That might be a more efficient way to do it. In terms of that which you have recommended and attached to your supplementary evidence, what have – what changes would you now be recommending in light of the conferencing that's occurred?

A. So I would recommend that Policy 10A21 have the, retain the points (c) and (e) in their amended form.

Q. Just pause with me. 10A21, retain?

A. (c) and (e) in their amended form from the planners JWS. So that's the, reflecting the historic rate of take.

THE COURT: JUDGE BORTHWICK

Q. Sorry, are you now wanting to – I can't see a (c). Is there a (c) there?

A. It may look like an (e) –

Q. Can you read out –

A. – because it's –

Q. Is it: "there is no increase in natural instantaneous"?

A. Yes.

Q. Okay. So that's the (c). So you recommend that that be retained?

A. Retained in its amended form from the planners' JWS. So, which is that there is no increase in historical instantaneous rate, I think.

Q. But what you're wanting to do is to put in words from the planners?

A. Yeah, I think it's probably going to get really confusing if we're just going through point by point now, changing, keeping. Points, I mean, I've kind of made a couple of notes on, to that effect for that. That's mainly to that policy to be fair but, and I would remove my added in (b), that's in highlights.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Where do you want to go with this? I mean I understand why you're asking because like I'm not – I was a little surprised that planners got into the objectives policies and rules but, you know, there they go and I thought that we're just dealing with the schedule –

A. As I had –

THE COURT: JUDGE BORTHWICK

Q. But they didn't, they got into the objectives and policies and rules and so I'm a bit like you, I don't know. This is the conundrum. I know that you and the previous witness liked the discretionary activity rule but that doesn't appear in the JWDS for planners. If you were still thinking about – if you were getting into those provisions you would have gone, "Yeah let's have a discretionary activity rule", or you would have – you know what I mean to be comprehensive. So what the JWDS looks like is that you've actually retreated from your March supplementary. But that might not be correct.

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A. No, so that's not correct so we – whilst there was movement into those policies and objectives in that planners' conferencing at the time we all felt that the changes made to the schedule needed to have those reflected changes in those parts of the policies and so we did only limit the changes that anyone would suggest or recommend as they related back to the questions that arose out of the technical conferencing and then the changes that were subsequently required to the schedule. So I appreciate that it then looks really confusing 'cos there's yet another version of this – of the plan change sitting out there and it doesn't

incorporate the other changes that someone like myself of Ms Dicey might also still want to see. We did note, I know with Mr Twose that things like the community water supply, they may still seek for that to be completely not included within PC7 and we did note that in the conferencing –

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Q. Mm.

A. – but that we proceeded on the basis that if it was included this would be the types of changes that would be required and agreed upon or something like community water supply. So it was difficult to try and separate things out and – but we did try and keep to, as related to the schedule –

10

Q. Yeah I know.

A. – but some things came backwards.

15 **MR MAW:**

I'm struggling to figure out which version of Plan Change 7 the witness is now pursuing is -

THE COURT: JUDGE BORTHWICK TO MS PERKINS

20 Q. Well I think it would be the JWS version plus a discretionary activity rule. Is that right?

A. Effectively yes.

MR MAW:

25 I think that's right.

THE COURT: JUDGE BORTHWICK TO MS PERKINS

Q. And have you tackled -

A. – some sort of long-term pathway rule.

30 Q. Some sort of long-term pathway rule and I mean I don't know in that – I have view about this that non-complying activities are not an odd, you know the non-complying activity rule is not your ordinate to a discretionary activity it's just not – it's not conceptually how I view the two forms of activity. So you've got, you want (inaudible 17:22:20) discretionary –

pathway and I don't know whether or not you were going to add any changes to the non-complying policy provision. Assuming that it stands on its legs.

5 A. Yes I think I would need to do some more work on this because – from the changes and just the change in thinking that's happened through the planners' JWS and the changes to the RDA pathway I don't and to be fair I didn't try and re-draft another discretionary version, I took what Ms Dicey has said and put that and said something, you know something like this without trying to confuse matters with yet more versions. If it's helpful I can like pare back or pare that back to more what I might word it as.

10 Q. Well I don't know it should be in your evidence, eh?

A. Yeah, I mean I did note that this was taken as hers and generally the intention of that – I supported the intention of that without re-wording further and further but I can go – I can do that for you if you like overnight.

15 Q. I think it should be in your evidence actually. Why would it not be in your evidence already? You've adopted – I thought you adopted what Ms Dicey...

A. I effectively have adopted what Ms Dicey suggests.

Q. Yes. So in a sense it is in your evidence.

20 A. Yes.

Q. And it stands and falls with the cross-examination?

A. Yes.

Q. Yes.

25 **THE COURT: COMMISSIONER EDMONDS**

I guess my suggestion only related to taking the things out of the JWS planning that had gone on after the various groups had looked at the scheduling and they'd taken it a step further. That if we could have a version that made that clear in terms of this witness, only those things that came out of the planning conference and where this witness is sitting. It more be a better use of the back end of the afternoon than struggling through each line. That was my only suggestion.

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THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Yes. I mean – this – I guess what you don't what (inaudible 17:24:31) are to go in, if you liked that JWS, if that's now the template that we're working from. Ms Dicey's policy and maybe something to do with non-complying activities?

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A. Yes and what I have in front of me is the version attached to the supplementary evidence of 23 March which has the, I'll call it the Ms Dicey discretionary policy plus the Ms Dicey discretionary rule. And I was not super clear as whether this witness was still pursuing on the same terms this framework or not, and I think the witness is. She hasn't

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MS PERKINS:

15 Yes, I would still like to see that. I still recommend there be a pathway like that in there.

MR MAW:

And I have some questions about that which I will pursue that.

20 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Yeah, no, you should acknowledges those, and then I think there's this big question about non-complying activity, policy and rule, and what's the go there.

A. Yes, and in terms of looking at what's changed, and, yeah, I'm unclear as to where this witness is now going with that.

25

Q. Okay.

THE COURT: COMMISSIONER EDMONDS TO MR MAW

Q. So that's all a lot of elements, then. There's the first one, to do with the (inaudible 17:25:50) conferencing we had and the planning one, which is where you started, so I just wondered if there was some cut-through we could get on that so that you didn't have to lead out? Do you agree with

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this one, do you agree with that? I mean, it may be clear reading the JWS, but it's quite hard to deal with provisions on that basis, isn't it?

A. What would make my job a whole lot easier would be an amended version of the plan change 7 attached to the supplementary evidence that has this witness's current position in terms of the changes which she's recommending be made to plan change 7, and then I can cross her on that. Now, that may be a reasonably straightforward exercise in terms of tracking into this version the differences, and they may not be significant, I just don't know, and whether that could be done overnight and circulated, that might speed things up in the morning.

MS PERKINS:

I can effectively, 'cos I know what's critically missing from the supplementary evidence version is an RDA pathway, and I do recommend that that be in there as we agreed, the planner's JWS, so that's obviously not in the supplementary because that was part, you know, so that's something that's come post the supplementary, through the planner's joint witness, so, yes, what is in one or the other alone don't accurately reflect my exact position, so I can see the difficulties you're having.

20 CROSS-EXAMINATION CONTINUES: MR MAW

Q. Well, I wonder whether, could that be prepared overnight –

A. I could do that overnight, yeah.

Q. – with relative ease, and have that circulated, and I'd use that as the basis for then stepping through the provisions, which I think I still need to do.

25 THE COURT: JUDGE BORTHWICK TO MS PERKINS

Q. You do. Mhm, okay, well, I know it is homework, but it sounds like it is relevantly straightforward. If you continue to support what Ms Dicey said or continue to have a view on the non-complying pathway and what that looks like, and I accept do not remember what the original supplementary said in relation to that, that can be brought forward into the JWS document. Have you got that in Word format? You should do. I thought somewhat there was an email floating around about that.

A. Yes, I think it was circulated. I will double check, otherwise I think it was sent through to Michelle, so.

1728

THE COURT: JUDGE BORTHWICK TO MR MAW

5 Q. Do you want to call it quits now?

A. Yes I think we should sensibly do so.

Q. Very good. All right, so that means, you remain in your oath so you can't talk about this case to anyone and if you could that homework and perhaps email Frieda the documents so we can get it printed off.

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THE COURT: JUDGE BORTHWICK TO MS PERKINS

Q. When do you think you'll have that done by?

A. Well if I do it tonight then it should be able to be circulated before I turn the lights off tonight rather than trying to do in the morning.

15 Q. Yes that will be good. It's just that counsel needs to prepare his questions but he's got something to go –

A. It wil–

Q. – you mean – you're following the Ms Dicey for direction.

A. Ms Dicey plus the – some of planners' JW stuff pulled in so it –

20 Q. Yes.

A. – it will expand out a little bit because of that. Yes.

Q. Okay. Very good. So as soon as we get that if you could yes, you know who to circulate it to. So if you circulate to the Court so it can be printed as well as all the other parties. All right. Thank you. That's us. Do we need to start at nine to get a push on? Yes, okay good. We'll start at 25 nine o'clock. You would have heard all of our questions to Ms Dicey and with her two – Ms Bright. You might want to cut through to the chase and think about concrete examples of deemed permits. And think about the Court's minutes. The question of, is there a missing – is there a policy gap, how might it be filled. If it is not just simply to repeat as a mantra and deemed permits because I bet you that's not going to mean much in 30 five years' time, though it's just to me it's – you know so we're assuming that there is a pathway either because we can create a pathway under

the RMA or because there is pa- you know the statutory (inaudible 17:29:57) can somehow survive. Do we need to do it? Why do we need it? No more anecdotal evidence from anybody. We need good concrete examples. Can they operate by themselves? Do they need to operate in tandem with water share agreements. Now we listened to this evidence and we wonder whether there's just simply a marketplace for water out there and that's what we're grappling with is that farmers seem to have the market, is a crude way of putting it. Or maybe there's some social licensing that goes on out there but if there is and that is important, how do we reflect it. Yes. And Ms Baker-Galloway is nodding, Mr Maw looks quite quizzical if that's a sickening thought but you know – might it be one that you need to grapple with. What's the reality out there? And what are the – what is the likelihood of any adverse impact on other abstractors I think first and foremost but also the environment, secondly if these things aren't brought forward.

THE COURT: COMMISSIONER EDMONDS

Well perhaps that (Inaudible 17:31:08)

20 THE COURT: JUDGE BORTHWICK TO MR MAW

A. Yes that differently to ensure that those things are not precluded. They seem to be happening anyway without.

Q. I know because there's a market and the people are regulating themselves now I know I should never use that word in the context of water but there's a lot of regulation already happening. So do we need to step into the frame?

A. Mm. Maybe or maybe not that's –

Q. Yes.

A. – yes, it's a good question.

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THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Yes, so difficult question also for you Ms Irving. Do we need to step up or do we go, "I bet you the value will do something this when it comes to exercise of consents".

A. Yes, it's like catching a cloud in a way I think because every catchment –

Q. Is doing its own...

A. – is doing something different.

Q. Pardon? Yes.

5 A. So, there's no one answer about whether people are exercising priorities or not. Even within a single catchment –

Q. Yes.

A. – some maybe, some maybe not and so to try and encapsulate that in a matter of discretion on a rule or is really hard and –

10 Q. So how does that echo...

A. Yes.

Q. Does it need to be echoed in this plan and how is it echoed?

A. Yes.

15 Q. Such that the direction to this marketplace is set by the regional plan and I know that's really poor choice of language, there being a market as to water but it seems to be that there is a lot of non-regulatory – it's not so much control but non-regulatory determine a flow sharing mechanisms afoot. So, how is that echoed in a way that that can be carried over, if there isn't a full-term consent because that's the risk you know we take if there isn't one and you haven't actually, you got good case in place. How are we – what is the signal to that marketplace? Is that a problem or not a problem that the signal is – there's an absence for signalling in the plan. I don't know. What I do know is that I'm not sure how to – yet that we've got a clear idea as to what our potential tools are.

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25 A. Yes I'm – in some ways, I feel that the existing regional plan water has had quite a few signals in it.

Q. Mm.

A. About its expectations of water users and certainly they have heeded those signals and begun moving. So it's I think a question of the extent to which they can be re-tooled for a transitional regime but I think the ease of that isn't going to be universally applicable because as I think has been described by a number of the witnesses and in some ways the re-tooling has been done in anticipation of the renewals with its associated limits and so in those contexts, you know the water sharing anticipates an extra

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piece of the puzzle which we're not adding in through the controlled activity pathway and other examples and I think the Falls Dam agreement, you know that's a more concrete example that is been working and that there's some structure around. So, it's a -- it's horses for courses in different catchments, different sub-catchments which makes it really hard to draft –

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Q. Yes.

A. – a rule that...

Q. And it may not be a rule that may be a matter of consideration.

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A. Yes.

Q. Either on our control – presumably on a control, that's the easiest pathway if people want to avail themselves of that or IDA I think in the minute but you may have policy – yes, it could well be re-tooling or re-purposing policy signals which are already there. They're already signals if you like to the community, then being picked up again in non-regulatory methods –

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A. Mm.

Q. – after all that's how people are organising themselves anyway and that's without any consents – the potential for you know, that's with the current situation. They are living there or organising their lives that way. So that's what the controlled activity rules (inaudible 17:35:49) pick up an echo back.

20

A. Mmm. I think one of the challenges perhaps from the council side is traditionally they've taken a very hands-off approach to that water sharing regime and it's a question of whether that continues to be a sustainable way of dealing with that you know...

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Q. It might be.

A. Yes.

Q. In the absence – well it might be – or, yes I don't know. It might be for six years and then thereafter not. Yes. Okay. Still a lot of thinking I think and be looking forward to your responses. You know do you send policy signals as the councillor has done under the operative plan and you know can you pick those signals up – should you pick those signals up and matters of control and matters of discretion, should not even do that, just

30

you're sending a policy signal and let the community organise itself because it has organised itself for the last 30 years in fact the last hundred years. Yes.

5 MS PERKINS:

I have been giving it some thought and I can give you some hope – some help tomorrow but I will signal that I haven't personally dealt with priorities on any permits that I have looked at.

10 THE COURT: JUDGE BORTHWICK TO MS PERKINS

Q. Okay.

A. So I can't give you anything more helpful on that and I don't think it would be helpful if I'm just taking you through generic answers –

Q. No.

15 A. So I personally haven't dealt with priorities.

Q. But that's helpful to know. Yes.

A. So, yes I have given some thought as to one way you might be able to include them which I can talk you through tomorrow but I haven't yes, pers– can't put an exact example in place for you. Because I just haven't

20 – haven't had that experience.

Q. Good. All right, no, it's good to know, you're off the hook to that extent.

THE COURT: JUDGE BORTHWICK

All right, thank you so we'll adjourn through to nine o'clock tomorrow.

25 COURT ADJOURNS: 5.37 PM

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COURT RESUMES ON TUESDAY 13 APRIL 2021 AT 9.01 AM**THE COURT: JUDGE BORTHWICK**

Nothing arising from us overnight. Anything arising from anybody else? Okay, very good. You remain on your oath, and Mr Maw has got some more questions
5 for you.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Good morning.

A. Good morning.

10 Q. Thank you for sending through your updated appendix. That will hopefully make this exercise a little easier, at least for me.

A. Yes, and just on that, I didn't make any changes to what had already been presented 'cos I didn't think that was the time to be doing that. This is just purely an amalgamation of the joint witness statement plus what was in my supplementary evidence originally.

15 Q. Very good, thank you. Right, I do have some questions for you about the drafting that you've put forward. So using this appendix, and for the record, it's updated appendix A to the supplementary evidence of Claire Perkins, dated 12 April 2021, and I want to start with the objective or the objectives on page 14 of the document.

20 A. Sure.

Q. And I see that you have recommended the insertion of a second objective, and my first question to you is was this additional objective sought in the submission of Landpro.

A. Not explicitly as an objective, no.

25 Q. Was it sought as a policy or something else?

A. No, not explicitly, but it comes back to the intention in that submission to have some form of longer pathway available, and there obviously then needs to be supporting objective and policies and rules around that pathway, but the actual wording or need for words saying we need a new
30 objective or a new policy were not mentioned, no.

Q. Can you describe what you see as the purpose of this new objective that you recommend for insertion.

- 5 A. So this objective is there to support the discretionary activity policy and rule that's behind that. There needs to be something that then, you know, you follow up the chain from having that discretionary pathway, so that's really the intended purpose of it there, to enable those environmental gains that we could achieve, that otherwise, we could end up in a position where they are lost completely in the next six years, as has been, you know, put forward in the case of a number of scientists as hearing to date.
- Q. So when we look at this objective, do you accept that it only covers some of the values that the new NPSFM requires a council to address?
- 10 A. Yes.
- Q. And when you look at this objective, can you tell me which of the values it excludes?
- A. It's primarily focused around those threatened species within the freshwater ecosystem, so it's effectively excluded most other things in terms of specific reference.
- 15 Q. So it excludes consideration of cultural values?
- A. As far as the wording itself goes, yes.
- Q. Well, the wording's important, isn't it?
- A. Yes, it is.
- 20 Q. And it excludes consideration of recreational values?
- A. Yes.
- Q. And it excludes consideration of amenity values?
- A. Yes.
- 25 Q. And when you think about the paradigm shift – or let's go back a step, do you accept that the transition in the national policy statement 2020 confirms the paradigm shift towards a new way of thinking about water management?
- A. Absolutely.
- Q. And it approaches the management of water in a water-centric manner?
- 30 A. Yes.
- Q. And what do you understand that to mean?
- A. Where the health of the water body and everything around it comes first.
- Q. And when you say "everything around it," what do you mean?

A. So everyone that has interest in the water in terms of the values it provides, so for ecosystem health, for cultural interest in the waterway, for the mana and the Māori that it represents as well.

5 Q. So when you think about the breadth of those matters and you read this objective, do you accept that this objective is not furthering the concept of “te mana o te wai” or capturing the essence of that water-centric approach.

A. Not in a whole sense, no, but it is going some way towards some of the direction that is going to be needed.

10 Q. And when you think about the discretionary activity that hangs off this objective, what’s the duration that might be sought?

A. So this is something I have given more thought to since it was put forward in the supplementary evidence. My view now is that probably a 15-year duration is probably more appropriate than 20. I think that’s reflected in it still comes within a transition time as far as water and water use is within Otago. There is always a transition period intended within the NPS itself as well, not that it’s specifically stated in terms of durations, but there is the acceptance that there will be some transition time, and I think 15 years also then picks up on the reflection of part of that duration of a slightly long-term that was picked up in the notified version of PC7.

15

20

Q. So when you think about this 15-year time period, you’re of the opinion that it’s acceptable to exclude consideration of cultural values for the next 15 years?

A. I think because it’s a discretionary pathway, you wouldn’t be excluding all of those values. I accept that there isn’t any words at the moment in the objectives or policies specifically mentioning cultural values, but in any application, the full range of values can be considered for a discretionary pathway.

25

Q. Well, that’s where it gets a little bit difficult, when you’re assessing an application against, in this instance, only two objectives. When you sit down and write an application, you’d look carefully at these two objectives as providing information or the outcomes that you’d be seeking?

30

A. Yes, but we’d also consider the wider information available and wider documents that we need to consider under s 104 as well.

Q. So how would you go about assessing cultural values in the context of your discretionary activity application?

A. It's challenge because we're not cultural experts. You know, the only way that they can be assessed is with that, you know, close input from iwi.

5 Q. And you've listened to or you've at least read the evidence from the witnesses from Ngāi Tahu?

A. Yes, it was a while ago, but yes.

Q. And what did you understand that evidence to be saying?

10 A. That at the moment, there isn't a clear picture of what those values are and that they need to participate in the development of the regimes and what needs to go into the land and water plan.

Q. In fact, it went further than that, didn't it, to the evidence, and I'm thinking of the evidence of Mr Ellison, where cultural considerations had been cut out of the process to date.

15 A. In my experience, I don't think they have been cut out, but I'm not a cultural expert to know exactly the feeling that they have in terms of how that's been dealt with. The applications that I have been involved in, particularly the last chance one, there was a lot of consultation to try and pull out from iwi what those values were. I think we made some headway in that, but I don't think we were able to get to a sound conclusion as to exactly what those values are for those water bodies of concern.

20

Q. And when you think about that last chance decision, do you recall what the decision-maker said in relation to the consideration of cultural values?

25 A. The restricted discretionary pathway put a significant limiting factor on that.

Q. In fact, the decision-maker found that they couldn't be considered, is that right?

30 A. Not as a broad statement as cultural values, no. It was only insofar as part of their concerns could be addressed within part of the matters for discretion.

Q. And so the evidence from Te Rūnanga was iwi was placing significant weight on the new land and water regional plan and the process to properly articulate "te mana o te wai" in a regional plan as providing it the

opportunity to ensure that cultural values are not put to one side. Do you accept that that's a fair reading of that evidence?

A. I accept that broadly, that is, yes.

5 Q. And so putting in place a flow regime for the next, you say, now 15 years in terms of discretionary activities would push out the consideration of those values through a new flow regime for at least 15 years, wouldn't it?

10 A. Yes, for those specific values, but I think it comes back to the significant concerns about do we have six years to wait completely and do nothing for six years on some of these critical water bodies in terms of threatened species?

0910

Q. So you essentially say it's more important to do something about the potential risks to threatened species than it is to ensure that a flow regime is put in place that properly expresses "te mana o te wai"?

15 A. No more important, no, not at all, more that that's something that we could do now to take a step in the right direction, and that after that, if you're talking about a six-year term and then 15-year term, within that next period of seven to eight years, you can make those additional, either through reviews or there's another short window of time to bring those consents that manage to go through that pathway, if any, into line with that, with the cultural values as well.

20 Q. When you think about the review of a consent, so let's say you have some discretionary activities that have been granted under your recommended rule and policy, would it be your expectation that those consents are reviewed after six years and brought into line with the new flow regime and the new land and water plan?

25 A. It will depend, in part, on what flow regime is then put in place in the land and water plan and how close or not that is to what may have been put in place for those discretionary permits. It would then depend on which catchments are considered more of a priority by ORC, the resourcing, timing, there'll be a lot of factors at play. I don't think there's one anyone could say it will happen right on that day.

30

THE COURT: JUDGE BORTHWICK

Q. Sorry to interrupt, could you just slow the pace of your responses? I really am having trouble following what you are saying and understanding at the same time.

5 A. Sure.

Q. I know it is nerve-wracking and all the rest of it, I do not pretend this is easy, it's the last thing I would want to do, but you just need to take it down a notch.

A. Sure, I can do that.

10 **MR MAW:**

Now, where was I?

THE COURT: JUDGE BORTHWICK

Sorry, sorry, sorry. You could be anywhere, you are going so fast I am not actually tracking what has actually been said and making sure I understand it.

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

Q. Consent reviews and the likelihood of them occurring. The reality is consent reviews are challenge for a council?

A. Yes, I would accept that.

Q. And resource-intensive?

20 A. Yes.

Q. And, if you think about it, it's highly unlikely the council's going to be able to review all consents as soon as the new land and water regional plan, say, is made operative.

A. No, they won't.

25 Q. And so, again, the risk of long-term consents is a risk borne by the environment in terms of the time it might take to put in place an NPS-compliant flow regime.

A. Yes, in effect.

30 Q. We can move on to the policies now. My first question relates to your deletion of what was the text in policy 10(a) 2.3, so you'll see there that

you've replaced that policy with what I describe as your discretionary activity policy.

A. Yes.

5 Q. When you think about the controlled activity framework, and you're retaining a controlled activity framework here, what is the consent duration that applies in relation to the controlled activity framework?

A. Six years.

Q. And where would I find in the policies that you now recommend the policy support for that six-year timeframe.

10 A. Yes, I appreciated this last night, as I was going through it again in a bit more detail, that there is a gap, that there does need to be a policy reinserted directing that, unless otherwise able to follow pathway provided by 10(a) 2.3, that discretionary pathway, there does need to be a policy alluding to six years as being the preferred duration for anyone
15 else in terms of the controlled and restricted discretionary activity pathways.

Q. Does that then also leave a gap in relation to the way you've framed your noncomplying activity rule?

20 A. Yes, I also recognised that last night, that there would need to be something, and on further reflection last night, my view is actually that the non-complying pathway should actually come back to six years as well. I don't think there should be the ability, as was currently drafted in the rule, for a duration longer than that 15 years that I would indicate.

THE COURT: JUDGE BORTHWICK

25 Q. So how does it work?

A. I mean, at the moment, what was drafted in there was a controlled rule for six years.

Q. Yeah.

A. An RDA rule for six years.

30 Q. Yeah.

A. A discretionary rule for what was drafted as up to 20, but I would suggest that be up to 15, and then there is currently a non-complying rule for durations longer than that 20 or 15 years, but on reflection last night, I

think that should actually restrict it to six years as well, because I don't think there should be a pathway for longer than the 15.

0915

5 Q. And so in order to achieve that drafting outcome, what changes would you now be recommending be made to the policies?

10 A. There would need to be a new policy or, you know, re-hash of what was previously included by Mr De Pelsemaeker indicating that a duration of six years was what should be granted outside of those applications or catchments that might fall within the discretionary pathway. So effectively it would have to be a 10A 2.4 inserted and it would need an exclusion that said except where Rule 10A 3.2 didn't apply.

Q. Sorry, 10A 3.?

15 A. 3.2, which is the discretionary rule. So if the discretionary rule didn't apply, then the duration would be six years. It's similar to the way it was drafted where it originally said except where Rule 10A 3.2 applies, so a similar type of drafting.

Q. All right. I have some questions for you now about Policy 10A 2.1.

A. Sure

20 Q. And I see there that you have changed the emphasis of the policy in terms of making it perhaps a more positive looking policy by removing the reference "to avoid".

A. That was to pick up the similar way it's phrased in the other policies.

Q. So what – so it's a change for consistency as opposed to a change for another reason?

25 A. Effectively I view it as consistency. It makes easier reading when it's referred to in the same way across all the policies.

Q. Right. Tracking down through to your next change, subparagraph (b), you've recommended that the increase in irrigation or irrigable land criteria be deleted?

30 A. Yes. So this is more in reference to where there has been a time limit restricted on it but also accept, I think as Ms Bright mentioned your evidence, there are some cases where there are horticulture owners who have purchased trees and have set up areas ready for irrigation that will still be within their historical limits of use because the water is being

spread more efficiently, say from pasture to horticulture, there is a reduction in how much you actually need across the whole property, so you could use what was used on one paddock for grass for two paddocks for trees.

5 Q. So I want to be really careful at understanding what your reason is for removing the restriction on increase in irrigable area and you've given a couple of answers there.

A. Sure.

Q. So I wonder whether you just might give them to me one at a time –

10 A. Separately.

Q. – so we can explore them.

A. Sure.

THE COURT: JUDGE BORTHWICK

And slowly.

15 CROSS-EXAMINATION CONTINUES: MR MAW

A. So two parts. One being, as Ms Dicey alluded to yesterday, and in my views and knowledge of property owners within Otago, that it's really difficult to go back to a date and know exactly what was being irrigated and when. So –

20 Q. Right, so – keep going.

A. Typically a lot of the farmers I have been working with have a command area, a block, an area on their property which could be irrigated but at any one time in any one season, some of those blocks might be irrigated and not others and so the challenge then is that if you say a certain date, that
25 that might not account for some of those paddocks that were being irrigated at that time and how do we have a, where the farmers actually have a record back in time, or whether it should just be the area of irrigation at the time of application of consent.

0920

30 Q. Right. We're now reading multiple reasons. So I want to look at the first explanation you've given first and I just want to make sure I've understood

this. So the first explanation for the deletion is that it might not be possible for a farmer to know what area of land was irrigated at a particular date.

A. Correct.

5 Q. So when we look at the reference to particular date, are you referring to the period of time within which the controlled activity rule referred to in terms of the maximum area of irrigated land?

A. Yes.

Q. And what do you understand Mr De Pelsemaecker to be recommending for that period of time?

10 A. That there be a limit on the area tied to those dates.

Q. And what are those dates?

A. 1 September 2017 to 18th of March 2020.

Q. So we're dealing with a three-year period?

A. Correct.

15 Q. And are you telling me that if I asked each farmer who appears before this court whether they can tell me what area of land was irrigated on their property, or the maximum area of land irrigated between those dates, they couldn't tell me?

20 A. They could broadly tell you a command area. I don't know if they could tell you exact.

Q. And when you say they could broadly tell me the command area, if I gave them a map and asked them to highlight the areas over which they irrigated during that period, do you think they'd be able to do that for me?

25 A. I think they could give you an outline on the map of where they have irrigated. Whether they're exactly within those dates or not, I don't know.

Q. And then having that map highlighted, it would be relatively straightforward for you to apply that handwritten highlighting onto a GIS programme to convert that into an area of irrigable land?

A. Yes, we can do a command area map quite simply.

30 Q. And so it's not an insurmountable hurdle, is it, in terms of trying to understand the maximum area of land between those two dates?

A. I think the dates are still quite specific. I don't know why there needs to be specific dates, why there couldn't just be a command area, this is the area that we have irrigated up to the point of lodgement.

Q. Let's stay with the first thread, which is, is it possible to articulate the area irrigated between those dates?

A. Possibly.

Q. Possibly?

5 A. I, without being a farmer, and talk to enough of them exactly about that, those dates, I couldn't tell you how easy or not.

Q. Well, you've been – how long have you been planning for?

A. Planning for 15 years but in Otago for two-and-a-half.

10 Q. And in those two-and-a-half years, you've had discussions with the rural community?

A. Yes.

Q. Is it fair to say that farmers have a pretty good idea about what's happening on their farms?

15 A. Yes, but I don't know exactly how well their records are kept for exact years.

Q. Right. So that's the first reason why you say this criterion should be deleted, because you say it's simply not possible for farmers to explain or to articulate the area of land? So we've explored –

THE COURT: JUDGE BORTHWICK

20 Q. She didn't say that. She said she didn't know. I mean I'd be surprised, if I just go to why we've got problems in Otago farmers can't articulate what they're doing on their land but that's your evidence. It's not necessarily farmers' evidence. So we'll leave it there.

25 A. Well, I think they can articulate. I just don't know exactly how well they can articulate to specific dates.

Q. You need to be careful with this because the impression being, you risk the impression that farmers have little or no management over their farming activities.

A. Yeah, I'm not trying to say that at all, no.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Right. Let's move on now. You have a range of or a number of reasons as to why this should be, this criterion should be crossed out. So let's move on to the second one.

5 A. So the second one there is to allow for those properties or farmers or companies that have already invested in some relatively minor expansions of irrigation areas within their historical use. Particularly I'm referring to here sort of horticultural businesses. Really it's, and potentially this then needs to come into the RDA process so it could be
10 evaluated rather than in a controlled activity pathway, to be fair, so that where there are some minor increases as a result of already sunk investment, that that could be accounted for.

Q. Right. So that you'd be recommending a change to the policy framework and the rule framework to pick up that type of a change?

15 A. There would be a change required, yes.

Q. And when you think about those that expand during the life of a permit, so let's pick up say a horticultural example where there's been some investment. That investment would have been made through the lens of understanding the terms of the current permit?

20 A. Yes.

Q. And is there any expectation as to whether you can renew a permit on the same terms in the future?

A. Yes, there is. There is indication within the Plan that you're not going to be granted, within the current Regional Plan, that you will be granted or
25 that it'll be looked at, what you've actually used from a water use perspective, not so much an irrigation area perspective.

Q. But plans change, don't they?

A. They do.

Q. And in terms of water permits, there can be no expectation that a permit
30 will be granted again when a fresh application is lodged?

A. No.

Q. And so investment decisions ought to be made taking into account that risk?

A. Yes.

- Q. And again, thinking about this from the perspective of risk, this is a question of who should bear that risk?
- A. Yes.
- 5 Q. Should the environment bear the risk or should the abstractor bear the risk?
- A. Probably the abstractor that should bear more of the risk but I also come back to the duration with which these permits would sit and this would still be the six-year timeframe.
- 10 Q. But we're talking about the new, the next round of permits, aren't we? So investment that's been made historically will have been made based on the existing terms of the existing permit?
- A. Yes.
- Q. Right. Was there a third reason as to why you say this restriction should be deleted?
- 15 A. I don't think so.
- Q. Do you accept that increasing the irrigable area of land has the potential to increase adverse effects on the environment associated with additional nutrient loss?
- A. There is that potential, yes, depending on the land use and depending on the historic water use method.
- 20 Q. And plan change 7 does not contain any provisions to manage those types of effects?
- A. No, it does not.
- Q. And the current regional planning framework, does that contain any provisions which manage those effects?
- 25 A. No, it does not.
- Q. And so if ongoing increases in irrigable area continue to occur without any restrictions in place, the environment bears the risk of those effects, doesn't it?
- 30 A. Yes, although I do also make reference to the National Environmental Standards for Fresh Water, which put a limit only relating to increases of irrigation area for dairy land uses of 10 hectares.
- Q. Yes.

A. And so that, in my view, has been accepted that there isn't as significant a risk for other land uses with increases and in Otago, the majority of those increases have been generally as a result of conversions from flood irrigation to spray, which would generally reduce the amount of runoff in nutrients you would then resulting in receiving, waterbodies receiving.

5

Q. And were you here when or have you heard, I think it was Dr Olsen's evidence in relation to the potential adverse effects associated with the conversion from boarder diking to spray irrigation?

A. No, his was one that I have not yet managed to listen to.

10

Q. And right, I recall his evidence was that whilst there might be a reduction in the types of contaminants associated with runoff, the likes of E. coli sediment phosphorus et cetera, that there is potentially an increase in nitrogen leaching as a result of the conversion to spray.

A. I'm not a water quality scientist so I couldn't make any comment on that.

15

Q. And I want to move down to the next change, which occurs in your policy. Now, so the changes recommended to 10A 2.1(d) and this is, as I understand it, these are changes that have come through following the joint planning conferencing?

A. Yes.

20

Q. And I want to move on now to what I'll just refer to as your discretionary activity policy.

A. Yes.

0930

25

Q. And I have some questions in relation to that policy, the first of which relates to the duration expressed in the policy and here in the written version in the, I'll describe it as the third paragraph, where it notes for a duration of no more than 20 years. Now, this morning you said that you've been thinking about this overnight and you now recommend that the 20 years should be moved or reduced to 15 years?

30

A. Yes.

Q. So I should cross out the 20 and write 15 in there for the purposes of understanding your current opinion?

A. Yes.

- Q. And now I want to work through each of the matters referred to in this policy, so starting with the first one, where the application relates to a waterbody that contains threatened species likely to be affected by the activity. The application poses measures to enhance or protect the habitat of the species. So the first part of that I want to ask you about is the reference to containing threatened species likely to be affected by the activity.
- 5
- A. Yes.
- Q. Now, just so I'm clear, when you refer to the activity, which activity are you referring to?
- 10
- A. The water taken use.
- Q. So this is the proposed activity, the activity for which consent is proposed and then threatened species likely to be affected by the activity. How does – how is that worked out?
- 15
- A. That is an assessment required depending on what species are in the waterbody, where they are located, whether there are other barriers in place, fish screens, the fish passage component, there's a number of factors that would be required and require scientific input.
- Q. So this is a question of science in your mind?
- 20
- A. Yes.
- Q. And then you go on to say that the application proposes measures to enhance or protect the habitat of the species. So when we look at that drafting, an applicant has a choice as to whether to enhance or protect. It's an either/either?
- 25
- A. Yes.
- Q. And when you think about measures to enhance, when you've used the word enhance, that might amount to any small amount of improvement would be considered enhancement, wouldn't it?
- A. That's correct, yes.
- 30
- Q. And so what this first part of the policy is requiring of an applicant is that they might do just a little bit of enhancement in relation to threatened species?
- A. Yes, recognising that this, the intention of this is to stop the decline that may occur within the next six years if we do nothing. So it is effectively

to draw a line and make improvements beyond that if possible, not to allow things to degrade further as could happen without something like this approach.

5 Q. When you used the word enhance in this context, what's the environment against which you are assessing a degree of enhancement?

A. The current state.

Q. Does the current state include consents which have expired, in your mind?

10 A. No, we don't have consents that are expired at the moment, generally speaking.

Q. How do you conceptualise the environment for the purposes of this policy with reference to the expiring permit? Are the effects of the expiring permit considered to be part of the environment against which you are assessing some enhancement?

15 A. I think the complexity of some of the catchments we're dealing with is that that is the case, yes, because in effect what has happened, from my knowledge of some of the science and some of the catchments, is that these abstractions have then potentially in some cases an abstraction is below a population of threatened galaxiids and has lowered the waterflows in that lower reach and therefore prevented competitive species like trout from reaching those habitats. So in some respects, yes, the actually the exercise of those permits that may be expiring has led to the benefit to those populations.

20 Q. When you think about the concept of the existing environment, does that include the exercise of permits that are the subject of an application to replace them?

A. Technically it shouldn't, no, from an assessment point of view.

25 Q. So when you think about that, and then you think about what might be required in terms of enhancement, does that change the position or the level of enhancement that you have in mind here?

30 A. I think really when I'm thinking of enhancement, it's thinking of improvements to those populations of threatened species, whether that be by enhancing the level of protection that they can receive through the

flow patterns or fish barriers or whether that be by increasing flows that are in that waterbody to protect them and enhance their habitat.

Q. Perhaps I put my question this way. Improvement compared to what?

5 A. There's improvement compared to the number and spread of their population that is occurring now.

Q. Which is an environment inclusive of the permits that are expiring?

10 A. Yes, and I think the challenge here is trying to be able to remove the effect of those permits and understand then what that population might be without them occurring and I don't know that there's an easy answer for that.

Q. In fact do you accept it would be particularly complex and difficult to undertake that assessment?

A. Yes.

15 Q. I want to move on to number 2, roman ii now. So this is picking up a situation where a waterbody or fresh water ecosystem is likely to be degraded or degrading as a result of the activity authorised by the permit that is expiring. Now, when you have used degraded or degrading in this context, are you referring to the state of the environment as it is with the existing permits in place?

20 A. I think in a way you have to because as I mentioned before, it's very difficult to remove them completely but understand that from a technical point of view, you can't consider the environment as if that was part of it, so it's, you have to look at both I think in the situation.

25 Q. And where you've used degraded or degrading, what do you mean by those terms?

30 A. They are, do have a definition included in here, as they come through from the MPS. Effectively, so it's either below the national bottom lines or, and understand that we don't have objectives set for these catchments, so you would have to refer to the national bottom lines and the current level of water quality or habitat that is present and make an evaluative call from a scientist as to where that may sit and then for degrading look at whether there is any trend of decline for any of those matters and attributes.

Q. So when I read your recommended definition, it doesn't tell me to do those things does it?

A. No, not explicitly, no.

THE COURT: JUDGE BORTHWICK

5 Q. So do you understand degraded in the MPS means you're below a national bottom line? Is that your evidence?

A. Or a level that's been set by a Regional Council, which we obviously don't have at the moment.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. So that's quite a different thing to the definition that you've recorded or recommended in this version of the plan change.

A. Yes, I think there that we obviously don't have a target attribute state set for these waterbodies yet.

15 Q. And so when it comes to applying this policy in the absence of that information, what is a decision-maker to do in light of your definition, which is pointing in a different direction?

A. I think that definition then potentially needs some tweaks to it for this period of transition before those target attributes are set.

20 Q. And then you move on in this matter, roman ii, that the application proposes enhancement to the waterway or instream ecology. So we have had a discussion about what enhancement means. Are you using that in the same way as we've discussed in terms of the first matter?

A. Yes, I would be.

25 Q. Now, you've introduced here the concept of enhancement to the waterway or instream ecology. What do you mean by enhancement to the waterway in this context?

A. That could be flows or other values for the waterway but except that we're primarily focusing this around threatened species or it could be an enhancement to water quality. It's not limited in this.

30 Q. Well, this matter doesn't say anything about water quality or threatened species, does it?

A. No.

Q. Do you accept that the way that you have worded this, in terms of referring to waterway, is particularly broad?

A. Yes, accept that.

0940

5 Q. And so, again, when it comes to a decision-maker trying to apply this policy, it would be particularly difficult for them to understand what it was that was meant by this policy or this part of the policy.

A. Yes, I accept there probably needs to be further consideration of the way it's drafted and what it's referring to, but effectively, you'd be looking at those attributes in the NPS as part of your degraded or degrading assessment, and so it would be whether there's any enhancement to those attributes for the waterway.

10 Q. Do you see that, let's say, in five years' time, somebody's trying to interpret this policy. Connecting between what's written here and that which you've just said, the dots really don't connect, do they?

A. Not clearly at the moment, but one matter I did note when considering this overnight is that one, I'd need to be more clear on what permits and what catchments are in play that will be expiring between October of this year and 2025, but from my broad understanding is that the majority of those catchment-based or sub-catchment-based groups that could apply under this rule are primarily in the deemed permit camp and have actually already been lodged. We're probably not looking at the large number that would be able to fix under this rule in the next four years, it's probably mostly just those that have already applied at that catchment group level.

20 Q. So that's an assumption that you've been relying on, rather than knowledge of the factual situation?

A. Correct. I don't know exactly, but that would be my assumption from my current level of knowledge.

Q. All right, staying with (ii), the alternative to enhancement of the waterway is enhancement to the instream ecology. So what do you mean there? What do you mean in terms of enhancement to instream ecology?

30 A. It would be on the lines of improvement to the habitat breadth or numbers of species present. I would need a scientist's input here to actually make those sorts of assessments.

Q. And again, the policy doesn't really explain precisely what you have in mind in terms of that enhancement.

A. No, it probably doesn't.

THE COURT: JUDGE BORTHWICK

5 Q. Probably does not, or does not?

A. No, it doesn't.

Q. No, okay, because what Mr Maw is getting at is that there is no outcome stated.

10 A. No, and I accept that there are significant improvements to the drafting that would be required.

Q. And your evidence is not informed, aside from Ms Bright, beyond that, you have got no evidence of a technical nature informing the words that you put up here –

A. No.

15 Q. – and what they mean and where they may go, even if you were to express an outcome?

A. No, I accept that, and it has been somewhat informed by the experts of other parties present, and I think the only way this could probably be drafted in a really robust fashion is with a group of planners represented
20 by different parties.

Q. You see, I beg to differ. I think you need technical input to this.

A. Yeah, fair point.

CROSS-EXAMINATION CONTINUES: MR MAW

25 Q. To move on to (iii), so where measures to achieve protection or enhancement. Now, we haven't talked about protection, have we, in relations to (i) and (ii). Do you see that protection sets the bar higher than a little bit of enhancement?

A. It can be or it cannot be. It could be protecting the current level or it could be protecting an ideal level.

30 Q. So when you say "protecting the current level," what do you mean?

A. Protecting the habitat or species that are present now.

Q. With or without the exercise of permits expiring?

A. I think both matters have to come into consideration.

Q. Again, your drafting doesn't make that clear, does it?

A. No.

5 Q. So staying with (iii), where these measures, you say, are necessary. If you're adding another layer of decision-making required in terms of decision-maker having to determine that it's necessary for enhancement or protection. What do you mean by having used the word necessary in this context?

10 A. No, I think that's potentially a drafting issue, and it's more saying where one or two, where you've sort of met the thresholds of one or two, and the only way to enter this rule is where one or two apply, so it's more that where one or two apply, not that they are necessary.

15 Q. Well, when you say that they're necessary to enter the rule, let me just have a look at the rule. So I'm looking at rule 10.A.3.2. Where does it say that those are entry conditions into the rule?

A. No, so it doesn't, and that's something that needs a bit of further consideration if they should be, actually, entry conditions, but recognising that it's complex to write something like that as an entry condition.

20 Q. So in your mind, the entry conditions into the discretionary activity rule require that the application is in an area where it contains threatened species likely to be affected by the proposed activity.

A. Yes.

25 Q. And, or is it "or," that the freshwater ecosystems are likely to be degraded, putting aside the complexities we've discussed about that? Is it both of those things, one or other of those things?

A. I think, actually, it could be one or other. I don't, I mean, yeah, probably one or other. It could be an "or" there.

Q. It could be, but –

A. It should be an "or" there.

30 Q. You envisage an environment that has species likely to be affected by an activity that isn't also degraded?

A. I would need a scientist's input to confirm that.

Q. All right, let's get back to (iii). So we've talked about necessary, and I'm still a little uncertain about what you mean there, other than you say there

should be an entry condition on the discretionary activity rule. That's what you mean by necessary?

A. Well, it's more meaning that if one and two are triggered, then three follows on from that.

5 Q. Right, staying with three, these should include consideration of fish passage. I want to focus on the phrase "include consideration." So consideration doesn't require any action?

A. No.

10 Q. So an applicant just needs to say I've considered all of these things but I'm not going to do them?

A. I think those words potentially could be changed to something like "should assess" so that they have to actually assess the effects, not just say I thought about them, I'm not thinking about them any further, and that's not the intent, that it's just a passing thought, it's that there actually needs to be an assessment.

15 Q. Right, so you assess them and then say: "Well, here's my assessment." Then what?

A. Well, it depends on what the assessment concludes as to whether fish passage is required or needs to be protected, for example, and that's where you need the science input on what's actually going on in that water body.

20 Q. So where does this policy say that?

A. Reading it as it's written, it doesn't, specifically. It's more identifying matters that you do need to assess and consider as part of the application process, and the outcomes from that are informed by the scientists, and then the discretion that is there from the consent authority to make a decision as to what may be then required as flows or limits or consent conditions.

25 Q. There's a lot of assumption required to get to an outcome that's not clearly expressed.

30 A. I accept that. It's somewhat similar to the position we currently have been taking under the RPW as to assess all those matters, and they're not necessarily explicitly laid out any more than we're sort of seeing here.

Q. Which perhaps highlights the current predicament the council's in in terms of its existing water plan.

A. Yes.

5 Q. Right, (iv), the application enables and is part of an integrated management approach, including as a minimum. So when you say "the application enables," what do you have in mind when you've used those words?

10 A. That they're basically part of a group that are looking at an integrated management approach, and by putting those parties together, you're enabling that to occur. If you didn't bring parties together, you could all well and good to have an approach set, but if the parties aren't on board with it and all in there together, you can't enable that approach.

0950

15 Q. So when you think about that, do you require then multiple consent applications or this one joint-consent application, what do you have in mind when you have used these words in this policy?

20 A. It could be either but you'd be looking at whether they were individual applications coming in together as a group that have then considered similar science or management approaches. That are similar across both applications and that is similar to way the likes that the (inaudible 09:50:48 Manuherikia???) has been approached to-date in its applications.

Q. What happens for an individual consent holder say on a tributary, this pathway's not available?

A. I wouldn't think so, no.

25 Q. And in so far as there might be these risks you've highlighted and on a tributary and your recommendation in terms of the discretionary activity doesn't deal with that situation?

A. Not this won't capture everyone or every population of threatened species.

30 Q. How many people within a catchment will be required to fit within this policy in your mind, is it all, consent holders in a catchment is it some of them, is it two of them?

A. I think the preference would be the majority.

Q. And where does it say that in your policy?

A. It doesn't specifically say that in there or the definitions, no.

Q. When you think about taking a coordinated catchment-wide approach, would a simple majority actually achieve the environmental outcomes that might be sought and let's start by examining that in the context of a minimum flow.

5

A. It will be challenging if there is a number of consents with large quantities of water being taken that are not part of that group, then you're not likely to achieve that, no. But it is dependant on how many permits the water body flows, the levels – it's very case specific I think.

10

Q. So isn't it more appropriate to step back and assess at a catchment-wide level what the appropriate flows and minimum flows and allocation blocks are through the new water and land plan, rather than doing it through consent by consent?

A. Yes I accept that but the risk is if you don't do anything on some of these catchments you're going to end up in a far worse state in six years' time, from my understanding of some of the science evidence that we've heard than we would be waiting six years for a rollover and then undertaking that work then.

15

Q. Now you've broken your Roman IV into three sub-paragraphs as well?

20

A. Yes.

Q. And there you refer to *Surface Water* including through flow-sharing membership in a water management group and imposition of flow limits?

A. Yes.

Q. Is there any policy guidance as to what those terms mean in the context of plan change 7?

25

A. Not in PC7, no.

Q. And so a decision-maker seeking to implement this policy would be – may be left in a position of uncertainty about what those terms mean?

A. The way it's drafted now, yes. There may need to be some reference back to those aspects in the current plan.

30

Q. Well when you think about how plan change 7 is drafted, do you understand that it operates as a code or do you understand it acts together with the existing water plan?

A. It's mostly sitting on its own. Apart from the reference, the policies to new water permits.

Q. So that's the only one which would apply and so further changes would need to be made to the text of plan change 7 to bring in other policy considerations?

5

A. Yes they would.

Q. And that would be a significant change?

A. Yes.

Q. And a change not signalled in the Landpro submission?

10

A. Not explicitly, no.

Q. And to move on to sub-paragraph (b), *Consideration of the Impact of Land Use*. So, we've had a discussion about consideration and what that means, so would your evidence in relation to the use of consideration under Roman III equally apply here?

15

A. Yes I think that could easily be – should be changed to *assessment*.

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Q. But again let's, well assessment doesn't require action does it?

A. No.

Q. Assessment's in fact no more than consideration?

20

A. No, you could interpret that word both the same way.

Q. So is it your evidence that that is all that is required?

A. I don't think that's necessarily the case, I think it's saying you need to assess the impacts and if your assessment concluded that there was significant impacts, I don't think any decision maker would then be able to grant a consent under section 104 for a discretionary pathway, well they may be able to, they may decide to, but that would be a significant consideration if there was to be significant adverse effects on water quality as a result of this.

25

THE COURT: JUDGE BORTHWICK

30

Q. Is that what you're after, significant adverse effects in water quality?

A. No I haven't used the word "significant".

Q. No.

A. No.

Q. So again what's your outcome?

A. So I was saying that if an assessment concluded that there was adverse effects that needed to be addressed, that could be dealt with through the consent process and through the decision maker's recommendation.

5 CROSS-EXAMINATION CONTINUES: MR MAW

Q. And when you then are assessing against that outcome, now that outcome is not captured in the policy as currently drafted is it?

A. No.

10 Q. So hold that thought, if that's what you're seeking to achieve, what mechanism does Plan Change 7 have in it to properly assess the effects of land use on water quality? How would you do that?

A. Would be purely a scientific assessment rather than referenced back to a specific policy.

15 Q. And what does it do? So in practice, have you been involved in any applications that assess the affect of irrigation on and land use activities on water quality?

A. Not substantial amount recently, no. Not Otago.

Q. So when you have recommended these changes, what technical input have you relied upon given you haven't had the experience?

20 A. That is technical input from other colleagues at Landpro who have -

Q. So -

A. - but it's not referred to in any evidence, I accept that.

25 Q. I want to move onto subparagraph (c) and here you say that the minimum flow limit set in Schedule 2A should be imposed on the replacement consent?

A. Yes.

Q. And you say any minimum flow set out in Schedule 2A, which minimum flow are you referring to?

30 A. Well there is a minimum flow separate to an allocation limit in Schedule 2A for specific water bodies.

Q. Right. So it doesn't say that does it?

A. No you could any to the minimum flow.

Q. And do you understand how those minimum flows in Schedule 2A were set?

A. I am not specifically up to speed on exactly how they were set, no.

5 Q. Have you assessed the appropriateness of those minimum flows for a 15 year period?

A. I haven't taken that step, no.

Q. And so you've just recommended this change because you feel that's the sensible thing to do?

10 A. Well they exist in the plan at present. There was obviously some basis for setting them, so that is better than not having something in place in terms of any minimum flow on some of these catchments.

Q. The effect of bringing through these minimum flows would lock in place a pre MPSFM 2020 flow and allocation regime?

A. For the term of that consent that's granted, yes.

15 Q. So we're talking about this 15 year term that you're now recommended?

A. Yes if it wasn't reviewed to change that minimum flow during that term.

Q. And we've covered the complexities –

A. Yes.

20 Q. – associated with reviews? Onto Roman v. I've read the regional policy statement and I can't see any reference to time frames to meet Te Mana o te Wai objectives relevant to the activity?

A. No that is in reference to the upcoming RPS which I understand will include time frames for that. It's more the intention that we know that there are time frames coming and I accept that if a decision was to be made on this tomorrow, that wouldn't work because that's not in that, it's more of – what's in the proposed RPS as opposed to the current RPS.

25 Q. So your drafting's a long way away from reflecting what you've just said is the intention of this part of the policy?

A. Yes it is, I accept that. That would need work.

30 Q. As a planner, is it appropriate to refer to a draft regional policy statement that's not before the decision-maker and that parties haven't seen?

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A. No, generally, you wouldn't take that approach, no. It is just really trying to come up with something relatively quickly that captured the intent of

the direction that I thought an interim kind of 15-year longer-term pathway should achieve.

Q. How do you assess the efficiency and effectiveness of incorporating a document that's unknown?

5 A. I don't think you can.

Q. Right. We move on now to (xi), the allocation proposed is the lesser of the rate, using the methodology in 10.A.5, or efficient volume as set out in schedule 10.A.5.

10 A. Yes, I accept there's an error with B and that I haven't actually included that schedule in here.

Q. Right, so what schedule are you referring to? Are you still recommending that an assessment occur in relation to efficient volume?

15 A. Yes, I think for a longer term, efficient volume should definitely come into play. I know this is particularly the case where, in this situation, in order to achieve the protection or enhancement required, a lot of water-users will be required to upgrade their systems that might currently be flood, and if you just included a historical rate limit and allocation from what's now schedule 10.A.5 in my documents, but actually, if we refer to it as schedule 10.A.4 for how we've generally been referring to it, that wouldn't necessarily be an appropriate number for a longer-term permit.

20 Q. So where do I look at to consider the appropriateness of your wording for a schedule 10.A.5 for the reasonable use?

25 A. There isn't that volume there, but effectively, that's referring to the Aqualinc guidelines, so that could be changed to an efficient volume as assessed using the Aqualinc guidelines rather than schedule 10.A.5 and B.

Q. And have you assessed the appropriateness of using those guidelines to inform reasonable use.

A. I've used those to inform reasonable use applications, yes.

30 Q. Have you assessed the appropriateness of using those guidelines for this reasonable use assessment? What technical input have you had as to the appropriateness of the use of the Aqualinc guidelines?

A. I have not had specific technical input into this, but I have had discussions with Ms Bright, who had mentioned the appropriateness of Aqualinc and

mentioned that in the primary sector joint witness statement. It was an outcome from that joint witness statement that Aqualinc has a place in plan change 7, and this, I think, would be the place for it as well.

5 Q. My reading of the joint witness statements from the technical witnesses was that the reference to Aqualinc guidelines might be used to inform historical use when water-metering data didn't accurately reflect water-metering data. Have I misread the joint witness statement?

A. No, that was part of that as well.

10 Q. So where do you say that the joint witness statement says Aqualinc can be used to do a reasonable use assessment in the context of a discretionary activity rule?

15 A. It may not be specifically mentioned in that. I could be getting confused with the conversations I've had with my technical expert, Ms Bright, with regards to the use of Aqualinc for efficiency assessments for all applications.

Q. Right, onto the matter number (vii). To exercise the replacement water permit on the terms proposed in the application would require substantial investment in new infrastructure. What is substantial investment?

20 A. I accept substantial is not defined. It is going to be applicant specific, substantial to one farm will be not substantial to another, so I accept that there is not clarity in that at the moment, but the intention behind that is that there will be upgrades, for example, as I mentioned before, from a flood irrigation system to a spray irrigation system, which is a substantial investment, and the level of investment will change depending on what
25 type of spray system, for example, the farmer was to use.

THE COURT: JUDGE BORTHWICK

Q. So is your evidence that this only applies where changing irrigation systems to improve efficiency, or something else?

1005

30 A. No, it's not just that. It's that's one level of investment in infrastructure that may be required. Another one may be the way the water is conveyed around the property or the intake point, so an open race system could be upgraded to a pipe system for example, which would increase its

efficiency and may potentially reduce the amount of water that may be required. I think there's a whole lot of different infrastructure upgrades that could occur.

Q. I'll return to you, Mr Maw. I'm interested in what does substantial mean.

5 CROSS-EXAMINATION CONTINUES: MR MAW

Q. So when you think about your discretionary activity rule, there's no restriction on the irrigable area?

A. No, there's not in there.

10 Q. And so simply increasing the irrigable area by extending out an irrigation system might be substantial investment?

A. Yes, I accept that potentially there should be a limit, much like there would be in terms of what you've historically irrigated, accounting for any existing investment that's already been accounted for.

THE COURT: JUDGE BORTHWICK

15 I'm not quite sure whether that was what Mr Maw was asking. Do you want to put your question again?

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Yeah, I'll try again. So we'll do it in bite-sizes.

A. Mmm.

20 Q. Your discretionary activity has no restriction on the irrigable area?

A. No, it doesn't at present.

Q. And so if the irrigable area is to be increased, and infrastructure is required to facilitate that increase in area?

25 A. I don't, what I was then saying was that I think now, looking at it, potentially there should be a limit like there is on the other –

Q. No, that's –

A. – like there could be.

30 Q. – that's – let's not get to what needs to happen. I'm just trying to understand the effect of the drafting that you have put forward to understand whether it means what you think it means or means something else. So looking at this drafting, so we're increasing the

irrigable area, an applicant could say” “I require, oh, that’s required substantial investment because I’ve had to increase my irrigation infrastructure to increase my area”. That would tick the box under 7?

A. The way that’s drafted, yes, that would but that’s not the intention.

5 Q. Right. So tell me what your intention was in relation to this matter?

A. The intention behind this is that the changes that may be required to achieve the enhancement or protection outcomes talked about earlier, that may require significant, that may result in significant changes in the reliability of supply or the quantity of water with which an applicant might be able to take. Therefore, they may need to make substantial changes on farm or to their intake infrastructure to actually action those changes or to buffer the changes in reliability, such as storage dams, changes to spray.

10

Q. There’d be nothing stopping an applicant saying: “well, I need to increase my efficiency on this part of my farm and the only way to do that is if I increase my productivity by expanding my irrigable area and that’s my substantial investment”.

15

A. I accept the way this is worded that that could cover that, yes.

Q. So your wording is a long, long way away from what your intention is here.

20

It doesn’t really pick up what you’re describing to me as your thinking behind this?

A. No, and I accept that this is drafted in a short period of time and having questions like this actually makes you think a bit more about some aspects of it and the way someone else could read it. So I accept that there’s a lot of benefit in that.

25

Q. You need to be very careful when you’re recommending these sorts of provisions as part of a planning framework. It requires really careful thought, doesn’t it?

A. I accept that, yes.

30

Q. And so to wrap up the discussion on substantial investment, you’d accept that as drafted this provision is ambiguous?

A. Yes.

Q. And it doesn’t clearly articulate the outcome that you had in mind when you drafted it?

A. No, it doesn't.

Q. Right. I want to move onto the controlled activity now. You've deleted the restriction on the irrigation area?

A. Yes.

5 Q. And I'm assuming, and correct me if I'm wrong, that's for the same reasons we discussed when we discussed the policy?

A. Yes, they're linked together.

Q. You've recommended a change to roman (iv), so a matter of control (iv).

A. Yes.

10 Q. And this relates to the rate of take?

A. Yes, it's consistent, this is from the planners joint witness statement, attachment 1.

Q. Now, not all planners agree with this change?

A. No, that's correct.

15 Q. And the Council's planner, Mr De Pelsemaeker, doesn't agree with this change?

A. That's correct.

Q. And he's expressed a view that allowing for any data or any water years after effectively the notification date of plan change 7, gives rise to a risk that consent holders could ramp up their takes for a small period of time in order to justify a higher grant on renewal?

20

A. Yes, and I think we discussed this yesterday in similar questions that I think the risk is relatively low that that will happen but it is a risk there it could happen.

25 Q. And so when you think about a plan through the lens of Te Mana o te Wai, who should bear that risk, the environment or the abstractor?

A. I think the abstractor should bear that risk but I don't think there is a significant risk for six years.

Q. Well, if there's not a significant risk, let's not take the risk and leave the date of June 2020 in there. Isn't that the right thing to do, vis-à-vis Te Mana o te Wai?

30

A. I mean you could do that and it would mean that effectively I would imagine that most applicants after this point in time would not be able to take a control pathway. Basically –

Q. Well, you just told me there's –

A. – anyone that's up to 2025 would want to use their most recent data to explain what their historical use has been.

5 Q. But you've just said to the Court that there's not a substantial risk of rates of take ramping up but you're now saying all applicants who don't have a permit expiring through to 2025 would want to use their most recent data. That presumably would only be because that data gives them a higher allocation of water under the schedule. So there is a substantial risk.

10 A. Not necessarily. It's potentially, I mean the schedule, as we've talked about, there is a risk that if you – well, there's a, there's some applicants that might only have two or three years of data prior to this point and their use of data beyond 2020 may give them a clearer picture as to what their use has actually been and I don't think there is any real risk of including that versus not. I think it would be preferential based on the expert
15 evidence from Ms Bright to include that data.

Q. Well, Ms Bright's evidence was that there was a risk associated with an increase over that period.

A. And I have said that yes there is a risk as well.

Q. And you've said that the environment should not bear that risk.

20 A. No.

Q. So why is it that you maintain your position that the date range should be extended out?

A. I just, I think there is clear examples that I have where that would mean that people can't take the controlled activity pathway when there hasn't
25 been a ramp up of use for any adverse reason but I accept that if this is a point that we can't get agreement on between parties, potentially that that then call fall into the RDA pathway but I'm making assumptions that all users would take that pathway but there is a potential that there might be users that had justified reasons for reflecting historic use beyond
30 June 2020 that then are unable to use that in the controlled activity pathway.

Q. I'm struggling to understand what your evidence is on this point. You accept that there is a risk that allowing water use or water years beyond June 2020 may result in increases of water take?

A. Yes, there is a small risk, yes.

Q. And you'd say that that's a small risk?

5 A. I couldn't quantify it but I don't think it would be a large risk but without looking, I think as I said yesterday, without looking at the data, and the consent limits for all the permits between now and 2025, I don't think you could quantify it explicitly.

Q. And then you say that when it comes to allocating that risk, the risk should be borne by abstractors and not the environment?

A. I don't think the environment should bear that risk, no.

10 Q. So then the logical conclusion, isn't it, that the controlled activity date is June 2020?

A. It could fall from that but I just, I would need to see the level of risk in more detail to say for certain that that should be the case that has to follow from that.

15 Q. But you've just told me that the environment shouldn't bear the risk.

A. But if there is not really any risk, then why shouldn't an applicant be able to use that data?

1015

20 Q. We'll move on. The same applies to Roman VI. Roman VI relates to the volumes as opposed to the instantaneous rates?

A. Yes.

Q. And presumably the same discussion we've just had on the instantaneous rate would apply in terms of your recommendations for change to Roman VI?

25 A. Yes.

Q. Again when it comes to volumes of water, the environment shouldn't take the risk of increases?

A. No.

30 Q. Right, when we look at the matters of control, I think yesterday we did talk about *Matter A*?

A. Yes we did.

Q. Well we need not traverse that territory again. Well I have no questions for you in relation to the restricted discretionary activity rule. And we've talked briefly about your recommended discretionary activity –

A. Yes.

Q. – and you mentioned that there would need to be drafting changes made to your discretionary activity to properly reflect the entry conditions that you had in mind that are currently included in the policy, have I understood that correctly?

A. Yes, I think the way – reading that discretionary rule, it doesn't effectively limit who should be taking that path and I think there does need to be some way of reflecting that not anyone could just take that path in terms of a rule entry.

Q. And so the wording that you've put forward is flawed in that regard?

A. Yes.

Q. I want to move on to the non-complying activity. Now we did have some discussion about what your evidence now is in relation to the non-complying activity. Now when I read these provisions last night, as they are drafted in this document, I was left with the impression that there might be a gap in the planning framework that you've recommended in relation to activities or applications which don't meet the conditions of either the controlled activity where the RDA doesn't apply or the RDA or potentially even your discretionary activity consent. So, when we think about these rules operating as a drop-down, I don't understand what the activity status should be for activities that don't meet some of those conditions. So can you help me understand what your thinking is, if particular conditions are not able to be or not complied with, what is the drop-down and I should say the drop down in circumstances where – well, actually no, if you could just help me understand your thinking?

A. Yeah, so actually I just noticed that it's repeated twice, that non-complying activity rule is this version.

Q. I did wonder about that.

A. So just strike out the first version of it because the second version actually has the numbering convention corrections.

Q. Okay.

A. That was a copy and paste error last night.

THE COURT: JUDGE BORTHWICK

So delete, for the record delete the first version of 10A3.3, a non-complying activity rule.

CROSS-EXAMINATION CONTINUES: MR MAW

5 A. And so you're asking Mr Maw then if something didn't comply with the controlled activity condition and it didn't then fit within a RDA condition then effectively unless it could meet the thresholds for entry that I think would be required for discretionary, that would be non-compliant.

Q. What if it was a permit expiring on 1 October 2035?

10 A. So this rule should be changed to, as I think I mentioned earlier, only a six-year term. I don't think there should be the ability for an application to be lodged for greater than the 15-year term allowed for by the discretionary rule as part of this transition.

Q. So what would you recommend we change to achieve that?

15 1020

A. You would need to take out the words: "where the terms sought would result in a permit expiring after 1 October 2041", just strike that out and make a change to (b). I can't give you, can't come up with the exact words but effectively saying unless it's provided for under Rule 10A 3.2.1 for six
20 years.

THE COURT: JUDGE BORTHWICK

Q. Just pause there for a second. Did that make sense? So unless provided for under the controlled activity rule, the term is six years?

A. Yes.

25 Q. But the controlled activity rule, the term is six years.

A. Yeah, so the controlled activity rule is already covered by the rule and that's six years. The RDA is six years. The discretionary is 15 and so this rule would then basically say that that has to be the term.

Q. What has to be the term?

30 A. The six years has to be the term. I can't on the hoof come up with the wording for you.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So is that conceptually an entry condition into the non-complying rule?

A. No, so I'm just looking at that actually now. No, that needs to be the policy and this rule just really needs to be that unless, that anything that's not
5 provided for under the other three rules is a non-complying and then the policy then needs to be there that says that that should be for six years. I was just confusing myself between the rule and the policy there.

THE COURT: JUDGE BORTHWICK

Q. So amend, so I've just noted it should say: "anything not provided for
10 under" –

A. The other three rules.

Q. Under the other three rules is non-complying but then you would also need to amend the policies to make clear the terms for each of those policies and controlled in RDA being six years and discretionary being 15.

A. Yes, and I think I mentioned that earlier that that is something that's
15 missing at the moment in terms of those policies. It didn't get pulled through a policy still relating to the duration with the change to the discretionary rule, or the discretionary policy.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Do you accept that you'd need to be very careful with the wording of how
20 the non-complying activity rule is drafted to ensure that there wasn't a gap in the framework?

A. Yes, I accept that. I don't think it would be any really different from what
25 was drafted in the 14th of March version where it previously said it does not meet any one or more of the conditions of those two rules listed there and you would simply be adding a third rule in there with the note that you'd have to amend the discretionary activity rule as we've just discussed.

Q. And the reason we need to be careful about this is because an activity
30 that might otherwise fall through a gap would be an innominate activity and processed as a discretionary activity?

A. Yes.

Q. I'll turn over to the definitions now. Now, we've explored the definition of degraded or degrading so we don't need to traverse the challenges there.

A. Yes.

Q. Now, I see that there's a definition of community water supply?

5 A. Yes.

Q. And my understanding is that that's come about through the conferencing in relation to how community supplies are to be treated?

A. Yes, that's correct.

Q. Did you participate in that conferencing?

10 A. I wasn't part of the community supply conferencing but the planners conferencing where we came up with the definition of that, yes, I was part of that.

Q. I have some questions about the definition and I wonder whether I might be better placed to put those questions to the planning witness for the territorial authorities.

15

A. Probably best place. He did start the drafting and we spent a bit of time on it and it is tricky but we also acknowledge that this was for the short-term, that was for PC7's definition only. It's not a wider definition that would necessarily be carried through into the land or water plan.

20 Q. I'll pick that up with Mr Twose later today. Now, the final set of changes are changes recommended to be made to the schedule. My understanding is you've just pulled through the changes recommended from the planning conferencing?

25 A. Yes, and you'll note that I, instead of keeping the other changes in my previous version, attached to my supplementary evidence, which was slightly different from those that came out of conferencing. I then just put the yellow highlight saying that there would be further changes required to those schedules for the record there.

Q. I understand. Thank you. No further questions.

30 **THE COURT: JUDGE BORTHWICK**

Thank you. We can take the morning adjournment. I think because we're going to be hearing from you, Ms Baker-Galloway, next.

COURT ADJOURNS: 10.27 AM

COURT RESUMES: 10.45 AM**CROSS-EXAMINATION: MS BAKER-GALLOWAY**

Q. Good morning.

A. Morning.

5 Q. So I just want to start, first, by looking at your objectives, and the new objective in particular, 10.A.1.2.

A. Yes.

10 Q. In sort of a more high-level point of view, what I'm taking from that objective is that you see a place in this plan change for an environmental objective to be expressed, not just a process-related object?

A. Yes, as it relates to that slightly longer term pathway for some catchments.

15 Q. The reference in your objective, in the second-last line, you do refer to halting of reversing degradation of an FMU. Do you agree that that part of the objective would apply to any decision made under the PC7 framework, so even the controlled activity pathway should have the objective of halting or reversing degradation?

20 A. My interpretation of the pathway for the control is to put a line in the sand now, effectively and just roll over for six years, but I think from the evidence we've heard that that may not halt degradation, because there is a risk for some of those threatened species that just stopping now may result in further degradation in that six years.

Q. Yeah, okay. Have you had a chance to read Mr Farrell's supplementary evidence for Fish & Game?

25 A. I realise that that's the – I don't think I have read his supplementary. I've read his full one, but –

Q. Okay, if I could get madam registrar to find that for you. So it's dated 24 March.

THE COURT: COMMISSIONER BUNTING

30 Can you check the date?

CROSS-EXAMINATION CONTINUES: MS BAKER-GALLOWAY

Q. Oh, yes, it's got 23 March on the cover, yeah, that's right. Have we got success?

A. Not, yet, no.

5 Q. Oh, sorry. Apologies, ma'am, I should have prearranged this.

A. Cool, yes, I have a copy now.

Q. Thank you, so in the appendix, you'll find Mr Farrell's redrafted objective 10.A.1.1.

WITNESS REFERRED TO OBJECTIVE 10.A.1.1

10 A. Yes.

Q. I'll just let you read that.

A. Yes.

Q. So as you'll see, rather than, if you like, picking and choosing particular values that Mr Maw took you through, and – excluding other values if you like, you'll see that Mr Farrell's objective tries to stay at the level of the MPS objective 2.1A, the top priority for Te Mana o te Wai? So, if and it focuses on protecting the health and well-being of water bodies from further adverse effects from water abstraction activities, so it's a holding of the line objective. Do you agree with that interpretation?

20 1050

A. Yes, though the only point I note on that is that we may yet see in the next year or so some further change for some applicants particularly where there has been perversion to spray. I know of one applicant in particular, in just the last season so from the time that was decided there still may be further decline on the odd one. I accept that probably that's not all of them.

25 Q. But if you were to draft a more generic environmental objective, this expresses it at that general level doesn't it?

A. Yes it is at t--

30 Q. The aim of this plan change is to stop further degradation at the very least, isn't it?

A. Yes.

Q. Yes. Now with Mr Maw you agreed that when assessing effects of new consents one of the points of comparison is the water body in the absence of consented abstractions and –

A. Yes.

5 Q. – consent of activities? And do you agree that that assessment is relevant, not just for a section 104 assessment for a consent? It would also be relevant when assessing how to give effect to the national policy statement?

A. Yes.

10 Q. And in particular you'd agree that to assess the first priority of Te Mana o te Wai, how to protect the health and well-being of water bodies and freshwater ecosystems, we need to have that understanding of what that water body would have supported or could support if it was restored to an abstraction-free state?

15 A. Yes I think there is some discussion around that baseline still needing to account for, if we were looking at an individual consent, the other consents such as for example the impact, like the Clyde dam has on the you know, it's the consented take, if we're looking just at takes say in the Manuherikia, there is an impact of that authorised consent on the actual
20 baseline environment.

Q. Of the structures of the Clyde dam?

A. Yes.

Q. But they also have a finite term?

A. They do, yes.

25 Q. Yes. Now you referred to the set of consents that you have applied for recently, that you helped people apply for recently were any of those considered under the non-complying pathway?

A. Every single one has been.

Q. Every single one has been.

30 A. Even for six years.

WITNESS REFERRED TO NEW POLICY, 10A.2.4

Q. Right, so still in Mr Farrell's evidence if you go down to *New Policy*, 10A.2.4?

A. Yes.

Q. I'll let you read that and the table that follows it.

A. Yes.

Q. So just to give you the context, in, originally the table was proposed in reliance on Dr Hays' evidence –

5 A. Yes.

Q. – aimed to set a presumptive set of thresholds in relation to naturalised MALF that would help interpret the words no more than minor, that were originally in the policy –

A. Mm.

10 Q. – so you're familiar with that?

A. Yes.

Q. And then with the suggested re-drafting from Mr de Pelsemaeker and the removal of that word which Fish and Game and Mr Farrell support, the suggestion is now that you could use those presumptive thresholds for when the, "no more than minor" test is used either for notification or the alternative limb for non-complying activity. So in your experience, having an objective signpost to when – it's presumed that effects are no more than minor unless comprehensive assessments otherwise establish it. Is that of any assistance in your role, based on your experience with applicants?

15

20

A. No. And particularly – well for those ones that may be seeking a longer term, then yes but for those that are still seeking a six-year term then no because it – at this point in time the key – one of the key drivers for why they (inaudible 10:55:06) considered non-complying under the notify plan relates to the schedule and the assessments under that schedule and I don't think that an assessment such as this could be undertaken without significant science and hydrological work as is been pointed out in that objective and that requires a lot of time and money invested for what is ultimately a six-year term still being sought which is intended to still be reflecting the intent of PC7, of rolling over, putting a line in the sand but there was – purely been issues with the notified version that meant that they were non-complying. And I think for the six-year terms that we have recently applied for, under the version of the controlled activity that is now being put forward, the majority of those would be controlled.

25

30

1055

Q. Right so let's assume then that the majority of those that by accident, previously fell into the non-complying category that they now have the controlled route for an application that was substantively non-complying, do you see assistance in certainty and not having to have a debate with the Regional Council about whether or not an application should be notified for starters?

5

A. Yes although I come back to it only probably being beneficial for those that are seeking that longer term under that non-complying, not the shorter term. And in a sense, this sort of assess– this would form part of any scientist assessment of what a recommended minimum flow would be but not being a scientist, I couldn't tell you the exact details around this and whether that's appropriate or not.

10

Q. No, that's okay. I don't want you to comment on that.

15

A. Yes.

CROSS-EXAMINATION: MS IRVING

Q. I just have a couple of brief questions your Honour. Ms Perkins do you have a copy of the schedule 10A4 – Technical Conference Statement available to you?

20

A. I've got the planners one but I don't have the primary sector one, is that what you're meaning?

WITNESS REFERRED TO PRIMARY SECTOR – JOINT WITNESS STATEMENT

Q. Primary sector one. I'm just wanting to clarify I suppose the source of the changes that Mr Maw discussed with you regarding the period of time or dates for the monitoring data that would be assessed to calculate the take rates and volumes.

25

A. Yes.

Q. Now can you please have a look at paragraph 19 of the primary sector, joint witness statement.

30

A. Yes.

Q. Can you read that please?

A. “All witnesses consider every full year, 1st of July to 30th of June the following of available verified water meter data should be used.”

Q. And if we look at the updated set of provisions that were attached to the planning conference statement –

5 A. Yes?

Q. – particular the control activity rule 10A3 1.1, Romans IV and VI.

A. Yes.

Q. Is it your understanding that the changes in those two provisions reflect the agreement reached in the technical joint witness statement?

10 A. Yes that was the intention behind those changes.

Q. And if we go to the planners’ statement –

A. Yes.

Q. I’m just trying to find the...

15 **MR MAW:**

(Inaudible 11:00:00) accurate.

1100

20 **MS IRVING:**

Well, no if you let me finish Philip, I think I’ll round out the questioning, just as a point of clarification.

MR MAW:

25 Well you’ve put a question to the witness which indicated that all witnesses had agreed with that, whereas that’s not what the joint witness statement says.

MS IRVING:

The technical one?

30

MR MAW:

Yes.

MS IRVING:

I think paragraph 19 says that.

MR MAW:

5 Well look at paragraph 22.

THE COURT: JUDGE BORTHWICK

I'll just read it.

THE COURT: COMMISSIONER EDMONDS TO MS IRVING

Q. Sorry, which one am I looking at, which ...?

10 A. The technical conference, paragraph 22.

Q. Sure, but there were three technical conferences?

A. Oh sorry, the primary sector one, yes.

Q. Well in that case there were four technical conferences because the planners also have a conferencing –

15 A. Well yes.

Q. As a planner, I think planners are technical too –

A. Well yes.

Q. - but in a different kind of way perhaps.

A. Yes so paragraph 22, would you like me to read that for the Court's
20 record?

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. No I just want to read it to myself and I'll read all four paragraphs, 19 to
25 22. Yes, so I think what Mr Maw's objection is, is that, I think it's Mr Wilson is saying, all witnesses are considering every full year but Mr Wilson's got doubt as to whether or not including the records, post June 2020 could influence behaviour of water users.

A. Yes.

Q. So it's more nuanced than just simply saying, all users?

A. Yes, yes and my next question was going to be that that is effectively
30 what's picked up in the planners' conference where there's set out in paragraphs 13 to 19, the differences on that particular issue.

Q. You can ask the question.

CROSS-EXAMINATION CONTINUES: MS IRVING

Q. So is it your - I suppose we go to paragraphs 13 through 19 of the planners' conference -

5 A. Yes.

Q. - there were differences that are recorded there about whether or not that agreement at paragraph 19 should be pulled across from a planning perspective?

A. Yes there was different views on that.

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

THE COURT: JUDGE BORTHWICK TO MS PERKINS

Q. Before we get to the Court's questions, (inaudible 11:03:38) chance to ask yourself whether there's any need to - just picking up on any questions asked by any of the three lawyers, by the three lawyers, whether there's any matter that you feel ought to be clarified because, yes, any matter that you think ought to be clarified or where perhaps you weren't given a full opportunity to give a full response and so this is your chance now and then the Court will ask you some questions.

A. I think I'm okay with where I got to with those.

20 Q. Okay, that's good. Right, I'm going to hand you over to Commissioner Edmonds.

A. Sure.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. Morning. So I've just got a couple of matters I want to explore, that's all?

25 A. Sure.

Q. And so I'd like you to turn to the controlled activity rule?

A. In the version that was sent through last night?

Q. Yes -

A. Yes.

30 Q. - in the version that you sent through and I'm looking at Roman iv -

A. Yes.

- Q. – and really Roman vi which say the same thing, but one's in relation to volume and the other's in relation to the rate of take, but there's a similar principle applying, so my understanding is that in terms of the metering regulations, they came in in 2010?
- 5 A. I can't recall the exact date but yes it sounds about right.
- Q. Yes I think that's stated in one of these -
- A. It is stated in –
- Q. – entry conditions somewhere isn't it? Yes.
- A. Oh yes it is, yes in the (inaudible 11:05:28) RDA one, yes.
- 10 Q. It's actually in Roman vii so it talks about –
- A. Yes it is.
- Q. - the regulations there. So if you think then that you may be able to go back to the 2010 situation, and then you think about what this looked like, this iv and vi, the little Roman ones?
- 15 A. Mhm.
- Q. There was previously a period, 1 July 2015 through to 30 June 2020?
- A. Yes.
- Q. And that's been struck out and it just says, for which water litre data is available.
- 20 A. Yes.
- Q. So my question to you is, if so you had 2015 that was a very particular date, we've had quite a lot of evidence about the amount of more efficient irrigation that's been going on, some of that presumably would date 2015, would it?
- 25 A. I would be guessing but I think that's probably true, yes.
- Q. True. So quite a lot of that flood irrigation and the borderdyking irrigation, still some around, we've heard that –
- A. Yes.
- Q. – but quite a lot of it has gone now and you had more efficient, the K-Lines
- 30 and then the Pivot irrigation systems –
- A. Yes.
- Q. – now and other efficient methods of doing things -
- A. Yes.

Q. - including storage. So I guess my question to you is, why wouldn't you stick with the 2015 date? Why do you need to open it up to earlier periods?

5 A. Sure I think, this was addressed by Ms Bright as well but from my understanding from discussions with her and from her evidence is that the water meter data that's available prior to 2015 is still valuable data as well. It won't always be the case that it was just relating to flood irrigation at that time, so I think it still needs to be considered because part of my understanding from the hydrologist concerns is that the 2015 to 2020 limit
10 may not capture all climatological years that might apply in terms of dry or wet seasons, so that might be adversely unfairly impacting on an applicant who might have completely valid data from 2014 that might better reflect say a year in which they irrigated more but it was not necessarily because of flood irrigation that it's higher volumes. I don't
15 think you could say clearly one way or the other but it's only because if the data from those years before 2015 was higher in volume or rate, than the data from 2015 to 2020, I don't think you could categorically say that that was just because it was flood irrigation happening. That may be the case, for some applicants potentially, but it may not be the case for
20 everyone. Does that answer your question?

Q. Well it does in one way but it doesn't in another, because if you've got a completely different pattern of use that's been going on post making all those improvements in the efficiency of your irrigation, why would you be going right back to get the highest figure, the maximum figure that you can work to right back to the period that predates all those improvements?
25

A. Well I think the risk is that even though you've made those changes with irrigation, the 2015 to 2020 years may still not have accurately reflected the most that you may need under that system or may have historically taken even if you'd put the spray in a different season, I just don't think
30 you can clearly work out what the climate – you'd have to go back and look at individual climate data in each year and compare it to what you've used to work out if even under spray you might have taken more historically, prior to 2015.

Q. So is there anything in the matter that control is reserved to that's going to allow the decision-maker to look into the kinds of issues that you're just talking about now?

5 A. Not explicitly, no. There is still a matter within the limits of historical use, so there is still some interrogation of the data required and provided for within that matter, so it is still a matter of control with regards to the actual volume and rate that gets placed on the consent.

THE COURT: JUDGE BORTHWICK

10 Q. Say that again? So the proposition is your period of data includes a time at which inefficient or less efficient irrigation systems were being employed on farm, and consequently, higher volumes and rates of take. So that's the data that you have captured.

A. Mhm.

15 Q. How does that then get filtered out, if I could put it that way, because it no longer represents the current irrigation system?

A. It doesn't explicitly get filtered out.

Q. Should it be?

A. No, I don't think it should necessarily be.

Q. Why not?

20 A. Because the evidence that I've heard from the hydrologists are that that period of time, of 2015 to 2020, still might not accurately reflect the historical use that is required and has been used.

25 Q. I'm not bothered by any particular therefore or years. Our interest is in the shift in efficiencies is irrigation systems. How is that captured or thought about in the controlled activity?

A. It's not.

Q. Should it be?

30 A. Then you have to look at efficiency of use calculations, that then, you couldn't apply it to every situation, because there will be some that are still flood irrigating, and it wouldn't be fair to impose an efficiency of use upgrade requirement for a six-year controlled activity pathway.

Q. Yes, I understand that, but just say they were flood irrigating, to use the totally out there example of an inefficient system, and have now moved

to a lateral, more efficient. What do you do? Do you allow them to say, well, my historical use is based on flood irrigation?

A. I absolutely see the point. I don't know how many this would apply to. I'd have to talk to the hydrologist about which situations have shown that data prior to 2015 is a lot higher than post that time, so I think it is a situational examination required as to whether that actually is a real risk in this situation.

Q. I do not know. I mean, most of your evidence, or a lot of the evidence that we have received is that there has been substantial investment to improve the efficiencies of irrigation systems, so on your own evidence, that would apply to most people that you've got knowledge of.

A. Yes, there has been investment by, I think, most clients that I have knowledge of to some extent, whether it's their full property or some of their property, there has been investment to improve things, yes, in light of knowing that their renewal process was coming up.

Q. With that in mind, how do you capture their historic use is really what we're interested in.

A. Yeah.

THE COURT: COMMISSIONER EDMONDS

Q. Yes, well, perhaps answer that question, then I'll have another question.

A. Sure. The only way you can include it would be if there was an additional requirement to outline details of your system and –

THE COURT: JUDGE BORTHWICK

Q. Your current irrigation system?

A. Yeah, current irrigation system.

Q. And any change? Okay.

A. And any changes they've made, but then you'd also have to reflect on, well, that maybe only happened in 2017, and so it would have to more fall, I think, under the RDA pathway rather than the – but then, at the same time, that maximum through the schedule is for this control, so there would have to be another matter of control to address that if that needed to be addressed, and I don't know how much of a concern that is to know

whether I think it should be included, and the effort goes into adding an additional matter, but I think, in the essence of keeping this as simple as possible for a six-year rollover, knowing that at the end of six years, the full efficiency and what water is needed scenario will be addressed through the new land and water plan permits, so I think I still come back to the intent of the plan change to be as simple as possible, and the moment you start adding in, then, you need to look at when systems changed, what changed, what years, have they been wet years, have they been dry years, adds another layer of complexity.

10 THE COURT: COMMISSIONER EDMONDS

Q. So a follow up question is you have struck out three, which was the total land area under irrigation and the maximum area irrigated period, the 1st of September 2017 to 18 March 2020. Now, that, perhaps was a bit more of a safeguard that, in fact, any efficiency measures that had been undertaken might, in some way, be locked in because it's an entry condition.

A. Yes.

Q. Or would be locked in.

A. Yes, I accept that.

20 Q. So if you were to put that back in, would that deal with some of the matters that we've just been talking about in terms of –

A. Yes, yes, it probably would, because you couldn't, even with a spray system, if that's in place, you couldn't – no farmer's going to go and flood their property with their spray system. The irrigation is designed to be purposeful for the pasture or crop that you're growing. You're not going to put far more water on than is needed, particularly if you're earlier in a season, you don't want to use your annual volume up too early and then have nothing left if autumn becomes dry, much like it has been, so that would provide another backstop to not using that historic that may be a flood irrigation volume over any more area.

30 Q. Okay, thank you. So I guess that's the controlled activity rule, but if we could just go back to the policy A.2.1, and you've got D, and so now we've

got this word “historical” that’s come in here. So that’s not defined in any way, is it?

A. No, there is no specific definition of it, no. It came through the planner’s joint witness statement. It’s not meaning anything different than actual, it’s just a reflection of the fact that in the RDA pathway, it may not be solely water meter records that you have the actual point in time, day, timestamp of that water taken on that day, and if there are other methods used, one that comes to mind that we discussed quite a bit at that conferencing was the use of something like synthetic records for hydroelectricity generation, so that effectively does go back and show what water was going past the intakes on those dates, but it’s not an actual record for a water meter, so the use of historical instead of actual reflected that, that it is reflecting the historical use, but it’s not through an actual water meter record that you could hold up.

15 Q. So that term, “historical use,” that’s come over, for example, in the matters of control, hasn’t it?

A. Yes.

Q. So do you think there might be a lack of clarity with that term, could that –

A. No.

20 Q. – potentially arise, result in arguments subsequently? Do you think that it’s clear?

A. I think all the planners were fairly clear on the use of historical and what it meant, in the sense that it was reflecting what has actually been taken, you know, whatever method is used to demonstrate that. It wasn’t purporting to suggest that it would be future or demand-based assessments of what you might need. It was – I don’t think historical would cover that.

Q. So you don’t think there’s a need to define it?

A. No, I don’t.

30 Q. So I just want to make sure that I’m clear about the restricted discretionary activity. So we’ve had this discussion about the controlled activity conditions, 1B and B1, but I’m just having a look at the RD, the A one that you’ve got here.

A. Yes.

Q. So you haven't suggested that (inaudible 11:20:00) 3, which was the one about the area under irrigation over a certain time period, you haven't suggested that that be struck out of the RD, that's still there in A, is it pre-entry – is the entry condition...

5 1120

A. That is and it's probably just an issue last night as I pulled over the RD rule from the planners' joint witness statement which we didn't address the likes of whether three should stay in or out as part of that conferencing because that wasn't related to the schedule.

10 Q. But in the light of the discussion that we had on the controlled activity, wouldn't it be logical if you were following that that line of direction –

A. That it would, yes.

Q. – that the three should stay?

A. Yes in the line if irrigation areas, yes.

15 Q. As an entry condition. Yes. So what kinds of activities would you envisage coming in terms of this RD rule?

A. The intention behind that was really the – originally as it was drafted it was only capturing those that had an issue with their data, like a technical issue or missing data and a lot of our discussion was around the fact that that may not capture everyone. So, it may not capture someone who's got a very good data record for three years. There's no missing data, there's no technical issues with that data but it only captures the three years and that's not reflective of historic use. They might have manual records and other information reflecting what they took prior to that point in time and so this would allow for those people or those that might only have one year of record to actually include additional data with their application to demonstrate what their historical use was – has been, so that actually is representative of the historical use and not just one or two years of water matter.

20

25

30 Q. So what's been the limitation on any activity coming under the RD category?

A. Well I think the incentive is still there to follow a controlled path with a guaranteed grant. The RD path doesn't have that same certainty for an applicant and if they're just going, oh I can just try and use something else

for an extra one or two litres a second, that's not enough incentive I don't think in the RD path, when you're still having to provide a lot more information at more cost and you're still got a six-year term. The incentive is still there for the controlled activity pathway where their data is representative that you have.

5

Q. Is this pathway though, this would be attractive to someone who thinks they can make a case for a greater historical use that would be available to them?

A. That potentially – that is available to them but there is still the discretion for the council to look at that data and assess it and they don't have to grant a consent on that basis. There is still the discretion for the council officers to disagree with what has been put forward by an applicant.

10

Q. But when you look at the matters that the discretion is restricted to, they are quite narrow, they're just about that really aren't they?

15

A. They are. And that's the only exception.

Q. Water metered data and other relevant methods and data and I think there has been other evidence and questions about what that might mean –

A. Yes.

20

Q. – I think you – were you asked about that, I'm sorry I can't recall.

A. I think it might have been Ms Bright that was asked about that.

Q. Ms Bright, that's right. So, I think that was quite thoroughly explored so the council officers are going to have a fairly, well I don't know, what sort of discretion do you think they're going to have in terms of A?

25

A. I think it will still come down to their audit of the data and other relevant methods or data that's put forward. At the current point in time where there still is robust debate between applicants and consultants and the council with regards to analysis of automated data and there always has been, even before PC7 was introduced so I think that will still come down to the same method and if there is a significant disagreement it may be that things progress to a hearing between the council and the applicant if agreement can't be reached on that and an applicant doesn't agree with proposed draft conditions that may come from council. So they still have

30

full discretion over an audit and review of that data. Much like any consent application, there's a full audit of the information provided.

1125

Q. Sure, but they won't be able to get into efficiency, presumably.

5 A. No, this isn't intended to cover what is an efficient use.

Q. And so what sort of time period could this data go back to? Just going back to those discussions we were having about an efficient borderdyking and flood irrigation. What would be your understanding on that?

10 A. There is no limit where it would go back to, but it would come down to an applicant having to have a reasonable record of their historic use in some form that they can talk to what has been historically taken. I think from discussions at the planner's conferencing, the likes of hydroelectricity that has the tools and systems to generate synthetic flow records, for example, they might be able to go back further than an applicant who has
15 been irrigating could in terms of having a reasonable record of historic use.

Q. So the AA, the community water supplies, so that one –

A. Mhm.

20 Q. – that talks about existing water permit volume and rate limits, so what do you understand by that term “existing water permit volume and rate limits”?

25 A. So the intention here was that A still applies to community water supplies, so it still has to be historic use, but we recognise that the schedule only looks at historic use, and in order to provide for some population growth requirements, but that an additional volume, potentially on top of what has historically been taken, could be provided for here, but that it still had to be no more than the existing water permit limits. So, for example, say your consent limit is 50 litres a second, historically, you've taken 40, but
30 as a community supply, you know your projected growth might mean you need to take 44, so you're still within your consent limits, but there is ability to allow for some growth, but potentially Mr Twose's, or in the TAs, are more suited to answer that, but from a planning perspective, that's where we came to with the drafting of that.

Q. Yes, I was asking from that perspective, but I'll leave exploring that a little further (inaudible 11:27:48) we'll see him soon. Thank you.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

5 Q. I have not got many questions. As you indicated yesterday, you have got no experience with rights priority and deemed permits, that is okay. Just turning to your proposed policy, 10.A.2.3, and matter noted at (vi), and here, we have got an allocation that is the lesser of the rate and volume assessed using the methodology in the schedule, or alternatively, inefficient use of water, and you said that could be amended to say "using 10 the Aqualinc guidelines, inefficient volume of water." I thought that the Aqualinc guidelines could also be used to determine what is a reasonable volume of demand, excluding or setting to one side whether the system is efficient or not. So, for example, if I was (inaudible 11:28:55) and I had poor records, if I was using (inaudible 11:28:58) poor records, I could go 15 to that Aqualinc guideline and that would tell me what would be a reasonable demand for my farm, and you're agreeing with that?

A. Yes, I'm agreeing with that.

20 Q. Okay, and so the issue here, is it one of efficiency or is it one of – I thought the issue here is what to do if you have not got good records for your data. The issue with Aqualinc is not efficiency of use, but it is actually demand, is it not? Or is that what you are meant to be covering off in the RDA?

25 A. So where it is talked about here, for this discretionary pathway, Aqualinc gives you an estimate of demand, but it is on the assumption that it is an efficient irrigation system.

Q. So it cannot produce demand –

A. For flood irrigation.

Q. – for flood irrigation?

A. No, it could not.

30 Q. Or for borderdyking?

A. No.

Q. What about K-line?

A. It's for a spray system.

Q. It is for a spray system only? Wow.

A. For a spray system only for Aqualinc, or, potentially, it was like a dripper process for trees.

Q. Yes.

5 1130

A. I'm not entirely sure on that but I know it's on the demand on the assumption that the system is efficient and there is a specific percentage efficiency included in those guidelines. I can't recall what that is.

Q. Okay, so many irrigation systems in fact would be excluded?

10 A. Yes, but the inefficient ones that we would typically refer to as inefficient, anything that's got that sort of surface application via flood or contour or borderdyke –

Q. Yes?

A. – they would not be accounted for within a Aqualinc demand.

15 Q. Okay, oh that's good to know. Now the second question I had relating to your same draft policy and in particular Roman numeral vii and Mr Maw's already asked you about what is required for a substantial investment –

A. Yes.

20 Q. – and you said, "Case by case", and I think he reflected back but there were these, the individual's tolerance for investment or for accruing of debt might vary and I think you acknowledge that that –

A. Yes.

25 Q. – would also be true? My question is more to do with the phrase, "require substantial investment and I understand from that phrase, "require", that this is investment in the future, so it's not already investment which has been made?

A. Yes.

Q. And your proposing that this – or are you proposing that this future investment be for securing items 1 and 2 of the same policy?

30 A. Yes.

Q. So it's not –

A. It's not sitting on its own –

Q. Yes.

A. – in the sense of someone just wanting to have investment that means they could come under this policy, it's all tied back to 1 and 2.

5 Q. – to securing those two. And so with that in mind, I read over your additional statement which you made yesterday, on behalf of several farmers, I couldn't see how they would themselves avail themselves of this discretionary policy because each of those farmers by and large have made substantial investment or I think in the case of a hydro wasn't proposing substantial investment, was proposing just a roll over of the consent, is that correct?

10 A. That is correct, yes.

Q. And so for all those farmers that you note in your opening representation on behalf of Landpro and others, they're all going to be six year consents?

15 A. The majority of those probably wouldn't fall within that discretionary pathway. I think Mr Naylor is only one that might do but potentially actually on the reading of that, possibly not.

Q. Okay.

A. More that it falls within the wider catchment and there's other pe- yes, it is...

Q. It's not your clients? Yes.

20 A. No, Mr Naylor is my client -

Q. No, no, no –

A. – but –

Q. – none of these people take advantage of what you propose here?

A. No they haven't, not directly.

25 Q. No, okay. All right. So who does?

1133

30 A. There is a, I would imagine that the majority of the applicants that can take advantage of this would be those that have had deemed permits because there's a big number all together in specific catchments. It would be those falling within the Manuherekia, the Cardrona and the Arrow primarily and probably some of the Taieri bit. I don't know the Taieri well enough to be able to –

Q. But you do know Manuherekia and you do know Cardrona and you do know Arrow and, correct?

A. Not the Arrow so much but Cardrona and Manuherekia.

Q. Okay, you know them sufficiently to know that they could bring themselves under your drafted policy?

5 A. Not to the level of detail that every single one in that group would and I guess that's part of the drafting is that if changes are required to 80% that fall within that sub-catchment of the applicants and maybe 20% are part of the whole group, but they have already made infrastructure upgrades, on reading that now, there is concern about whether they could then still be part of that. Yes, I accept that now, thinking about that. There is some
10 difficulty with that.

Q. There is some difficulty and that's with Manuherekia and Cardrona or just one or other or you can't say?

A. Probably both but I –

Q. Probably both.

15 A. Probably both.

Q. Because you have, within those groups, you have a population, if you like, who have already made that substantial investment.

A. Yes.

Q. So therefore, policy wouldn't apply to them?

20 A. 7 wouldn't but the rest probably still would.

Q. Yeah, you see I don't understand that because I look at the words "and"
–

A. Yes.

Q. – it's a conjunctive.

25 A. Yeah.

Q. You actually have to qualify?

A. Yes, and that isn't –

Q. Yeah, it's future investment. They've already made it. They're out.

A. Yes.

30 Q. And so for them just the six-year consent?

A. But then you wouldn't, the difficulty is that you wouldn't achieve the benefits that could be achieved through some of these sub-catchments with all of those parties being on board because they, yeah, there is difficulty where they couldn't necessarily all be on board with that,

although they have made the investment. Whether that's sufficient, depending on what the outcome is of this, and whether they have to make more, I couldn't say.

5 Q. And so was this policy drafted with those two catchments in mind, Cardrona and Manuherekia?

A. Yeah, those were two of the priority catchments that were in mind that, that – experiencing those concerns with regards to threatened species and degradation.

10 Q. And I think it may have been in relation to hydro. Unfortunately I can't locate my pad, my, you know, notepad but in relation to hydro, and in response to a question from Mr Maw, the greater risk, I thought it was hydro but it might not have been, the greater risk for companies seeking replacement consents where they are involved in hydro, was not PC7, but was a future plan to come, the future Land and Water Plan. Do you recall saying something to that effect?

15 A. I can't recall it.

Q. But is that correct? The greater level of uncertainty and therefore risk going forward is not this plan but it's actually a future plan?

20 A. Yes, potentially and I think the other part of the risk that comes with some of those hydro is if they are linked to large dams that then are requiring a lot of investment on that six-year term. So I think sometimes it comes with those two aspects combined rather than just sitting on their own.

Q. And if that was true for hydro, is it also true for primary sector?

A. Yes.

25 Q. And is that risk to do with what the future Regional Plan, Land and Water Plan, might say about overallocation?

A. Yes.

Q. Yes. And so in seeking a 15-year consent, which is what you now propose, is that to in some way future-proof the taking use of water?

30 A. No, I don't think it is in any way. I think the Land and Water Plan will still come in and will still set its limits and consents will either be a short-term now and apply within six years under that or within 15 years, either get to the end of that 15 and apply under that new plan or be reviewed in respect of allocation of flow limits, for example in that timeframe, so, no, I don't

think it's a future-proofing that. It's more providing for the duration needed to be able to secure investment to make those changes and upgrades that are required to protect those critical ecosystems with threatened species and degradation occurring and I think that's where the term comes in, is that six years doesn't allow for that level of investment to undertake those changes to the systems and to reflect those minimum flows that may be required there.

5

Q. I thought you'd agreed with Mr Maw that it was unlikely that the Regional Council would review every permit.

10

A. Yeah, I don't, I don't think that they will review every permit and it may just depend on which catchments and which concerns.

Q. And is that because of the sheer volume of permits to be reviewed and the depth and capacity of the consents officers that would be required to be engaged, or external consultancies required to be engaged, to undertake that task throughout Otago?

15

A. Probably both and I think it's important to point out here as well that it wouldn't be only consents granted under PC7 but a part of that review process I think is the Council has pointed out there is a large number of consents across Otago for water that don't expire in this timeframe and they also would form part of the need to whether or not they need to be reviewed and I think Ms Dicey mentioned the Taieri, which has a large number, large percentage of its allocation, 20, 35-year consents, so that obviously is not part of the PC7 process but are also consents that may then need to be reviewed.

20

25

Q. And I understand, with that in mind, your answer is unlikely that the Regional Council would engage in a review exercise across the region.

A. I don't think there would be one across the region. There may be catchment-specific ones where it's more critical but I couldn't say what, without knowing what the Land and Water Plan outcome is and which catchments there would need to be substantial change in, and the level of time required, I couldn't say on behalf of the Council what that would be.

30

Q. And so what do you think would inform what catchments there may be the need for substantial change?

A. I think it would depend on what the limits are that come through the new Land and Water Plan compared to what is on existing permits and what is occurring in the environment at the time as to, just putting a number out there, say the minimum flow that comes through the Land and Water Plan is 500 litres a second, but all the current consents are bringing everything down to a 100, that might signal a significant need to make some change straightaway but, yeah.

5

1140

Q. And moving in the opposite direction of that review would be considerations of viability, wouldn't it, as a matter that the Council would have to consider on a review?

10

A. Yes.

Q. That viability is linked, is it not, to efficiency of use?

A. Yes, but I don't think it limits the ability to remove some allocation or limit on that consent in terms of their rate of take or volume of take.

15

Q. So my proposition to you is if I am a farmer with substantial new investment in irrigation systems which are efficient, how could that be reviewed backwards and not impact the viability of the farming system, both in relation to land and the efficient application of water to land? Presumably the two are geared or correlated considerations is the first question?

20

A. Yes, they are correlated.

Q. They are correlated, and so if I am efficiently using or applying water to the requisite area of land, how could you take water, how could you diminish either the rate of take or the volume without excluding land under irrigation? One would follow from the other, wouldn't it?

25

A. I think there would have – the only way you could do it would be to exclude land or to reduce the amount of time each area of land was being irrigated if you were to claw-back volume or rate.

30

Q. Right. And then you'd get into questions of viability where the irrigation system is, where investment has been made in an irrigation system, assuming certain parameters as to efficiency and, yeah, efficiency relative to the total area to be irrigated. Is that not so?

A. Yes, there may be in part. It probably depends on the system set up on each property, for example one large pivot on the property and that was it. There would be significantly more impacted by that than in a property that had a K-Line systems where it's just as easy not to run a K-Line out
5 over one area than not. So it's more those bigger systems and whether they'd, whether a property just has one or has multiple or, I mean I'm not an irrigation specialist to know how you'd change it really, so.

Q. So for relatively inefficient systems, such as guns and K-Line and putting, you agree that guns and K-Lines are not as efficient as laterals and other
10 spray irrigation systems?

A. I couldn't, I couldn't recall the exact figures but they're still far more efficient than flood, you know, flood and border dyke systems, yeah, on the spray.

Q. Well, I'm only focusing on I know I can shift it, a K-Line, and in theory you
15 could shift a gun relatively easy as well?

A. Yeah.

Q. Yeah. So for those systems where there's no fixed infrastructure, if I could put it that way, related to the land, you could remove the systems, not irrigate the land, don't know whether a farmer would think that's viable or
20 not. Depends on whether they've planted cherries I guess.

A. Yeah, I think it's very dependent on what the system is that they've got and how much of an area it would change. I don't think it's easier saying it's not going to make a property viable or it will always still allow it to be.

Q. No.

A. It is a case-by-case.
25

Q. So there's a huge, quite a degree of uncertainty if you have to go to a case-by-case assessment of the impacts of a future Land and Water Plan and how those might be rolled through, if you like, in terms of the consents that, replacement consents that are under consideration today. Would
30 you agree with that?

A. Yes.

Q. Okay. All right. Deemed permits. I know you're not involved but you said you had a thought yesterday. So what was your thought?

A. My thought was –

Q. All thoughts welcome.

A. – was just with regards to how that one item of priorities might be covered and the only thoughts I had is that it probably just has to fall into the matter of discretion or matter of control whereby it's effectively an existing aspect of existing conditions on some of those deemed permits but an evaluation in the application phase would be required whereby maybe it's just set out in the application form. I don't know exactly but, you know, an applicant would have to just identify firstly if there is any priorities attached to their deemed permit. Secondly, do they exercise them? And thirdly, the only time it really matters, I think, is if the lower priority is higher in the catchment. So it doesn't really matter if the person at the top of the catchment has highest priority.

Q. No.

A. It doesn't make any difference.

Q. No, it's going to get the –

A. So there's three components.

Q. – water. Yeah.

A. And so I don't think you'd get every priority that exists rolling over and I think, I was looking through Ms Dicey's supplementary and she'd put, you know, inserted a couple of the tables that are, they way they're currently worded and I think obviously there's a legal component that then comes from that but I think the need for that is so that there is effectively something in writing that holds the line for those priorities in terms of particularly between applicants knowing that that exists because obviously those sections of the Act state that, you know, they don't continue beyond 1 October. So those sections of the Act don't apply then and so it's just having some formal record of those for the future conversations for water sharing regimes as they might apply under the Land and Water Plan. That's my only thought.

Q. Yeah, no, that's all right. I had a similar thought, you know, could it be a matter of control or a matter of discretion under an RDA. Wasn't sure. I mean, and this is assuming that you can –

A. Yes.

- Q. – bring it down that there's some good reason for doing it. So I wasn't sure and then I think I was asking Ms Dicey that maybe there needed to be a policy signal and I think she said maybe and Ms Irving put quite well, you know, re-tooling existing policies. So I thought, you know, that maybe we should look at that, could we look at that, do we need to even and of course that might be a 293 matter, unless there's scope. Certainly scope in some, there may be some scope in some submissions.
- 5
- A. I think there's potentially scope because it's kind of like an existing condition and we've always talked about existing conditions coming through, so it's just a legal matter of whether that's a condition or not.
- 10
- Q. Yeah. It's a creature.
- A. Yeah, which I couldn't help on.
- Q. I think it's probably a creature statute but I have to talk to all of the lawyers about that. You said, you know, subject to whether they've ever exercised them, how would you even know? And the fact that I might need to do it this year but not need to do it for another decade, that actually might be the case?
- 15
- A. Yes.
- Q. But it's important.
- 20 A. I think really my view of it is that if they haven't exercised it historically, it goes because everyone was assuming it would go under a new full replacement anyway. So it, but it is relying on the word of the applicant in the application. So, yeah, that, that – I couldn't give you any more help because I don't think any historic use records can demonstrate, because the flows vary timing-wise whether you're taking it or the natural flows are lower. So there's nothing to tell you in a water use record if they've been exercised as a proof kind of component.
- 25
- Q. Is there any value in this, in the record of priorities, either all of the priorities or just, you know, the ones that you want to capture, priorities which are not at head of catchment but I guess in mid-catchment, lower-catchment, not quite sure where you draw the line there, but is there any use in that as a method sitting outside of a plan, as in, you know, this is the record that parties might have reference to going forward in terms
- 30

of forming water management groups, and saying that I suspect they all no darn well who's got what.

5 A. Yeah. The only way you can do it is to go look at every single deemed permit and pull out the priorities that are listed on them. I mean they're all there. It just would require someone to spend a few days doing an administrative task.

10 Q. Not me. So, now some easy questions hopefully, and if you don't know, just say so, because you've only been working in Otago two to three years. For those catchments, so this is the questions that I asked in the minute, broader questions, for those catchments which are outside your Schedule 2A areas, and deemed permits have already been replaced under the RMA, I asked: "is the new water permit subject to right of priority". Do you know?

A. The ones that I have dealt with, no.

15 Q. Okay, no. Allocation limit in minimum flow.

A. Yes. Oh, not an allocation limit, sorry. Well, the allocation hasn't changed from the current allocation limit under the RPW, which is anything prior to 1998 is the primary allocation limit.

Q. So that's Policy 642?

20 A. Yeah, so that hasn't changed, but there is minimum or residual flows on the ones I've dealt with.

Q. So there's minimum and residual flows. Cessation conditions?

A. Well, they are effectively from a residual flow, your cut-off, yeah.

25 Q. For those replacement permits, are there any other type of conditions that we should know about that are regulating availability of waterflow within a waterbody as between abstractors? So here we're talking about abstractors, not the environment.

A. Yes.

Q. What are –

30 A. I wasn't the planner preparing the Luggate catchment ones but I have just recently been helping the Luggate group prepare their low-flow rationing agreement, which is a condition of their consents, and that effectively the five matters identified that form that agreement are a communications protocol amongst themselves, how they will give priority to domestic

users, what are the triggers levels for when they will start reductions, what is their agreed abstraction reduction methodology, so whether they go one-to-one with each other alternate days and then the process they will use to notify ORC when they start those reductions.

5 1150

THE COURT: COMMISSIONER EDMONDS

Q. So are (inaudible 11:50:25) in addition that consent that relate to that?

A. So that's a low, yeah, the consent condition requires a low-flow rationing agreement, and those are the five components of that agreement and all
10 of the consents have a minimum flow for the irrigation season and outside the irrigation season for primary takes and then they also have two supplementary limits, a first supplementary band and a second supplementary band and residual flows below their individual points of take.

15 Q. So that's a 2019 decision is it?

A. Yes, or possibly 2020. Can't remember exactly when it was. I've just been helping with the, trying to start drafting that agreement for them, or with them.

THE COURT: JUDGE BORTHWICK

20 Q. Okay. For catchments inside of Schedule 2A, have the minimum allocation limits been applied to existing permit holders on review? So there's a review now done.

A. Not that I have been involved in or aware of.

Q. Okay.

25 A. The only one is that Luggate hearing. There was a, I wasn't involved in it but looking at it now, there was a 2A limit and that was part of the conversations at the hearing but I couldn't give you any more detail on that.

Q. Was Luggate a replacement or a review?

30 A. Replacement.

Q. Okay. Again for catchments inside 2A, where deemed permits have been now replaced under the RMA, are those permits subject to a right of priority?

A. I haven't been involved with any.

5 Q. You haven't been involved with any –

A. With any 2A catchment ones.

Q. – replacement 2As?

A. No.

Q. Okay. All right.

10 A. Not that have got to the point of replacement.

Q. So there's no sort of singles?

A. No, I mean the last chance one that was dealt with –

Q. You know, the odd, the odd permit out there.

A. – is the tributaries of the, of the, of Lake Roxburgh and the Clutha and
15 then other ones that I've been involved with are all applications in process. That's the only one granted so far.

Q. Okay. So they're my questions.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL

THE COURT: JUDGE BORTHWICK

20 Your opportunity, do you want to add anything to any questions that the Court has asked? Anything arising, counsel, from the Court's questions?

QUESTIONS ARISING – NIL

THE COURT: JUDGE BORTHWICK

Q. No, nothing. And do you want to add anything?

25 A. No.

Q. In terms of anything we've just put to you?

A. I think I've covered any little note that I'd made.

Q. Very good. All right. Sounds like we might see you back again, though, by the time we finish the JWS exercise, so thank you very much. Again,
30 it's been very helpful.

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. All right. Where to?

A. So I'll start with opening.

Q. Yes.

5 A. Feels kind of momentous to be moving on.

Q. I need a new copy of that.

A. Yes, I've got copies here.

Q. Thank you.

10 A. Just before I start on the submissions, just as a flag for you, I'm just tweaking the order of the witnesses slightly just to accommodate some availability now that we're a bit later in the day than planned on the schedule. So I'll call Mr Heller, followed by Mr Twose and then Ms Muir and Ms McGirr. The order of those two might just depend on the afternoon and whether we think it's just easier to bring Ms Muir back
15 tomorrow. So we'll just keep that in mind during the rest of the day.

Q. Okay. Thank you.

A. All right.

MS IRVING MAKES OPENING SUBMISSIONS

20 So, as I think we've heard a number of times now, plan change 7 has been described as a process or interim framework devised to address the gap between the replacement of deemed permits and other water permits expiring prior to 2025 and the notification of the Otago Regional Council's new NPS compliant land and freshwater management regime. The primary mechanism
25 for achieving this is a consent duration of six years for all new and replacement water permits regardless of the purpose for which the water is intended to be used. Unfortunately, this term limitation creates a significant issue for the territorial authorities that are required to maintain and develop community water supplies. In addition to being a second-tier priority within Te Mana o te Wai,
30 provision of safe and secure supplies of drinking water is legislatively mandated through the Local Government Act 2002 and the Territorial Authorities also have obligations regarding water supplies pursuant to the Health Act 1956 and the Civil Defence Emergency Act 2002. As set out in the evidence on behalf of the TAs provision of these services necessitates long-term planning both from

a financial point of view and due to the nature of the infrastructure. As such, it is not amenable to short-term water permits. Requiring Council's to develop infrastructure without the certainty of long-term access to water puts them in an unenviable position with respect to their obligations to ensure prudent

5 stewardship, efficient and effective use of resources including planning effectively for the future management of resources. Plan change 7 captures a small number of existing community supplies and will also impact on planned developments for new or upgraded supplies. It is the position of the TAs that in doing so, Plan change 7 fails to address the mandatory obligations of both

10 the TAs themselves and of the Otago Regional Council. Including community water supply within the ambit of Plan change 7 prevents both the TAs and the ORC from satisfying their obligations under the Partially Operative Regional Policy Statement, the National Policy Statement for Fresh Water Management and the National Policy Statement for Urban Development and the Resource

15 Management Act itself. In addition, the six-year term for all new and replacement permits will inhibit the TAs from fulfilling their community water supply obligations under the Local Government Act and to the Health Act 1956 by jeopardising the TAs ability to manage and provide efficient and effective community supplies now and in the future. It remains the position of the TAs

20 that Plan change 7 should not apply to community supplies. Alternatively, if it is to apply, a number of key issues need to be addressed. Firstly, the amendment of the Schedule IOA so that it is more appropriately calculating historic use for community supplies, provision made for replacement permits for community supply to include increased rates and volumes to account for

25 projected growth, and provision made for new permits to be sought where greater rates and volumes are required than under existing permits or where new community supplies are being developed. And finally, that consents for community supplies are able to be obtained for longer than six years. Now, in these submissions I am not traversing the statutory analysis law because

30 you've heard that from a number of my counsel, other counsel, and I don't have a quarrel with their submissions in that regard. So I'm focusing on what we consider to be the key issues for the Territorial Authorities and I set those out there at paragraph (a) to (g) and will work through those one by one. Firstly looking at community supplies in the context of Regional Plan Water. I think it's

important to understand how these community supplies have been have been treated under the Regional Plan Water. Community water supply has not been a defined term within the Regional Plan. The term 'Town and Community Water Supply' is defined, although it is only utilised in the context of the
 5 Waitaki Catchment. Town and Community Water Supply means reticulated water supplies servicing urban areas, rural-residential and residential subdivisions, including all commercial and industrial premises and schools and other educational facilities located within the reticulated area.

THE COURT: JUDGE BORTHWICK

- 10 Q. Can you pause there a second. So you've got town and community water supply but it's only a term that applies to the Waitaki catchment?
- A. It does.
- Q. Nowhere else?
- A. No, not so far as I could tell.
- 15 Q. Are they special for a reason?
- A. I think it was linked – pardon.

THE COURT: COMMISSIONER EDMONDS

- Q. If it was a special plan.
- A. Yeah. It's linked to the fact the Waitaki, I think, allocation issues are dealt
 20 with essentially by Environment Canterbury under the Waitaki Water Allocation Plan, so it does have its own sort of set of special character in that sense.

THE COURT: JUDGE BORTHWICK

- Q. Okay.
- 25 A. There are, there's a few definitions that we work through. It's, yeah –
- Q. Okay. So that's Waitaki.
- A. – interesting in that respect. Yes.
- Q. And I'll just re-read that.
- A. Mhm.
- 30 Q. Okay. So that's fine.

MS IRVING CONTINUES OPENING SUBMISSIONS

So we also got a definition for registered community drinking water supply, which is a drinking water supply which is registered under section 69J of the Health Act and serves a community of more than 25 people for more than 60
 5 days a year. Registered community drinking water supplies are afforded special status within the Regional Plan Water in recognition of their importance. For example, under Policy 6.4.2A such supplies may obtain more water than previously to account for growth.

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10 Q. Now, I'm not sure that that's correct. I know that, I think it is correct that there's no definition of community drinking water supply. Your planner certainly doesn't. Are you going to take us through to the, what in fact is regarded as being of importance under the Regional Plan because it's the, under Chapter 5 is dealing with drink water.

15 A. Well, Chapter 5, I think, talks about the water supply values, which is the defined term and references water supplies for the existence of takes for human consumption, which have come to be relied on by the community, and it would be fair to say, as you work your way through the provisions, or the various chapters, that there are a variety of terms that are used.

20 Q. Yeah, that's true.

A. And where I get to is although that's a bit disjointed, that a lot of those terms are essentially used in a synonymous fashion.

Q. Well, you're going to have get me over the line. You certainly didn't get me over the line for the Clutha decision, which you've appealed, and I
 25 don't know whether you've appealed that aspect of it but I certainly wasn't over the line. So you're going to have to now take me over the line. Are your submissions dealing with Chapter 5?

A. No, they're not.

Q. And that's, is that problematic in terms of not bringing forward all relevant
 30 provisions to the Court's attention?

A. Well, I think we've got to look at that, I suppose, in the context of this is a case about plan change 7 and whether or not community supplies need to be incorporated into that plan change. So –

Q. What's the purpose of your submission on community water supply?

A. In terms of what it means?

Q. Yes.

5 A. I'm just trying to set out for you what I think is the context under the Regional Plan Water about how that term is used.

Q. But you're not going to take me to Chapter 5?

A. No.

10 Q. No, and I know your planner doesn't as well, and we had questions for your planner, why would you exclude something which appears to be relevant? That's problematic or potentially problematic.

A. So, you mean why would we exclude community water supplies from plan change 7?

Q. No, I mean –

A. Or why has Chapter 5 not been referred to?

15 Q. Yes. That's right. If it is relevant, and it appears to be relevant because it's looking at the values associated, particularly pertaining to drinking water supply, why would you not put that relevant consideration before the Court or why would you not say it is there but we're excluding it for this reason? Why would you, and you know I know because I've issued
20 a decision on it, so now I'm expecting you to take me through that decision or at least take me through to the parts that we've referenced in that decision as being relevant to this next question of community water supply, because you know I know that they're there and I was of the view then, still of the view now, they're relevant to an interpretation argument?
25 Also, if you're arguing interpretation, how does one normally go about arguing interpretation? You set out what?

A. Sorry?

30 Q. In any interpretation argument, it's good practice to set out the statutory interpretation principles that you would rely on or that you consider relevant. Then having done so, apply those principles to the words and phrases which you say support, you know, wherever you're going, you know, your interpretation but you haven't done that and I will be looking at this with a view to what do the words say and what was the purpose and meaning? What's the meaning of the words if they're not clear but

what was the purpose in this subordinate piece of legislation. That is what we're meant to do, isn't it?

A. Yes.

Q. Yes. So if that's what we're meant to do, why haven't you done it?

5 A. Well, I have to say I don't, didn't think that there was a question about the, I suppose, importance of community water supplies.

Q. There is a question, is there not, there's no question about drinking water supplies and the Regional Plan says they're important. That's to paraphrase Chapter 5.

10 A. Mhm.

Q. The question in this whole proceeding is whether supply for a dairy shed washdown, irrigation permit, purposes or any other primary sector potentially, potentially also maybe other urban uses but certain primary uses. That's what's in question, isn't it?

15 A. Yes, and I think in part, and I get to the question of drinking water and what that means further in the submissions because I think that on first blush, it's very easy to say well, drinking water is drinking water. It's the stuff we put in our mouths and swallow and but when we work our way through the definition of that, and the way that I suppose the evidence
20 from the TAs on that issue, I don't think it is quite that simple.

Q. No, because it could also be flushing toilets –

A. Absolutely.

Q. – down at the local warehouse or it could be, you know, any other number of uses, and so in supporting an interpretation of community water supply,
25 and the range of uses, both for drinking water for community consumption, as well as to be consumed before other residential and other purposes, you know, is it any range of uses for water which community water supply is to capture or is it less than that? That's always been the matter in issue in this plan for community, for the TAs. Is that
30 not so?

A. Well, I think that the TAs, I suppose, they know a community water supply when they see one in some ways and so, you know, these are often systems that they have provided and had in place for very long periods of time. The question of, I suppose, divvying that up and deciding well how

much of that is really community supply versus something else is perhaps not a level of enquiry that they undertake and I think that also dovetails in part with their other statutory obligations and the scope they have for turning the tap off and on and I do get into that in a reasonable level of detail in the submissions because there are opportunities or risks of those things butting up against one another and other methods, I suppose, through the likes of the Local Government Act and so on that helps manage, I think, the dynamic you're interested in, which is how much of the supply is not drinking water or community. It's these particularly rural uses that –

5 Q. Which have a commercial end point.

A. Yes.

Q. But then again, you could say so does the toilet at the local warehouse. So –

15 A. Yeah, and I think –

Q. – it's problematic. It's problematic –

A. Agreed.

Q. – and to be fair to you, any interpretation argument should be founded on statutory interpretation principles, which should be set out in your submissions because all you'll have the Court do is, for the Court to do the work for you but then to decide what interpretation principles apply, then apply them and if you don't like the answer, you'll appeal. It's actually your responsibility to, you know, to set it out and then for us to pick up the argument in those, were those principles being applied. I'll give you a chance to come back to this overnight. It is not just a matter of telling us, look, it's these principles but it's these principles, how are they applied, but the issue, there are infrastructural issues for, you know, I get, I suspect, for the TAs, but there are also issues to do with the take and use of water for a wide range of purposes which this Regional Council says needs to be held for a period of six years until it puts into effect a plan which is compliant with the MPS.

25 A. Mmm.

1210

Q. Why is it wrong to do so.

A. Mmm.

Q. So this is, I don't doubt that you've got a hard – you've actually got a really hard case, yeah, in terms of, and it doesn't mean to say you're not going to succeed. You've actually got a hard case in terms of trying to both
5 meet, if you like, the needs of the TA and the Regional Council. They're both important.

A. Yes.

Q. They both have their statutory drivers and they both do, is really the key message.

10 A. Yes.

Q. Now, do you want to continue with your submissions or do you want to reflect on the law?

A. I think I would like to, I think, continue with the submissions. I can come back to you on, I suppose, a more detailed analysis of the interpretation
15 issue around community supplies if that's necessary but I think that –

Q. It will be necessary if you haven't given me the statutory principles that you rely on.

A. Certainly.

Q. Yeah.

20 A. Certainly, but I think the questions around the inter-relationship between the other statutory obligations, the functions that both territorial authorities, and the Regional Council have, I think we can carry on with that because I think, yeah.

Q. Okay. All right. Thank you.

25

MS IRVING CONTINUES OPENING SUBMISSIONS

So, what I might – yeah, so we're back at paragraph 15. Well, I've read through paragraph 15, so we'll start with 16. So in schedule 1B and 3B, the Regional Plan identifies existing water takes that are used for public water supply
30 purposes and the schedule identifies that the communities supplied by these takes have come to rely on them for their social and economic and cultural wellbeing and that links to the definition in the Regional Plan around water supply values, which is a term used in Chapter 5, as your Honour has referred to.

THE COURT: JUDGE BORTHWICK

- Q. And what is that? Let's now go into the plan because I think it would be helpful to actually track what you are saying through the plan itself.
- A. Do you want to start with the definition of water supply values?
- 5 Q. Yeah, and the policy that (inaudible 12:13:35).
- A. So volume 1 of the common bundle and the definition of water supply values is at the common bundle, page 447. It's tab 2.
- Q. Is this in the definition section somewhere?
- A. In the glossary, yes, which is actually perversely at the back.
- 10 Q. From memory it was the very last page.
- A. In the schedules.
- Q. Of a very long plan. Water supply values. Okay.
- A. So the existence of a take for human consumption which people and communities have come to depend on.
- 15 Q. Okay. So pause there a second. I just want to annotate your submissions. So water, sorry, I've lost the thread. Water supply values, do you mention that at paragraph 16 or are your –
- A. No, I don't.
- Q. Okay. So water supply values.
- 20 A. Yes.
- Q. As defined. And it means the existence of a take?
- A. For human consumption.
- Q. For human consumption.
- A. Which people and communities have come to depend on.
- 25 Q. Just pause there a second. And you've referenced that because you know I know about it or you've referenced that because it fits into an argument?
- A. No, I was actually, I picked up on that when I was looking back at the glossary for another issue actually and noticed water supply value sitting
- 30 there with a definition which I thought was odd and I hadn't picked it up when I was working my way through the plan in relation to the terms around community supply and so the term water supply value is the one that is used in Chapter 5 and the use and developments, if we're looking at Chapter 5, it's picked up in 5.2.1 as, in issues.

Q. 5. what?

5 A. 5.2.1, which is the issues that the use and development of water resources may have the potential to have adverse effects on water supply values and then in Policy 5.4, which is to identify the following natural and human use values supported by lakes and rivers, which is the policy that gives rise to the schedules, so in this case Schedule 1B and 3B, which identifies the supplies for public water supply purposes.

Q. So Schedule 1 and 3B say?

A. Yes.

10 Q. But even 5.3 or –

A. 3B is the groundwater takes.

Q. But only Schedule 1 is actually referred to here.

A. Yes, that's correct.

15 Q. That's probably a fact that a groundwater is being – is groundwater being utilised to supply drinking water, water for human consumption or don't you know?

A. I don't know the answer to that off the top of my head.

Q. Okay. So at least Schedule 1 because Schedule 1 is actually all that's referred to?

20 A. Yes.

Q. Okay. So anyway, so identify human use values in Schedule 1 and that includes human use values, including water supply values, which are the values which for human consumption. That is to come in Schedule 1?

A. Yes.

25 Q. Right.

A. And so Schedule 1B includes that list of existing, what are referred to in the schedule as public water supplies are primarily the water supplies operated by the territorial authorities.

30 Q. Just pause there a second. So Schedule 1B is a schedule of water supply values which water supply values is defined as being a take for human consumption.

A. Yeah, so if you look at Schedule 1B, which is common bundle page 352, we've got schedule of water supply values and this schedule identifies the existing water takes from lakes and rivers where water is taken and used

for public water supply purposes and the communities identified in the schedule have come to rely upon these water supplies to provide for their social, economic and cultural wellbeing.

1220

5 Q. And so the interpretational question for you is whether water supply values, which are defined to, and it means human consumption, is used differently in this schedule.

A. Yes.

10 Q. And I didn't think necessarily that that was the case, although it may well have been implemented by District Councils that way but the water supply values are those which are there for human consumption?

15 A. That's correct and then when we look at the provisions around, in Chapter 6, that's where we start to see a different, different terms used around the likes of the registered community drinking supply, community supplies and so on. So there is a bit of a disconnect between Chapter 5 and the provisions in Chapter 6.

20 Q. And this is where the legal statutory interpretation, the principles established by case law become really important. Is there a gap between the two chapters, any inconsistency between the two chapters, or can they actually be reconciled according to their purpose. That's all statutory interpretation stuff and that's where the law becomes really important. All right. Any other policies in Chapter 5 because I know that they are?

A. (No audible answer 12:22:00)

25 Q. I'll give you a hint. It's Policy 5.4.2. It's not in your planning evidence but it's there.

A. Yes.

30 Q. So the management of any activity involving surface water, groundwater, dead or margin of any lake or river, to give priority to avoiding in preference to remedying or mitigating water supply values in Schedule 1B?

A. Yeah, adverse effects on the water supply values in 1B. So I interpret that to mean that other activities need to be managed to avoid effects on the water supply values rather than remedy or mitigate those effects.

- Q. Yeah, avoid in preference, it's quite a clear statutory direction but again, water supply values, is that for the purpose of the defined term, which is for human consumption, or something else? And this is where you start to get tension with TAs taking water for a whole host of activities, which in combination with land use –
- 5 A. Yes.
- Q. – have the potential to impact drinking water?
- A. Yes.
- Q. And so then how is – and that's the perversity, if you like, in terms of a take for a range of uses and then how we're managing that or reconciling that under this plan?
- 10 A. Yes, and I think perhaps the issue that came up, I think, in the Clutha case that you are familiar with, was the use of the water for the dairy shed washdown and so on and whether or not the effects of that use would then effect the consumption or the human consumption values and I think the question then is, is that an effective use of water or is that an effective discharge following the use of that water?
- 15 Q. Or is it an effect of associated land uses but –
- A. Yes.
- 20 Q. – and how does the plan in any integrated sense deal with that.
- A. Yeah.
- Q. Who knows.
- A. Yeah. I mean I think the Clutha example is, like we so often find in this case, you know, that's a, certainly based on the evidence, a bit of an outlier in terms of the proportion of water that is utilised for other uses.
- 25 Q. The planner needed to be saying this. I think your planner needed to have been dealing head-on with Chapter 5, particularly in light of an adverse court decision only late last year and needed to be saying Clutha in that one take is an outlier. Actually everybody is pretty much primarily for human consumption, which I don't assume it means just drinking water. It could be any flushing of a warehouse, you know, but needed to be dealing with that as opposed to present uncertainty, but we can follow-up or you can follow-up in questions with that.
- 30 A. Yes.

Q. But your task is what are the water supply values which are there in that schedule? Is it for human consumption or is it, and what does that mean or is it a range of other uses, including the ones noted in, which really the Court was quite troubled about in Clutha?

5 A. Yeah. I can give more detailed thought to that particular issue.

Q. Because I think it's all statutory interpretation to be fair.

A. Yes.

Q. Yeah.

A. Yeah. Shall we carry on?

10 Q. Okay.

A. So the question of community supplies also comes up in Chapter 15, which is the chapter identifying the non-regulatory methods that may apply and that is common bundle 262 and so the relevant provision is 15.2.1, which relates to the restrictions on taking water. So it seems to me that that is anticipating that the uses that aren't human consumption, or at least hosing restrictions –

15

Q. So watering your garden?

A. Yes.

Q. So here you're using human consumption – I had wondered whether human consumption means more than just drinking it but, and again, looking forward to hearing from your planner on that, and also your submissions on that but anyway, community supplies, how does that help us? Yeah, hosing restriction. I wasn't aware of that but I mean, you know, you kind of expect it but so ORC to talk to TAs –

20

25 A. Yes.

Q. – when the consumption of water in a community supply, okay, which is not a defined term.

A. No.

Q. Okay.

30 A. So basically, when, as a catchment comes under pressure and water users generally are beginning to experience shortages, the expectation will be that community supplies will also sort of do their bit by dealing with, what they're referring to is hosing restrictions, and this, I think, dovetails, as I say, with the other statutory frameworks that the TAs work with in

relation to this around water conservation management plans and so on and I think is a acknowledgement perhaps of the practical circumstances we're dealing with with this infrastructure where there are a range of activities and uses that water is put to within a single system and that within that there will be some levers to pull to reduce consumption if that's necessary at particular points in time but –

5

Q. Is that limitation just one of watering, hosing?

A. Well, I think –

Q. I mean I'm assuming hosing means watering parks and gardens?

10

A. Yes, and I think that's right of this liaison provision.

Q. Of this particular provision.

A. Correct.

1230

Q. It's just hosing.

15

A. Yeah, but there are other, as I say, mechanisms that the TAs work with that covers a broader range of issues, which I talk through later in the submissions.

MS IRVING CONTINUES OPENING SUBMISSIONS

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So I was just, the purpose of that was to really try and pick up on the various terms that are used in the plan and I think, as you work through the plan, it is a little bit, probably generous, but disjointed but that's what we're working with.

25

So I think then I want to turn to what the TAs view is of what community water supplies encompass, which is discussed in the evidence of Mr Greenwood (now Ms Muir), Mr Heller and Ms McGirr and they talk about the existing community water supplies, providing potable water for a range of purposes, including human consumption, commercial and industrial activities and a small proportion of rural uses. The water is distributed via schemes that generally don't distinguish between uses and the TAs regulate the delivery of water within their

30

community supply network according to other legislation. In particular the Local Government Act and the Health Act and under the Local Government Act, it is common for the TAs to establish bylaws for this purpose. Now, other parties, particularly the Ministry for the, or the Minister for the Environment, have suggested that it may be appropriate to provide a carve out from Plan Change 7

for drinking water and it appears from that evidence that drinking water is intended to be a narrower subset of water provided by community water supplies managed by the territorial authorities. Now, drinking water is a defined term under the National Planning Standards, meaning water intended to be used for human consumption and includes water intended to be used for food preparation, utensil washing, and oral or other personal hygiene. As Mr Twose sets out in his supplementary evidence, drinking water has been consistently defined in the Planning Standards 2019, the Resource Management Environmental Standards for Sources of Drinking Water and the Drinking Water Standards for New Zealand 2005. Under section 69G of the Health Act, drinking water is defined slightly differently. It is water that is potable but excludes stock water or irrigation water that does not enter a home or building for drinking, food preparation or domestic use. Now, to understand the provision of drinking water by territorial authorities, it is useful to consider what they actually do. They abstract water from a source, convey it through infrastructure to a treatment plant and treat it so that it may be made available for human consumption. TAs then distribute drinking water from that treatment plant through their networks to a point of supply on a connected property. All of that water is treated to a level intended for human consumption. It is submitted that whether the drinking water is actually consumed by people or used for sanitary purposes is not the determinative feature of drinking water. Concerns about other uses of potable water after it enters the distribution network misapprehends the intention and effect of treating water to a potable standard. The reason water is taken by TAs and treated is to make it fit for human consumption, food preparation and sanitation purposes. The definition reflects this by referring to water intended to be used for human consumption. Water taken for community supply becomes drinking water when it is treated and made potable and able to be safely consumed. It is submitted that this interpretation of the definition aligns with the reality of operating these schemes. It would simply not be practical to separate the provision of water that is actually consumed by humans from water delivered by the same system and used for other purposes. In fact, TAs are not empowered to turn the tap off completely and that was brought in by virtue of an amendment to the Health Act where the territorial authorities power to stop providing drinking water services was

completely repealed. The Local Government Act 2002 provides a limited range of circumstances where water supply can be restricted, and those powers are subject to the TAs obligations pursuant to the Health Act. . Under the Health Act TAs are required to take all practicable steps to ensure that an adequate
 5 supply of water is provided to every point of supply.

THE COURT: JUDGE BORTHWICK

Q. Just pause there for a second.

A. And what I –

Q. No, can I just, sorry, I just need to read and absorb it and I'll come back
 10 to you with any amplification. Yeah, and what do you want to say?

A. I just wanted to, just missed a footnote there. The adequate supply is a defined term in the Health Act, meaning in relation to drinking water supplied to a property, means either the minimum quantity of drinking water that is required by the occupants of that property on an ongoing
 15 basis for their ordinary domestic food preparation use and sanitary needs or if there are regulations made the prescribes the quantity of drinking water, or a formula for it, then whatever that quantity is.

Q. Pause there a second.

20 MS IRVING CONTINUES OPENING SUBMISSIONS

So, the quid pro quo of being provided with water for water users is set out in Local Government Act, section 192, which obliges them to avoid wasting water. TAs seek to manage this through the implementation of Water Conservation Management Plans that set out the methods to be adopted to ensure that water
 25 is used efficiently and the steps that will be taken if water supply shortages are experienced. And again, Councils may also establish bylaws for this purpose. In my submission, this means there's a degree of overlap between the TAs Local Government Act obligations and their obligations under the Resource Management Act. In section 14(1)(h) territorial, and this is under the
 30 Local Government Act, territorial authorities must act in accordance with the the principle of sustainable development including taking into account the social, economic and cultural wellbeing of people and communities, the need to maintain and enhance the quality of the environment and the reasonably

foreseeable needs of future generations. So their obligations and the purpose under the Local Government Act directly reflects the purpose under the Resource Management Act. The two things need to mesh together in order to allow territorial authorities to carry out all of their functions. And I just there the proposed definition of community water supply that was included in the outcome of the planners joint witness statement. The proposed definition I think picks up the key aspects of water supply, including the TAs obligations under the Health and Local Government Acts, and the fact that the schemes provide drinking water for a range of uses, not just human consumption.

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THE COURT: JUDGE BORTHWICK

Q. Yes, and that's the thing that you're going to have to grapple with. I mean I understand the infrastructure, at least from the Clutha case. I just I had that in mind and you reflect that back in your submissions, that the TAs are treating all water to a human consumption standard and that's fine. The fact that you deliver it to mechanical workshop is neither here nor there. It's treated to that standard but that's not, that is not the issue that we're dealing with here. The fact that they have to treat it to a certain standard does not mean therefore, is that to confuse, and I'm sorry, I'm not sure where you're, I haven't quite pinned where you're going with the statutory interpretation. Are you interpreting the, something, either the Regional Plan or PC7 you want to now come on PC7, by making the equivalent the treatment standard of water to the purpose for which water is supplied or the value of the water in terms of the Operative Plan definition. Now you're losing me because the treatment standard is not equivalent.

15
20
25
A. So this is, I think, I mean I keep saying this is all very hard but –

Q. It is to be fair. You've actually got one of the harder cases because it is hard because your clients are actually supplying for a full range of uses, which this Regional Council says may be drink water, human consumption excluded but hey, why are you continuing to supply, and the good example is dairy shed, when we've got PC7 sitting there.

30
A. I think –

Q. PC8 sitting there.

A. Yes. I think that the key, I suppose, feature for me was in the definition of drinking water and what is drinking water and it's not just water that is consumed. It is the water intended for consumption. So when I look at
5 the way that councils operate their water supply infrastructure, it is drinking water when it has been treated and it's ready for that purpose. Whether it actually goes out into the network and is used for that purpose I don't think matters in terms of whether or not the whole take, I suppose, should be captured by Plan Change 7, I think that there are the other
10 mechanisms that the territorial authorities use through the Local Government Act and the Health Act and so on that manages the, I suppose the demand side when there are restrictions or issues around the availability of that supply but that the significance of water supply being available to the community is such that we shouldn't be, I suppose,
15 shutting the gate on those wider range of uses prior to, I suppose, the treatment plant.

Q. So again that's a statutory interpretation approach, both statute as well as the Regional Plan. It has to be founded on statutory interpretation principles which apply to the argument that you're running, including
20 potentially provisions within legislation and provisions within PC7 and the Operative Plan, which in some way are inconsistent, would require a finding of inconsistency or not and trying and always with a view to interpreting or smoothing out any inconsistencies such that the purpose of the provisions that you are relying on can stand according to their
25 purpose. It's all statutory interpretation. You're not there. Well, your proposition is, as I understand it, that if a TA treats water to a standard which is fit for human consumption, the purpose of its use is irrelevant and completely irrelevant. Is that correct?

A. Yes, I think that's right.

30 Q. With that in mind, you need to go back and now, with that principle in mind, the use of the water which has been treated for to a standard for human consumption is irrelevant. You now need to land that potentially both in your TA-type, you know, LGA, Health Act, blah, blah, blah, you know, that and the Resource Management Act itself, just to iron out or

see whether or not there's any inconsistencies in provisions and then you also need to do that, I think, within the Regional Plan itself and PC7 but is that your key proposition provided that the TAs treat water to a standard which is fit for human consumption, it's use is irrelevant?

5 A. Yes.

Q. All right. Now, I understand the key proposition. You've got some work.

A. Linking that through.

Q. You've got some work, yeah, and do you appreciate why I'm saying there's some work here?

10 A. Yes. Yeah, no, I understand the issue.

Q. Okay, good. All right.

MS IRVING CONTINUES OPENING SUBMISSIONS

So turning to the territorial authorities obligations to provide water infrastructure.

15 So under the Local Government Act and the Health Act, the TAs are tasked with providing safe drinking water, maintaining that existing water supply infrastructure, protecting water supply as a lifeline utility, anticipating future demand for water supply and planning for future growth and capacity. The TAs must develop long-term plans to satisfy these statutory objectives. Under the

20 Local Government Act 2002, section 93 requires the territorial authorities to have a long-term plan which identifies the work they will do over at least 10 years and the funding required for that work. In the LTP, the TAs set out how they will achieve identified community outcomes and at what cost. Generally, 25 to 35% of a TAs LTP expenditure relates to three waters infrastructure. So

25 that's stormwater, water supply and sewerage infrastructure. A TA must ensure prudent stewardship and efficient and effective use of resources in the interests of its district and planning effectively for future management of assets is specifically recognised as part of this duty. It is not one the TAs cannot abrogate responsibility for. The TAs must also, as part of the LTP process,

30 prepare an infrastructure strategy identifying how community water supply infrastructure will be managed for at least 30 years. The strategy must include indicative estimates of expenditure for the first 10 years of the strategy and for each subsequent five-year period following that. To provide projections like this, TAs must canvas scenarios about the levels of service, life cycle of assets

and the level of certainty in the assumptions underpinning the canvassed scenarios. It is submitted that the six-year term in Plan Change 7 is at considerable odds with the long-term planning horizons that territorial authorities must operate to under the Local Government Act. Turning to the

5 Health Act. Drinking water is governed by Part 2A of the Health Act and the purpose of this is to protect the health and safety of people and communities by promoting adequate supplies for the safe and wholesome drinking water from all drinking water supplies. The public health obligations on TAs with respect to water supply are significant. As drinking water suppliers, TAs must

10 take all reasonable steps to protect the source of their water supply and that in all aspects the drinking water supply system is free from contamination. They must have a water safety plan which is reviewed every five years with respect of their network. In addition, they must monitor the supply and ensure it complies with Drinking Water Standards. The Standards divide the drinking

15 water supply system into source, the treatment plant, and the distribution zone. This encourages management and planning to be structured across these three areas. Compliance with these obligations is supported by the territorial authorities work programmes through their infrastructure strategy and long-term plan. Turning to the Regional Council and the TAs respective functions under

20 the RMA. Those are obviously set out under section 30 and 31 and the ORC and TAs have some shared obligations with respect to integrated management and to ensure sufficient development capacity. Starting with development capacity, in response to current housing shortages, an obligation to ensure sufficient development capacity has been placed upon both the Otago Regional

25 Council and the territorial authorities. Development capacity, in sections 30 and 31, has the same meaning as in the NPS for urban development and therefore includes network infrastructure for water supply. It is submitted that limiting community water supply permits to six years and not enabling the provision for growth is likely to compromise the ability for sufficient development capacity to

30 be provided, particularly in the medium term, being three to 10 years as it will inhibit investment, long-term planning and development.

THE COURT: JUDGE BORTHWICK

Q. Just pause there. So what is the meaning of development capacity in that you've got at paragraph 48? Is that a defined term somewhere?

5 A. Yes, it is. It's in the National Policy Statement for urban development, which is in the common bundle at tab 6, at page CB787.

Q. And I'll just read that to myself.

A. Certainly.

10 Q. So development capacity in the NPS Urban Development 2020 has two components. It's the capacity of land to be developed for housing or business use and it's based on zoning and adequate development of infrastructure to support the development of housing and business use and my question for you is, housing – no. All about business use or business the meaning of business use referable from the definition of business land?

15 A. No, there's no definition of business use.

Q. And what about business, yeah, but can that be, is the meaning to be ascertained from business land, business use or business land?

A. Yes, I think that would be right.

Q. Yeah, okay.

20 A. So land zoned for those purposes.

Q. And it's in an urban environment?

A. Correct.

25 Q. And so this submission, and again bearing in mind we're dealing with rural TAs as well as urban TAs, or I suppose they will have an element of urban, is this submission focused on urban environments or is it focused on rural and urban environments?

A. I think it has to cover both because in –

Q. Now, that's statutory interpretation, so why are we now looking at the rural environment?

30 A. Well, I think there's the Council's obligation to provide the infrastructure applies to not just it's urban environments. This submission is in relation to the Council's functions in relation to development capacity, so to that extent, it will apply where we are dealing with an urban environment as it's defined. So that is limited but I'm, the point is that the TAs will provide

water infrastructure to communities that may not qualify as urban environments under the NPSUD. This is part of the equation, not the complete equation.

5 Q. This is statutory, this is again statutory because I read this, and I think you are correct insofar as TAs have to provide water for housing.

A. Yes.

Q. And that could be urban or rural, it doesn't really matter where its location is but business starts to bite in terms of where it's location is or do you say that's wrong?

10 A. Well, I think that we've got to go back to 1.3 of the NPS, around the application of the policy statement, which is to apply to urban environments.

Q. I haven't got it printed. Okay.

A. So have you got common bundle 786?

15 Q. No, and I seem to be missing – 786, maybe we do. Okay, 1.3.

A. Yes.

THE COURT: COMMISSIONER EDMONDS

Q. And there's a definition of urban environment?

A. Yes, that's right.

20 THE COURT: JUDGE BORTHWICK

Q. Yes.

A. So I think in terms of the application of the NPSUD, that is going to apply to those urban environments as defined.

Q. Yeah.

25 A. And so the submission in relation to the functions, the development capacity, are linked to that. So it doesn't extend to the communities that the Council may provide drinking water or water supply to that are outside an urban environment.

30 Q. So I've annotated your submission adjacent to the subtitle development capacity at page 9 to say this submission is limited to urban environment.

A. Yes.

Q. Okay.

A. So I think, and I think that the issue of providing infrastructure, development infrastructure, will be to housing and business land within urban environments.

Q. Right.

5

MS IRVING CONTINUES OPENING SUBMISSIONS

So the submission is that impeding the planning and development for network infrastructure for water supply by truncating the term and scale of community supply permits is contrary to the Regional Council's obligations under section 10 30(1)(ba) and potentially places the territorial authorities in the position of being unable to satisfy their development capacity obligations pursuant under section 31(l)(aa).

THE COURT: JUDGE BORTHWICK

Q. Where are you reading from?

15 A. This is my submissions.

Q. Sorry. Did you read paragraph 49? I might have had my nose stuck in an NPS.

A. Yes, I did.

Q. Okay. Why did you say three to 10 years?

20 A. Well, it was – so that's the medium-term time horizon within the NPS and the six-year term under Plan Change 7 sort of fits in the timeframe that the territorial authorities will be planning their infrastructure or implementing infrastructure, infrastructure upgrades to provide development infrastructure in that particularly three to 10 year medium-term window. So because of the way that the NPS for urban demeanour 25 anticipates that Councils will try and get ahead of housing demand, business land and have the infrastructure ready, the reality is they need to be moving say now to put in place water supply infrastructure to provide that development capacity in that three to 10 year window.

30 Q. So I found that there is a definition of medium-term and it is as you say three to 10 years in the NPS for urban development.

A. Yes.

Q. And six is sort of half way there and you're – so what is your submission in that regard? Are you saying that if it were 10 years at least, that that would dovetail with the medium-term or the, you know, the full extent of the medium-term?

5 A. So what you'll hear and probably read in the evidence from the territorial authorities is that, and particularly within Central Otago, there are works planned like in the next year to two years to improve water supply infrastructure and to anticipate the growth that they have seen or are seeing and their evidence is that because of their other obligations around
10 prudently managing their infrastructure and so on, a six-year renewal for those permits is going to present some significant challenges for them in terms of whether to push ahead with that work and run the gauntlet on whether or not those consents get renewed in six years' time or whether they have to push pause on those projects to await the outcome of the
15 subsequent renewal.

Q. And so again –

A. And then that puts them in a position where they are behind on providing their development infrastructure under the NPSUD.

Q. So the uncertainty again is not so much Plan Change 7 but it's the plan
20 to come and any changes in the plan to come which is, you know, the plan which is fully compliant with the NPS for fresh water?

A. In some respects, yes.

Q. In all respects. Is that not where you're uncertainty goes?

A. Well, I think, I think the, one of the primary reasons that
25 Mr De Pelsemaeker gave for preferring a six-year term rather than longer terms and then relying on review, was his view that the Council needed to be able to essentially refuse consent. So the territorial authorities have to operate on a basis where at the end of that six-year period, they may not get a consent back.

30 Q. Now, if the consent is for water which use is human consumption, how likely do you think that is, given what the RMA also has to say about human consumption.

A. Yeah. Yeah, and I think that's a, you know, that's a good question. You would assume or you could assume that it's really unlikely that the

Regional Council would want to refuse a consent for community supplies of drinking water.

5 Q. Well, I'm actually being very specific here. I'm here actually saying whether taking is actually for human consumption. So that's my proposition.

10 A. So I think that, I think it's right. So it's unlikely. So my question, in relation to this, if it is that unlikely, why not grant a longer term consent and if there needs to be a review in order to implement a minimum flow, then that could be done. We know that with the territorial authorities we're dealing with a relatively small number of permits and the infrastructure is of such importance to these communities that I don't think, or my submission is that the term of the consent should be shortened because as you say, why would or how – why would the Regional Council want to refuse a renewal of that application but if the term is critical, and that's what the 15 TAs are telling you, to their ability to invest in the infrastructure in the interim and to deliver on their long-term planning obligations, then let's give them the time to do that.

20 Q. Well, probably two responses to that. Firstly, it does rather depend on the use for which water is put to and your submission is the use is irrelevant provided TAs treat to a drink water standard, that is all that is relevant. So maybe the Regional Council is rightly concerned as to the use in an integrated sense because that's what's coming, land and water. It is concerned about the use to which water may be put. So that might be room for movement for your client if it is – if the take and use is for 25 human consumption, then maybe there's less of a concern but it may be that it is quite considerable concern if the use to which the TAs may put the water is irrelevant, none of the Regional Councils concern. That's quite a different proposition.

A. Yeah.

30 Q. And I'm going to leave it there. You think about it over lunch. You think about it over lunch but I think you've just confirmed yes, your problem is not with this plan. Your problem is that the consenting environment might change under the Land and Water Plan and so what you're doing is trying to manage your risk by obtaining long-term consents.

A. Yes.

Q. Where use is taken away, effectively removed from the Regional Council under your argument.

A. I'm sorry, can you repeat that?

5 Q. Where the use of water is effectively removed from the purview of this Regional Council, its oversight. Its regulatory oversight and its obligations.

A. Yeah. I'm not quite sure.

10 Q. Well, you've said to me that the use of water is irrelevant and I would have thought, yeah, that's a statutory interpretation matter because I think this Regional Council's got statutory obligations there.

A. Yes. Yeah. Yeah, there's a few parts to that question.

15 Q. Yeah, there is a few parts, but there's also, if you're going to grasp the medal, surely it is actually agreeing to recognise that both take and use are matters in relation to which the Regional Council itself has statutory obligations. Both are relevant, treating to a drink water standard and use for human consumption means whatever it means, might be a way through this but it's, it just seems, yeah, anyway. Okay. All right. Time for lunch. Back at 2 o'clock.

20 **COURT ADJOURNS: 1.07 PM**

COURT RESUMES: 2.02 PM

THE COURT: JUDGE BORTHWICK

Over to you, Ms Irving.

5 MS IRVING CONTINUES OPENING SUBMISSIONS

So we were up to paragraph 51 on page 10. So turning to integrated management. Now, the Regional Council is required to manage natural and physical resources in an integrated way and it is submitted that integrated management in this context is a systemic obligation requiring integration across
 10 RMA documents, agencies, legislation, and time. Therefore, the ORC must ensure that Plan Change 7 achieves consistency with superior RMA documents, co-ordination with other territorial authorities and agencies so provisions work together, co-ordination with TAs so that various functions can be achieved, and that the decision-making is forward-looking. It is submitted
 15 that Plan Change 7 conflicts with the ORC's integrated management obligations under the RMA due to its inconsistency with higher order planning documents, including the NP-FM second priority in Te Mana o te Wai; the National Policy Statement for Urban Development and the Partially Operative Regional Policy Statement and the adverse impact that this has on the territorial authorities
 20 long-term planning imperatives both in the RMA context and under other legislation. So turning first to the National Policy Statement for Fresh Water Management. In the NPSFM 2020, the hierarchy of obligations in Te Mana o te Wai prioritises the health needs of people above everything except for the health and wellbeing of water bodies and freshwater ecosystems. It is
 25 submitted that the role of community water supply is to provide for the health needs of people placing it in tier 2 of Te Mana o te Wai. Plan Change 7 as notified

THE COURT: JUDGE BORTHWICK

Q. Is that right? Well, it may be right in some instances but is it right in every
 30 instance, as far as the distribution of water goes across the TAs network?

A. In terms of the, is this a question about the various uses that –

Q. Yeah, it's again it's a use question.

A. Yeah. I think that there will be some shades of grey in individual circumstances where the, and I think, you know, if we take the Clutha example, that the extent of water used for those rural productive purposes wouldn't fit within the tier 2 category but I think, looking more broadly and

5 at the other schemes that we're talking about here, then yes, I think that those community supplies are for the health needs of people.

Q. Can I ask, is your planner or perhaps your representatives from the TA or in fact both, are going to be addressing the schemes and the purpose, yeah, and what uses of water those schemes have? Has there been any

10 considered analysis of that, to substantiate your submission that –

A. Yes.

Q. – the Clutha scheme, now in appeal, is an outlier?

A. I think they will certainly be able to answer questions about that issue if you're after more detail on that.

15 Q. Well, to have any confidence in your statement that they are in fact an outlier, you will need to lead evidence.

A. Certainly.

MS IRVING CONTINUES OPENING SUBMISSIONS

20 So paragraph 57, Plan Change 7 as notified, and the 14 March version, treats all water uses equally and in my submission, this fails to recognise the priority accorded to water uses that support the health needs of people. Counsel believes it is agreed by all parties that Plan Change 7 needs to give effect to the NPSFM to the extent that it can and the blanket approach to all water uses

25 taken under Plan Change 7 doesn't do that. A more nuanced approach to community water supplies is required, in my submission and this now appears to be addressed to a degree in the amendments set out in the Planning Joint Witness Statement, although, it is submitted that more is required, particularly with respect to the provisions that will apply to new water permits. Turning to

30 the Partially Operative Regional Policy Statement, so this was developed with reference to the National Policy Statement for Freshwater Management 2014, and Plan Change 7 must give effect to the provisions of that document. Community water supply supports the outcome identified in Part B of Chapter 4 of the Partially Operative Regional Policy Statement that communities in

Otago are resilient, safe and healthy. Objective 4.3 requires that infrastructure is managed and developed in a sustainable way and the Proposed Regional Policy Statement affords protection to community water supply as a regionally significant infrastructure where it qualifies as a municipal infrastructure and/or
 5 as a lifeline utility.

THE COURT: JUDGE BORTHWICK

Q. Just pause there a second.

A. And I have included in the footnotes there the references to the definition of municipal infrastructure. Do you want to go to that or would you be
 10 happy to look at that later?

Q. Well, my question for you is does the RPS, proposed RPS, does it have a definition of community water supply or does that have a definition of a regionally significant infrastructure?

A. Yes, it does.

15 Q. So it does have community water supply as defined term?

A. No, it has a definition of regionally significant infrastructure.

Q. And you're saying that community water supply, where there is no purpose attached to the same, is regionally significant infrastructure?

A. In part.

20 1410

Q. In part. What do you mean by that?

A. Well, it again, I think it will come down – so if we, perhaps if we go to the definition of municipal infrastructure, which is at page CB651, so it's tab 3 of the common bundle.

25 Q. Just pause there a sec.

A. Tab 3, CB651.

Q. Right. Haven't got that one. Have I got that with me? No, I haven't got that with me. CB?

A. 651.

30 Q. Just pause there a second. I've got that and what are we looking at?

A. The definition of municipal infrastructure.

Q. And I'll just read that to myself. So I've read that. The definition dealing with aspects of Three Waters.

A. Yes.

Q. And limited to urban environments, which means Dunedin, Queenstown and Oamaru and any other urban area within Otago.

A. Yes, or –

5 Q. Which qualifies under the NPS for urban development capacity, on urban development capacity.

A. Yes, and (b) an area of land containing et cetera, et cetera.

Q. Et cetera, et cetera. So and again to understand, and this important because you've got various TAs which don't look like each other.

10 A. Mhm.

Q. Dunedin does not look like Clutha District for example.

A. Yes.

Q. I don't know. This submission is made as if it's to read or applies equally to all territorial authorities and maybe it does because there's urban areas which qualify under this definition but again, because I don't have evidence before me as to the area that the TAs are reticulating water to, I don't understand how your submission would apply to all areas of reticulation.

15

A. Mhm. I think, if I can perhaps assist in part on that, there are, in the evidence there's a discussion of which territorial authorities have permits that come up for renewal in the life of Plan Change 7 and that is Queenstown and Central Otago.

20

Q. It's your submission on the prior page, at 59 say, there is a problem for those who are going to apply for new water permits. So it's not just replacement consents and we can have a look at them, but it's also new water too.

25

A. It is and I think each of the territorial authorities have assessed what, because of their long-term planning processes, what may or may not need to be applied for within the period and we, I think in the evidence, Mr Heller, Ms McGirr and Mr Greenwood identifies the projects that will fall within the life of this plan change. So I think there is or can be drawn from that evidence the extent to which there are areas of municipal infrastructure or urban environments that are affected by Plan Change 7.

30

Q. So it's going to be important, for me personally, having gone through the Clutha District Council appeal, to understand the four corners of the relief sought by territorial authorities and as I said before, whether Clutha District Council is simply an outlier or whether that actually applies generally across all territorial authorities. It's your responsibility, I think, to lead that from your witnesses and again I just, I'm struggling to understand the ambit of the submission. You know, is it just about municipal authorities and urban development or is it actually any person to whom that TA may choose or contract to supply water? Certainly your planner's evidence brings in everybody. So I don't know where you, you know, you need to be clear what your ambit is. If you haven't satisfied as to ambit, you're almost certainly going to luck-out on this process. So you need to be, your witnesses need to be clearer. So this submission, is this to do with your urban authorities and specifically urban authorities and their interest in your municipal infrastructure in urban environments as defined in this document?

A. Well, that, I mean that's the extent to which the provisions of the RPS will guide what needs to be in Plan Change 7, so where we are dealing with municipal infrastructure within an urban environment, then the objective and policies that apply to that infrastructure in the RPS need to be given effect to. Now, I think Mr Twose will be able to speak to this further but there are urban environments within Central Otago and Queenstown that are being provided water supply with permits that will need to be renewed, replaced or sought during the life of Plan Change 7. So to that extent, these definitions are relevant to Plan Change 7. The next part of the submission –

THE COURT: COMMISSIONER EDMONDS

Q. The area of land containing or intended to contain a concentrated settlement of 10,000 people or more, I mean how many locations are we talking about in that category, rather than being so general about it that I haven't got a picture. I mean Central Otago hasn't got a huge population for example.

A. No, it doesn't. I mean Cromwell, and this is discussed in Mr Greenwood's evidence, has been through its spatial planning exercise and identified its urban environment as being one captured by the NPSUD and I think Queenstown have done, Queenstown Lakes have done the same and from recollection, they have essentially identified two urban environments that encapsulate urban environments within the Wakatipu Basin and urban environments within the Upper Clutha.

Q. So that's all you're –

A. Those are the ones that are relevant in terms of the –

10 Q. The argument you're advancing now?

A. – Council's, yeah, that have permits that need to be renewed or replaced within the life of Plan Change 7.

THE COURT: JUDGE BORTHWICK

Q. Replaced. When you say renewed, you mean replaced, don't you?

15 A. Well –

Q. Technically, because you never renew anything do you? You replace it.

A. Well, that, yes, that's right.

Q. Yeah. Okay. And so I'm not sure why you need to draw a link between community water supply and regionally significant infrastructure. I'm not sure where you're going there but what you're saying is that the RPS has policies about municipal infrastructure.

A. Mhm.

Q. And we'll look at that. Don't, you know, don't make it more difficult for the TAs by saying oh, that's community water, if your definition of community water is just simply treating all water which is treated to the drink water standard which is a water regardless of its purpose because here now there is a purpose, which is, you know, municipal water supply within urban environments.

A. Mmm.

30 1420

Q. And it's defined. Well, that's a purpose.

A. Yes. The other component of the provisions in the RPS is around lifeline utilities, which –

Q. What does that mean?

A. Lifeline utilities has its own definition in the Civil Defence Emergency legislation and relevantly includes an entity that supplies or distributes water to the inhabitants of a city, district or other place. So there are – so that's probably slightly broader than the definition of municipal infrastructure but –

Q. Yes, but what does it mean for this case? Does it mean you can start irrigating land with it?

A. Beg your pardon?

Q. Does that mean then you can irrigate farm land?

A. No, I don't think it does mean that.

Q. Okay. All right. And again, don't make it harder for the TAs. You know, there's, you're going to have to overcome the doubt in my mind created by evidence which is yes, you can have all of these other non-urban activities and non-residential activities and it's perfectly, and you don't have to look at use, just supply for whatever, just supply. The region's only got an interest in the supply side of, in the fact that you are taking, not in the use of it because that's your case, isn't it, regions not interested, has no, should not be encroaching –

A. Well, I think, I mean the applications, if we work through I think what would occur, is the territorial authorities will make an application to replace their community water supply permits and I appreciate that in the Clutha example, there was not a whole lot of enquiry or information provided in the application around the use and that, that was one of the issues that I think exercised your Honour in that case was –

Q. Well, to be fair, that's right, because it wasn't disclosed by Clutha District Council that there were a number of rural uses.

A. Yes.

Q. Goodness only knows why you think you can use the water for that seeing as there was a taking use application but anyway, regions not taking any issue with that. So the fundamental problem with the application going forward.

A. Yeah, and I acknowledge that that was a particular, that created an issue in that case. I don't think that that means that every application for

community water is going to suffer from the same issues and I think if we

–

5 Q. And that's for your witnesses to actually satisfy me about that because they haven't, because those range of uses are clearly envisaged in the planning evidence and I'm not sure what you are saying. I'm not sure where you're going with it.

A. Yeah.

Q. And I need to know the four corners of your case.

A. Understood.

10 Q. So what is the submission. This submission is about, it's about it's a limited submission and it's dealing with municipal infrastructure and urban environments. That's all it's doing.

A. Yeah, so I think, I mean like, I mean as you know, this plan change needs to give effect to the provisions of the Regional Policy Statement. So to 15 the extent that community supplies that also qualify as municipal infrastructure, are captured by Plan Change 7, then the objectives and policies associated with that infrastructure need to be given effect to.

Q. Mhm.

A. So at 65, I talk about Policy 4.3.1 and 4.3.3, where the ORC is required 20 to provide for the functional needs of the infrastructure captured by those provisions and in my submission, the treatment of lifeline utilities and municipal infrastructure within the RPS protects and provides for community supplies at a higher level of priority than other water takes and this is consistent with its status as a tier 2 priority under the NPSFM. So 25 I take your point that we need to establish the extent to which community supplies are health needs or providing for the health needs of people and that that's a question we need to flesh out the answer to.

Q. Yeah. So, where there was a definition of lifeline?

A. Yes, that's in the Civil Defence Emergency Management Act.

30 Q. Okay. Not in the RPS?

A. No.

Q. Right. So –

A. Well, it is in the RPS but it refers back to the Civil Defence Emergency Act, so I've set out –

Q. Civil Defence?

A. – at footnote 27, the relevant part of the definition of lifeline utility.

Q. I see, here it is. Okay.

5 A. So the blanket six-year term in Plan Change 7 treats community supplies in the same way as other takes, which is inconsistent with the priority given to municipal infrastructure and lifeline utilities in the RPS and means that the functional needs of those uses has not been adequately provided for. It impairs the ability of the territorial authorities to fund upgrades and maintenance of community supplies, develop medium and long-term
10 plans for the efficient and effective management of those supplies, and to make infrastructure provision for growth as required by the section 30, 31 and the NPSUD.

Q. Okay, and that again is a submission which is strictly limited to municipal infrastructure and an urban environments.

15 A. Yes.

Q. Okay.

A. And to the extent that crosses over with whatever we decide community water supply is. So turning to the obligations under the NPSUD, so this requires local authorities, including both the Regional Council and the
20 territorial authorities to provide sufficient development capacity to meet expected demand over the short, medium and long-term. As we've talked about, the definition for development capacity is defined and includes the network infrastructure for water supply. Local authorities are separated into three tiers and within the Otago Region, Queenstown and Dunedin are both tier 2 and the other centres and districts served by the TAs are
25 in tier 3.

Q. No, I'm sorry, I'd like to go back to that definition again so we're tracking you.

A. This is urban development capacity.

30 Q. Which volume is that?

A. So that is, I think it's volume 2. Sorry, volume 3. It's tab 6.

Q. And again, is your submission that development capacity is a term which is limited to an urban environment or is it something else?

A. I think it is limited to providing that capacity within an urban environment. So for the purposes of giving effect to the NPSUD, I don't think we could argue that this would apply to the provision of development infrastructure outside of an urban environment.

5 Q. Okay.

A. So Mr Greenwood, I think, sets out some of the significant growth that has occurred within Central Otago. So whilst it's not a tier 2 authority, it is experiencing some of the same issues as the authorities that are captured by the tier 2 requirements in the NPS. Now, local authorities in
10 all tiers are required to work together to implement the NPS and in particular the Regional Council is required to work with the territorial authorities in relation to water supply to achieve integrated infrastructure planning.

Q. Just pause there a second. So your citing in your footnote initial policy
15 development statement urban development, Policy 10A. What page is that on?

A. That's CB793. It's at the bottom of CB793.

Q. Okay.

A. For water supply to be sufficient, both the Regional Councils and TAs
20 must ensure that in the short-term, so that's within three years, there's adequate existing water supply to support the development of land, but in the medium-term, the three to 10 years, there is either adequate existing water supply or funding for adequate water supply identified in a long-term plan, and in the long-term, the next 10 to 30 years, either the
25 short or medium-term conditions are satisfied, or the necessary support is identified in the local authority infrastructure strategy. And so that, I think shows you how the obligations under the various pieces of legislation are to be meshed together. And in my submission, these obligations are rolling obligations that requires Councils to proactively
30 plan to provide development infrastructure and the evidence of Ms McGirr and Mr Greenwood (now Mrs Muir) identify a number of projects that are in the pipeline in accordance with those territorial authorities obligations. The reality is that community water supply infrastructure does not materialise overnight and planning for it needs to begin ahead of the

actual need, otherwise it acts as a bottleneck which would undermine the objectives of the NPS urban development. Now, the approach taken to the NPSUD by Mr de Pelsemaeker results in a triumph of form over function, in my submission. It effectively places the territorial authorities in a holding pattern, unable to take active steps to ensure that they continue to meet their rolling obligations to provide infrastructure-ready development capacity. The costs associated with water supply investment are often in the millions and tens of millions of dollars. To be affordable and equitable for the community, the cost of this needs to be spread over many years, not dissimilar to the life span of the infrastructure itself. Plan Change 7 short-term sinking lid focus singularly fails to reconcile the range of obligations placed on territorial authorities with respect to community supplies. How can a Council set a rate that spreads the cost of the infrastructure over its expected economic life when the water itself may only be available after six years? I thought I should mention drinking water reforms, although we've got obviously a review of the drinking water supply by the Government as part of its Three Waters Review, which was in response to the Havelock North Drinking Water Enquiry. Currently before the house, the Water Services Bill proposes to replace Part 2A of the Health Act and although we can't speculate on the outcome of that, the obligations that exist in relation to the provision of water will require long-term certainty, in my submission, regardless of which organisation those obligations fall upon. So in conclusion, it is submitted that Plan Change 7 was devised as a narrow method to pause time so that the new Land and Water Plan can become operative. Yet the scope of activities captured by it is not commensurately narrow. This has given rise to unexpected complexities. The ORC's approach fails to give due consideration and weight to the full range of obligations on local authorities. As a result, the plan change does not implement the superior planning documents as they relate to community water supplies or nor does it integrate the water supply obligations on the ORC and territorial authorities across statutes. By treating community supplies in the same fashion as all other water uses in Plan Change 7 brings the ORC into conflict with its resource management obligations

and the TAs into conflict with their resource management and other statutory obligations. As set out in the evidence for the TAs, the exercise of their water supply functions cannot sit idle for six years. Works are planned and need to be carried out within the life of Plan Change 7 to ensure that they meet their obligations. Replacement consents that fail to provide for growth will compromise the ability for the TAs to ensure adequate supplies are available in the short, medium and potentially the long-term. Consents of only six years duration will also place TAs in an untenable position with respect to their obligations to be prudent and ensure efficient and effective infrastructure management and planning. Provision of safe and resilient community supplies are a fundamental service of such importance to our communities that it simply should not be subject to the Plan Change 7 regime. Community supplies are completely ill-suited to short-term planning.

15 **THE COURT: JUDGE BORTHWICK**

Q. Oki doki. I have made a note, and just correct me if I'm wrong here, but your key proposition is that water treated to the standard which is safe for human consumption, is community water supply regardless of the use to which that water is put. So it's the treatment which drives the definition community water supply.

A. Yes.

Q. And you'll have to come back overnight.

A. Yes.

Q. Fairly significant areas there of statutory interpretation and planning interpretation.

A. Yes.

Q. So that's the one note that I have made. The second note is from paragraph 47 to 50, that is a submission which is set specifically in the context of the NPS for urban development and is a submission limited to urban environments as defined by that NPS, correct?

A. Mhm. Yes.

Q. Likewise, your submissions from paragraph 60 to 68 is a submission set in the context of the proposed RPS and the proposed RPS and is a

submission set in the context of an urban environment as defined by that instrument, I think.

A. Yes, in relation to the provisions that apply to municipal infrastructure.

Q. And municipal infrastructure.

5 A. Yeah.

Q. Yep. I made a note that your submission in relation to paragraph 69 through to 75 are again as set in the context of the NPS for Urban Development 2020 and is confined to development capacity within an urban environment.

10 A. Yes.

Q. Okay. All right. Your first witness. No.

1440

THE COURT: COMMISSIONER EDMONDS TO MS IRVING

15 Q. Well somewhere in her you suggested that while the planning witnesses might have gone so far with things that more was required, so I was left scratching my head as to actually what it was that you were seeking now.

A. Yes, so in the evidence from Ms McGuirr and Mr Greenwood they talk about the projects that are on foot now that will require resources – resource consents to be sought within the life of plan change 7. And in 20 both cases there are projects that will require new resource consents to be sought as opposed to replacements of existing resource consents and so policy 10, what it 10A 2.2 or 10 2.2, whatever the numbers are. Is the policy that will bite in relation to those new applications and that is obviously a policy that requires that consents only be granted for six years 25 and because those permits are not replacement permits they couldn't avail themselves of the third policy in the notified version that gave a pathway to at least a 15-year term and so what we – that's an issue I think that needs further consideration. If community supplies are to be subject to plan change 7 then do we need a framework that enables somewhat longer term consents for new applications as well as replacement 30 applications. And there's sort of two, I suppose two parts to that in a way as well because and this was something that was discussed a bit during the community supply conference in terms of the need to provide for

growth. So if there is headroom, as we're calling it within the existing rates and volumes on the consent then a replacement consent could be sought within that headroom but providing for some growth. However if the community supply is already tapping out that existing consent and to provide for growth needs to take more water, over and above that existing consent, then that again would be a new application that the policy 10 2.2 would apply to rather than the policy –2.3 policy would apply to.

5

Q. And the other thing you mentioned, you did mention the definition that had come out of the expert conferencing in terms of the, was it community water supply?

10

A. Yes.

Q. And I just wondered with the second part of that, I suppose there's just a couple of things that occurred to me. The first thing was in terms of this discussion that we've been having about the use dimensions, how that might fit in with that definition because the second part of it, I don't think I've ever seen a definition that uses the words "enabling". That part of it seemed quite broad in terms of the responsibilities. Then we've got the next part which talks about, "for the supply of drinking water". So I thought that might be something –

15

20 A. Yes.

Q. – that you might need to consider in terms of the additional work that you were going to get under way.

A. Yes and that, the use of the term "drinking water" in that definition, yes, didn't escape my attention and I tended to think that it lent, in some way support to my view or the submission I've made around the definition of "drinking water" in the planning standards and its referenced to intending to be consumed or whatever the words are. So it is less about whether it is actually used for human consumption and more about whether it is intended for that purpose and that would be consistent I think with what's been captured in that definition of "community water supply" where there is reference to the likes of the industrial and business uses. Now some of the water that would get delivered to those activities would obviously be consumed or it may be used for other sanitary purposes that are captured within a definition of "drinking water" and other things may not

25

30

but the water that is delivered to those people is all intended to be able to be consumed. So I thought in that sense those definitions did mesh together. I think that obviously they've narrowed the scope of uses that could be, for within a community water supply and so I think in this definition, wouldn't capture the Clutha district example that your Honour is familiar with because I think in that case, from memory there was about 20% of that water that was being used for going to domestic uses and the balance was rural supply and so I think in that instance based on that information you would have to say that that was not the primary purpose. So it creates a slightly interesting dynamic given that that particular Clutha supply is identified in schedule 1B.

Q. Oh you see there – there you got the interpretation argument, what is identified in 1B?

THE COURT: JUDGE BORTHWICK TO MS IRVING

15 Q. It's a bit of a beast that document.

A. Yes.

Q. But I would have thought 1B under the sub-title, *Community* – or is it – *the values...*

A. Well it's *Water Supply Values*, yes.

20 Q. Yes that's right, it's the *Water Supply Values* which is define, which is consumption.

A. Yes. There's a dis-

Q. You know, so it's like, so that's my drinking water, it's – so where the purposes where, yes the purpose of the supply, is drinking water whether it's used for that or not, I guess but whether – that's what it is. It's not irrigation supply or maybe it's being co-opted or these schemes have been co-opted or have morphed out of, you know from their original purpose to serve or meet the needs of community, whatever they may look like. I don't know how the Clutha got itself to the position that it's in but anyway that's what Region's trying to manage.

30 A. Yes, I mean I think if we were to take, so we would imagine for a moment, this definition of "community water supply" went into plan change 7 –

Q. Mm.

A. – then I think in that situation, if Clutha came along and said, “look we’d like to replace our permit”, then it couldn’t be considered as it is now as a community water supply. It would come in under the other provisions. So in that sense dif–

5 Q. Come under what other provisions?

A. Well into the standard plan change 7 provisions because it wouldn’t qualify –

Q. No, yes.

A. – as being for the primary purposes. So in that sense this definition would
10 act as a bit of a drafting gate for that *use* issue.

Q. And no doubt counsel and the Court will test the definition but is that your,
you know if your instructions are now. You know, so you’ve got new
instructions, that it’s, you know that community water supply is primarily
for this definition, you should tell us that because I’m – when I read your
15 submissions I’m going, “nah, they’re trying to get the gate open to
everything else”.

A. Mm.

Q. You now the entire rural primary sector uses and so I’m, you know this is
where you’re creating doubt in my mind and where I’m saying, “no, you
20 have got to put the four corners before me and don’t in the next, you know
lest it be said in the future well that was before the Court surely they knew.
I really want to pin you to what are the four corners which isn’t to constrain
what your case is, but to understand yes that is your case or no,
something else is your case.

25 1450

A. Yes well I mean I don’t, the changes have been discussed and
recommended in the conferencing were on the basis that if it was decided
that Plan Change 7 would apply to community supplies, then this was a
solution that could work. So I don’t at this stage, have instructions to walk
30 away from just a (inaudible 14:50:47) just take community supplies out of
Plan Change 7 which was the relief set out in Mr Twose’s
evidence-in-chief.

Q. Okay, no well that’s very clear and so then Mr Twose is going to have to
establish for the Court what the four corners are at this moment –

A. Yes.

Q. – they're quite unclear?

A. Yes.

THE COURT: COMMISSIONER EDMONDS

5 Q. So how does that last statement relate to what you were outlining before in terms of a pathway to a 15 year term that was as was in the notified version?

A. Yes, well I think it's I suppose goes to the same point doesn't it, that if Plan Change 7 is to apply, then we're saying it needs to be amended to provide that longer term pathway for community water supplies.

10

Q. And what do you mean by longer term? Is that the 15 years or is it something else?

A. I don't have a instruction -

Q. Oh are you still thinking about it and –

15

A. – yes I don't have instructions on - for that –

Q. Okay, all right.

A. – to be honest.

Q. (Inaudible 14:52:00) clarifying that –

THE COURT: JUDGE BORTHWICK

20 Q. And the planners didn't deal with that?

A. No they haven't.

Q. They got to the definition part, but they didn't –

A. Yes.

Q. – deal with duration part?

25

A. No.

Q. As per that definition, so that remains at large?

A. Yes.

Q. Okay.

A. Yes so I think what's in the joint witness statement is a partial solution to the issues if community supplies are to be captured within Plan Change 7.

30

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

- 5 Q. I didn't have any more I don't think, oh I suppose just the one area that I was left a little confused about, there's quite a lot said about the Municipal Water Supply and Urban Environments and things like that but when you drive around the Otago region and you look at all these houses in the rural environment and you think, well, they probably don't actually relate to the urban environment definition –
- A. Yes.
- Q. – in terms of the MPS?
- 10 A. Correct.
- Q. So you haven't taken us specifically to any document provisions that specifically speak to that question –
- A. To the urban environment question or...?
- Q. No, to the non-urban environment?
- 15 A. Yes.
- Q. And in terms of, I guess even in the rural environment, you think like the urban environment, there ought to be some integrated planning going on in terms of any zoning or resource consents and all those sort of things, so the water isn't – supply issue isn't being driven in one direction and the pattern of development being allowed to go in another direction, so I just wondered whether, how your case might be addressing that issue?
- 20 A. Yes, I don't think I quite follow your question. Are you – can I perhaps pose what I think –
- Q. Well you can, I suppose I was partly thinking about well we've got a land and water plan that's surely going to have to look at making sure you get a sort of integrated pattern of future possibility in terms of land use as well as the water resource use, so how is that being factored into the work that might be being done by the Councils on future –
- 25 A. Yes.
- 30 Q. – development, future demand, future supply –
- A. Yes I mean –
- Q. – all those things, a bit like what's attempting to be done with the MPS on urban development capacity –
- A. Well it –

Q. How's that being done for the rural area, and you did mention somebody doing spatial planning along the way –

A. Yes.

Q. – I notice, but I mean, to me, that left a bit of a question mark?

5 A. I don't, I mean the short answer is I don't know the extent to which the Regional Council's land and water plan is going to I suppose look at how rural land use might be changing which may place demand for water infrastructure, that, I don't know the answer to that. I, from the TA's point of view, they have perhaps unsurprisingly focused on the areas where
10 they are responsible for the provision of that infrastructure and so the extent to which water supplies that they don't manage, may be effected by land use change, hasn't been something that we've been thinking about in the course of this process.

Q. That may be enough of an answer -

15 A. Yes.

Q. – and I've – if I think of anything I can ask some of the individual witnesses –

A. Yes, I mean I –

Q. – but it's not something that you've been factoring into your case, so that's
20 what you're saying?

A. No, no.

Q. Okay, thank you.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

Q. I just had one question to do with the definition from the planners where
25 they've got an exclusion. It says 25 or more people on at least 60 days a year, how's the balance addressed? Is this covered under the various Local Government Act or something like that?

A. Yes, so that there I think is pulled from the definition of registered
30 community water supply which is currently in the regional plan water and is also from the Health Act, so that's sort of the smallest type of community supply that is referred to in the Health Act and so I think that's been brought across to essentially capture any supply, I suppose bigger than that, so serving at more than 25 people or for more than 60 days,

anything smaller than that wouldn't qualify as a community suppliers is my understanding of how that definition is to work.

Q. So could someone want drinking water for a community, a small community –

5 A. Mmm –

Q. – of 25 or less people etc?

A. Well I suspect that, I mean they could, there could be people that are applying for water for domestic –

Q. Yes.

10 A. – that are smaller than that, absolutely.

Q. But not captured by the –

A. But not captured by the –

Q. No.

A. – community supply definition.

15 Q. And could it be that the quantities of water are so small they don't warrant?

A. Yes, yes I mean, I think that's right, I suppose the current sort of Health Act framework is I think focused on I suppose risk in some respects, how many people are served by these suppliers that may be at risk and there are of course permitted activity rules in the regional plan water for taking water for domestic purposes.

20

Q. Okay.

A. That would cover some of those smaller uses –

Q. Okay.

25 A. – perhaps not up to 25 people, but there is certainly some provision there for smaller takes.

Q. Okay. Thank you your Honour.

THE COURT: JUDGE BORTHWICK TO MS IRVING

All right, your first witness.

30

MS IRVING CALLS**THOMAS BRENDAN HELLER (SWORN)**

Q. In your full name Thomas Brendan Heller?

A. Yes.

5 Q. And you are a director of Environmental Associates –

A. Yes.

Q. – Limited in Dunedin?

1500

A. Yes.

10 Q. And you have prepared a brief of evidence in these proceedings dated the 3rd of February 2021?

A. Yes that's correct.

Q. And you are also a signatory to the joint witness statement for Community Water Supplies dated 31 March 2021?

15 A. Yes and I don't have a copy of that with me.

Q. Do you have any amendments that you wish to make to your evidence?

A. Not specifically although I'd like to talk to the Court about general positions that I have with respect to what has occurred with (inaudible 15:03:04) and so forth.

20 Q. Okay. I'll perhaps get you to confirm your evidence-in-chief and then I think you've got a summary that you wish to use and you could perhaps elaborate on those matters during that?

A. Okay, yes.

25 Q. So do you confirm that your evidence is true and correct to the best of your knowledge and belief?

A. Yes I do.

Q. Thank you, so if you'd like to go through your summary and then answer any questions.

30 A. It may be helpful to the Court if I were to just firstly provide my position on the focus of my evidence and then run through this amended summary and then I can get to what is – and this should really help the Court, my position on where we've got to with the plan change 7 schedule 10A 4 – Water Allocation for Community Water Supplies.

THE COURT: JUDGE BORTHWICK TO MR HELLER

Q. I thought the focus of your evidence was the (inaudible 15:04:04) was the schedule.

A. Yes.

5 Q. Yes. That doesn't step beyond that in terms of dealing with duration –

A. No.

Q. – or does it?

A. No.

Q. So it's just the schedule and the methodology in the schedule?

10 A. Yes, just the water allocation outcomes of plan change 7 for the Community Water Supplies.

Q. Well outcomes are quite a different proposition.

A. This schedule.

Q. The schedule, okay, right.

15 A. Yes.

Q. All right, no, I understand that's what your evidence was.

A. Okay thank you. So just moving to the amended summary.

Q. Mm.

A. And would you like these read out in full your Honour?

20 Q. Yes.

1505

A. Okay. Point 1, Community Water Supplies and that's including – that's inclusive of those in schedules 1B and 3B of the regional plan water operates on a peak water supply requirement with an acceptably sized storage facility to buffer water use on a daily basis and to provide continuity and reliability of supply. Schemes configured in this way are considered to be the most efficient method for delivering community water. Water-metering data shows that daily, monthly, and annual water abstraction for community water schemes is not fixed and can vary significantly according to seasonal water requirement, and where required, growth of a scheme over the consent period. Large storage facilities to enable reductions in peak abstraction over short-to-medium periods are expensive and are effectively not utilised during the balance of the seasonal scheme operating period. The PC7 schedule 10.A.4

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allocation method, as notified and as amended, did not provide for the efficient and reasonable allocation of water for water supply takes and their associated scheme, planning, and operation. The issues with the notified method were set out in my evidence-in-chief. Expert conferencing regarding schedule 10.A.4 has taken place, and this is assuming that the community water supplies would be subject to plan change 7. The outcome of that caucusing enables the full array of water metering data to be used, and applying legitimate maximums of rate, daily, monthly, and annual volumes of take to community water supplies. If those amendments are accepted, it is my opinion that schedule 10.A.4 is able to accurately reallocate water to enable a community water supply to continue to operate up to previously taken rates. However, that doesn't enable any future growth and demand. The method to enable increased water allocation to support growth and demand for community water supplies was to the planning caucusing. It is my professional opinion that six-year terms for community water supplies is too restrictive on that basis for territorial authorities to operate and plan infrastructure facilities in order to meet future water supply needs. In my experience, territorial authorities carry out infrastructure and water-supply planning for at least, or up to, a 30-year timeframe. This is to ensure that water-supply provision is anticipated and that mechanisms are in place to provide that water when needed. Mr Twose, in his evidence-in-chief, explains the planning regulations that direct territorial authorities in matters of water supply, infrastructure, and provision. The facility to encapsulate projected community growth out to a 30-year timeframe within a water permit, enabling the abstraction of water, is fundamental to territorial authority, water supply, infrastructure planning, and execution." Your Honour, if I can perhaps just then identify where my position is now with respect to water allocations for the community water supplies under plan change 7? And this is specifically in respect of schedule 10.A.4. As identified in my amended summary of evidence, I agree with the other technical experts, including the regional council experts, in relation that schedule 10.A.4 can be modified to account for water supplies to community water schemes, and this is with the incorporation of the water-metering data that we

discussed and confirmed, and taking the maximum rates and volumes as was confirmed in the caucusing document. That is all, I agree with all of that and that's my position. Secondly, the provision for growth that was undertaken at the planning caucusing. I agree with that position and with the planning experts that growth can be incorporated into the community water supplies upon reapplication or application, and that I also agree that where it's within the headroom of a consent, that will be dealt with under the existing replacement as opposed to any water that was required over and above the headroom of the existing consent would be a new application, so I'm agreed with that, which came out of the planning conferencing. The only point that I have concerns with is that the term of consents, whether it be replacement or new consent under plan change 7 of six years is insufficient in itself to provide for water supply projection and planning out to a 30-year timeframe for the territorial authorities."

15 **THE COURT: JUDGE BORTHWICK**

Q. Sorry, to provide for growth, is it?

A. To provide for the growth, it's just for the growth, your Honour.

Q. Out to 30 years?

A. Yes.

20 Q. Why is that?

A. And that is my only concern.

Q. Yeah, so why is that? So, first off, why 30 years, and why is that remaining concern?

A. Yes, the reason being is that I think we have heard that there is an onus on territorial authorities, and I am not going to get into the relative legislation and so forth because it's not part of my evidence, but territorial authorities have a planning requirement up to a 30-year timeframe for water supply to try and keep ahead of their water supply requirements. That would be in excess of a six-year period for growth which has been agreed to at the planning caucusing, so the terms of consent of six years obviously only incorporate a six-year projection for growth. That will be difficult where there is significant growth, because that doesn't provide the confidence to the territorial authorities to be able to then go ahead

and install infrastructure and to make the necessary upgrades on the basis of a 30-year projected population increase and water-use increase, with the thought in mind that, you know, in six years' time, they may not get that extra tranche of water. So it's a technical and it's an application, it's a logistics problem for the territorial authorities.

5

Q. Thinking about the Clutha case, and this is not the application before the Court, but there was some evidence from a Clutha engineer that we heard that at least part of his thinking was that the Clutha District Council take, which is now in appeal to the High Court, that that take could be used maybe as a replacement take or instead of or, I guess, as an alternative take to at least one or two other community water schemes in the area, which schemes were unreliable because the flow in the water body was unreliable or the flow in the water body from time to time got heavily silted up, for example. Would it make any sense for those other two supplies, on whatever water bodies they were on – so this is quite different from the permit before us, but we heard evidence about it – well, firstly, do you recall evidence about that?

10

15

A. Yes, I do, I think, yes.

Q. That part of the strategy for the engineer was to think can we also use the permit before the Court to supplement or to replace these other two unreliable takes?

20

A. Sort of branch across schemes.

Q. Yeah, that's right.

A. Yeah, yeah.

25

Q. That's what they were thinking, and I'm not quite sure whether that required new infrastructure or not. Would it make any sense to renew those other two permits for 30 years, given reliability issues and water quality issues?

1515

30

A. Dare I say it your Honour, that will be on a case-by-case basis. No two – you know, no application will be the same and no schemes will be the same. They can be vastly different. I think if we take one example that is in my evidence-in-chief of the – well I think it's in my evidence-in-chief, for Clutha District Council to develop what is a, a sort of mega scheme at

Clydevale. That's one of its current community water supplies, sourced from wells they're riparian wells to the Clutha river at Clydevale. They would like to take other schemes which are reliant on tributaries which have you know, flow problems –

5 Q. Mm.

A. – and silt problems, water quality problems and bring them all to Clydevale. Have this one big mega scheme supplying the lot. Now that is in the pipeline, so to speak for Clutha district in – within the next six years. And that would be captured by plan change 7 but the intent there is to surrender the existing permits from the tributaries and take it all from the Clutha.

10

Q. Assuming that there's – that's a lot of assumptions around Clutha ability to provide.

A. Yes.

15 Q. Yes.

A. The tributaries are tributary of the Clutha –

Q. Mm.

A. – upstream of the take. One's upstream, one's downstream.

Q. Mm.

20 A. Yes.

Q. So any way. Your evidence is – yes, okay. You seem to be wanting at least 30 years on the basis of the council's long-term planning under the MPS urban development. Yes?

A. Yes but that. I'm not addressing this as a – from a planning perspective your Honour.

25

Q. Mm.

A. I'm – this is a technical and sort of – infrastructure installation-type perspective that it's – it would be very difficult for a TA, territorial authority sorry, to go ahead and increase pipe sizes for a water scheme projected to have growth out to the next 30 years where they only have water for that projected growth for six of those 30 years.

30

Q. And I think we heard the same for the primary sector as well.

A. Is – okay.

Q. So, you're all in that category.

A. Okay.

Q. How then are we to distinguish you, I think is the key issue for TAs. Are TAs are continuing to look for water supply, for primary sector and non-urban uses?

5 A. There are few very primary sector water cons– there are very few primary sector water consumptions from Community Water Supplies that I know of your Honour. I know of one commercial irrigation take form the Tapanui water supply in Clutha district and that is for a nursery.

Q. Mm.

10 A. And that is only able to take water because the rate and volumes it uses are relatively low and they can be obtained from the pipe sizing network that the council operates. Essentially any large irrigation take will not be able to take water from within a municipal – a community water supply because the pipes are just too small.

15 Q. Okay.

A. And if they go and take water then somebody else misses out.

Q. Thing is, counsel have left this all in play, creating uncertainty at least in my mind.

A. Right.

20 Q. I don't, yes – and you know, a permit before the Court now on appeal to the High Court is described as an outlier were 80% of the water was destined for the primary sector. I don't know that because there's been no analysis by anyone to say, "yes it is a true outlier and all other permits held by territorial authorities are to provide water for urban development in an urban setting".

25

A. Yes.

Q. Yes. I simply don't know. I've not seen the analysis so – and would need to hear it from each territorial authority. And you're representing who here? Clutha?

30 A. Waitaki district and Clutha district.

1520

Q. Yes, and so have you gone through each and every permit held by both those district councils to ascertain what percentage of use is for purposes other than human consumption and associated with industrial business use within an urban setting?

5 A. No I haven't your Honour and that is not focus of my evidence.

Q. Whose evidence is dealing with that?

A. I am unsure.

Q. Okay. All right.

10 A. I think that there are a couple of territorial authority officers presenting information that may be able to elaborate. Certainly with regard to their own councils.

Q. Mm.

15 A. I mean I could try to elaborate on behalf of Waitaki and Clutha but it would be just off the top of my head but again that is not the focus of my evidence. It is really about how a water allocation model would look under plan change 7 for those community water supplies. And the community water supplies that I'm talking about your Honour are those ones that are scheduled in 1B and 3B.

Q. Okay.

20 A. But that was my primary focus.

Q. Yes, no understood. Anyone else giving evidence specifically for the Waitaki and Clutha or council or no?

A. No.

Q. Thank you.

25 **CROSS-EXAMINATION: MR MAW**

30 Q. Good afternoon. I want to start by just understand the scope of your evidence because you gave some further explanations when you added some further opinion to the end of your summary in relation to some outstanding areas that you perhaps expressed some concern about. One of which was in relation to the onus on territorial authorities and the planning requirement out to a 30-year timeframe, now you said when you commenced the giving of your evidence that you were focused on the schedule. It strikes me that you are now straying beyond the schedule,

into the planning realm and I want to be really clear that I understand that whether you are entering the planning realm in terms of the obligations on territorial authorities over, you say a 30-year period or not. Because that's either within your area of expertise and I can ask you some questions on it or it's straying beyond, so can you clarify that for me please.

5

A. I can confirm counsel that I am not entering the planning realm and that the statement I made to the Court which is within my amended summary is mostly based – or it's entirely based on the technical and provision aspect of infrastructure. Typically when a district council or city council re-applies for water with their consent, that they look 30 years ahead and say, “well do we need any extra water?” and at that time they will ask for water for growth. And this is really just a technical and an infrastructure provision requirement that if they don't get that water then they probably wouldn't install that infrastructure.

10

15

Q. So, in relation ...

A. So it can be dealt with by the planners, in answer to your question sir.

Q. Well at – it did seem to stray beyond your written material where you had stayed focussed on the schedule. So I understand you to be saying to me that your clients say to you that, they'd like a permit for 30 years but you can't tell me what the planning rationale or the planning basis is for that, in a technical sense, a planning technical sense, RMA planning documents etc.

20

A. Counsel I'm not saying that there should be a permit there for 30 years. what I am saying is that, “yes we've identified that the schedule 10A 4 can work”, there are aspects of it that can be changed and I'm all absolutely fine with that and we left the growth part to the planners. And I'm absolutely fine where the planners got to. I was just pointing out my concerns from that operational perspective that it is a 30-year growth which is envisaged by the territorial authorities not a six year and look the assessment of that and the provision for that rests entirely with the planning group.

25

30

Q. I shall direct my questions then about that to the planner for the territorial authorities. So just rounding back on to the joint witness statement and

you've just summarised again for me where your thinking's now at and am I correct to understand that you're comfortable that the schedule and the modifications that have been made to the schedule, so schedule 10A 4 to enable the calculation of takes for community water supplies now addresses the concerns that you'd expressed in your evidence-in-chief?

A. Yes, that's correct.

WITNESS REFERRED TO PARAGRAPH 19 OF EVIDENCE-IN-CHIEF

Q. Now I had some questions for you about the particular water takes within the two districts for whom you are giving your evidence and you've traversed some of this information and questions from the bench a moment ago but I want to explore a little more further if I may, this question of the uses to which community water supplies are put. Now you touch on this in your evidence-in-chief at your paragraph 19. And there you set out some of the additional uses but I'd be interested to know, in your opinion are you able to list the types of uses to which community water scheme water is put in terms of the two districts for whom you are giving evidence?

A. There are many uses counsel. Yes, I have listed some. I can't go any further than that but just to re-affirm that there uses of that water.

Q. Can you describe some of those uses for the Court?

A. I think that's in paragraph 19.

Q. Right, so let's look at paragraph 19, *Household and property water needs*, so when you say household and property water needs?

A. Yes, I also think that it is identified in other paragraphs of the evidence, counsel just to help. We can rely on paragraph 19 and we can also rely on additional paragraphs where I describe each of the schemes that I have made as examples in relation to assessing water allocation from schedule 10A 4. So I provide an explanation of the uses of water in those schemes and that is the Waihemo, Palmerston water supply. The Milton water supply and the Balclutha water supply. So just to reiterate, the Waihemo supply supplies the town of Palmerston. It also supplies some rural stock water. It supplies one dairy shed – one dairy farm of which

the discharge from that dairy farm is permitted activity. The Milton water supply supplies...

Q. Let's just press pause on the Waihemo –

A. Okay.

5 WITNESS REFERRED TO PARAGRAPH 36 OF EVIDENCE-IN-CHIEF

Q. – for a moment. As I read your paragraph 36 of your evidence, it also refers to stock water being supplied to the balance of the rural command area.

A. Yes.

10 Q. So what size command area are we talking about here?

A. I'm not sure.

1530

Q. No understanding of knowledge of the number of connections or the volumes of water?

15 A. Not specifically. The predominant use of that water is for Palmerston township, though, I do know that.

Q. Right, tell me about the Nelson –

A. But there certainly are other uses in various schemes. I mean, that seems to have been discussed earlier as well with counsel.

20 Q. I wonder whether I might put a list for you from a memo put together by Ms East, and you can confirm whether it perhaps accurately covers the range of uses to which community water scheme water is put.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Who's Ms East? Given me so many folk.

25 A. Now, Ms East has prepared a memorandum, which is attached to the evidence of Mr Twose. Ms East is not before the Court, but he confirmed the contents of it.

Q. So it's an attachment to Mr Twose?

A. Yes.

30 Q. Okay, all right.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. And there, she described the wide range of uses, aside from human consumption, as including bathing and toileting, rural and stock purposes, irrigation, watering of the garden, washing the car, firefighting, watering sports fields and parks, water-intensive commercial and water-intensive industrial processes, like commercial vehicle-washing, water-blasting, commercial laundries and manufacturing. So does that list sound, or does that accord with your understanding as to the wide range of uses to which water is put from these schemes?

10 A. I'm unsure about the term "irrigation" that you use. I mean, you've used the context of the watering of lawns and then sports fields, and then you have irrigation separately. Are you talking about, like, commercial farm type irrigation?

15 Q. Well, you tell me, what is the water used for? Or is it simply you don't know the range of uses?

A. There's a lot of range of uses, and we can distil down to, you know, the filling of duck ponds and, you know, various other things that are – I mean, imagine how many different water uses there would be in Dunedin City, for example, for water, just within the city itself. Quite a lot, so, look, the main uses that I consider are for, essentially, household supply, from the scheme that I have had experience with, household supply, community supply – so that's businesses and so forth, that's supplying the regional council with their cup of tea water – and also when you extend out to beyond the urban and you get into the rural, some of those schemes also incorporate stock water, and a few schemes even supply water to dairy sheds, but I'm not aware of any other commercial irrigation supplied by these schemes apart from the one that I –

25 Q. So apart from the nursery in Tapanui.

A. – apart from the Blueskin Nursery at Tapanui.

30 Q. So it's a fairly broad range of uses, you'd accept?

A. It's use that I would expect from a municipal community water supply.

Q. Now, when you think about the community water supply and the range of uses, and then you think about the proportion of water that's used for human consumption, do you have, or are you able to give an opinion on

what percentage of the water that is taken might actually be consumed or would fit into the category of “for human consumption”?

A. My evidence doesn't extend to that, counsel.

5 Q. Have you considered any of the schemes within the Clutha or Waitaki Districts and carried out any analyses of the breakdown of water use?

A. Only insofar as previous resource consent applications.

Q. And in relation to those previous applications, you have been able to conduct that exercise?

10 A. Yes.

Q. Yes.

A. To various extents.

15 Q. And recently, you've provided evidence to the Environment Court in relation to an application by the Clutha District Council with the respect to, I think it was the community take at Stirling? Do you remember that evidence?

A. I do remember. I don't seem to recall it in my evidence here, though, counsel.

20 Q. No, there's no reference to that evidence or the analysis that he had carried out with respect to that water supply, but as luck would have it, I have some copies of your evidence and I can provide a copy to you to refresh your memory if that would assist.

25 A. I'm unsure if I'm able to comment because it could be outside the scope of my evidence. I'm definitely comfortable in terms of, you know, there are ranges of uses within a community supply for, you know, the provision of water.

THE COURT: JUDGE BORTHWICK

Q. I don't think counsel is confined to what you decide your scope of evidence is. He can cross-examine on what he likes.

30 A. Yeah, okay.

Q. And the obvious line of questioning, it is obvious to the Court that the region is going to get into what are the range are the range of uses, and at the moment, this is quite opaque, where we are going. So how about

you refresh the witness's memory with his own evidence, and we will take a cup of tea and allow time for reading. How does that sound?

MR MAW:

5 A. Very good.

COURT ADJOURNS: 3.36 PM

COURT RESUMES: 3.52 PM

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Now Mr Heller do you recognise this document?

A. Yes thank you counsel, that jogs my memory very well thank you.

5 Q. And the document is a brief of evidence of Thomas Brendan Heller dated 13 May 2020 and the document was produced as evidence in the case of Clutha District Council and the Otago Regional Council?

THE COURT: JUDGE BORTHWICK TO MR HELLER

Q. If you could just say "Yes" for the record?

10 A. Yes.

Q. Thank you.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Do you now produce this as exhibit, and I'm going to say Territorial Authorities One or?

15 **THE COURT: JUDGE BORTHWICK**

Q. Yes I think that's exhibit Territorial Authorities One, it's the first exhibit for the Territorial Authorities? That will be right? Yes, okay.

EXHIBIT 1 PRODUCED – TERRITORIAL AUTHORITIES ONE – BRIEF OF EVIDENCE OF THOMAS BRENDAN HELLER (MAY 2020)

20 **THE COURT:**

So, I'll just for the record, exhibit Territorial Authorities One is a brief of evidence of Thomas Brendan Heller dated 13 May 2020 and it pertains to proceedings Clutha District Council and Otago Regional Council.

CROSS-EXAMINATION CONTINUES: MR MAW

25 Q. Now in relation to this evidence, it was given in the context of an application to replace a community water take at Stirling?

A. Yes.

- Q. And you carried out some analysis as to the uses to which water was being put in relation to that community take, is that correct?
- A. That's correct.
- Q. And in relation to those uses, you prepared a table in your evidence and set out the range of uses?
- 5 A. Yes, Table 1.
- Q. And where would I find Table 1?
- A. Page 11.
- Q. And if you can step me through that table, so the total annual average scheme water use was what in terms of cubic metres per day?
- 10 A. 1353.
- Q. And of that what proportion related to properties and household water within the scheme?
- A. 208.
- 15 Q. And as a percentage?
- A. Well probably about 20% roughly.
- Q. Suggest it be maybe closer to 15%?
- A. 15, 20, yeah, stock water.
- Q. Yes, what was the majority use in that context?
- 20 A. Stock water and dairy shed and there was 1077 metres cube per day and I make the statement in paragraph 35 that that comprised approximately 80% of the water taken.
- Q. And then there's a comment that you've provided in relation to each of the uses, but before we get to that, let's finish the exercise, there was some unaccounted for water referred to?
- 25 A. Yes, 68 cubic metres per day.
- Q. And approximately 5% according to your comments?
- A. But that was by my calculations.
- Q. So when we look at the stock water and dairy shed uses in this context, you've provided some comments in relation to those uses?
- 30 A. In what way counsel?
- Q. Well you've added some comments in the box to the right of the 1,077?
- A. Oh yes, yes, sorry, comments in the table, yes.
- Q. And here you describe, my words, a command area for that use?

- A. Yes, yes.
- Q. And what's that for the record?
- A. That's 4 - 4594 hectares.
- Q. And then a range of animals supplied by that water?
- 5 A. Yes that's correct. And it also includes 28 dairy farms.
- Q. And the water used on those dairy farms for what purpose?
- A. That is for both stock water and dairy shed use.
- Q. So dairy shed wash down?
- A. Yes. Well there's also milk cooling and so forth so it's a – it's not just the
- 10 wash down.
- Q. How would you describe those uses? Would you consider them to be primary industry uses?
- A. I would consider them to be stock water and dairy shed uses and that's what the scheme supplies.
- 15 Q. Now in relation to this particular scheme, and this is the only scheme that you have a working knowledge of within the Waitaki and Clutha District in terms of these types of uses?
- A. Please repeat that? That doesn't sound correct.
- Q. Right, the breakdown of uses of water within community schemes and this will be the only scheme that you have numbers to hand showing the
- 20 breakdown of water and the different uses to which it is put?
- A. When you say, "numbers to hand", are you also including knowledge of the schemes and their specific uses?
- Q. Yes, well you told me before the afternoon tea break that you didn't have
- 25 an understanding of matters like the command area or the volumes of (inaudible 15:58:20) to particular uses?
- A. No, no, no, not to that detail, you're quite correct, counsel.
- Q. Now you describe the water take, well in fact I put to you, how did you describe this water take?
- 30 A. It's a community water scheme in Schedule 1B.
- Q. Your paragraph 36 you've described it as well?
- A. Yes, yes.
- Q. And there you say, "The water take is primarily used for human consumption and stock water and also supplies water for dairy shed use"?

A. Yes.

Q. Now reference to the word “primarily” caught my eye in relation to this brief of evidence because that word is also used in the joint witness statement for planning when describing community supplies and I wanted
5 to ask you some questions about what your understanding of that word is?

A. But, was that the planning conference counsel?

Q. Yes it was. Let me get that document.

A. I was not in attendance in the planning conference.

10 Q. Have you read that planning -

A. I have, I have briefly read that.

Q. Did you have a – you’re about to be given a copy hopefully.

A. Thank you. All right, page – which paragraph?

Q. Page 8 under, “Definitions” and it’s to the Appendix.

15 A. Which paragraph is it?

Q. Right, so let’s make sure you’re looking at the right document. You’re in the Joint Witness Statement For Planners?

A. Yes.

Q. And attached to that is a marked up version of the plan? Page numbers
20 on the plan?

A. Okay.

Q. One of which hopefully is an 8?

A. Not particularly, 6, 8. “Definition”.

Q. And you’ll see there a recommended definition for community water
25 supply?

A. Yes.

Q. Starts with, “Means a water supply for the primary purpose of supplying drinking water to communities. It may also be used for industrial and business uses and is for the purpose of enabling territorial authorities to meet their responsibilities”, etc. When you read that definition, would you
30 include or would the Stirling scheme described in your evidence-in-chief from the previous case fit within that definition?

A. I'm not a planner and so I can't under- I don't try to understand exactly where the planning (inaudible 16:01:59) was coming from when they're talking about primary purpose. There is a, there -

5 Q. Well you've used that phrase in your evidence-in-chief, so what do you understand it to mean?

A. Yes, and I specifically used that as being one of the primary purposes of that scheme and I have said that it is for consumption and stock water and also supplies water for dairy shed, that they are the three primary purposes for which that scheme operates and when I read the definition, 10 it says the primary purpose of supplying drinking water so one of the primary purposes in my paragraph 36 is drinking water. There I, I can only, therefore, assume that it fits with the definition.

Q. Do you consider that each of the uses in the Stirling scheme is a primary use?

15 A. I just said it was primarily used in my 36, "primarily used".

Q. I'm just trying to understand when you use that word, what you mean, so what do you understand "primarily" to mean?

A. Is that the three major uses or the three primary uses are for the drinking water and the stock and the dairy shed.

20 **THE COURT: JUDGE BORTHWICK**

Q. Just pause there a second.

THE COURT: COMMISSIONER EDMONDS

Q. Sorry, I've lost track of your paragraph, in 36, thank you.

THE COURT: JUDGE BORTHWICK

25 Q. So all three major uses which from recollection, human consumption was between 15 and 16% stock water and dairy shed cumulatively be 80% primarily supplying drinking water to communities?

MR MAW:

30 That appears to be the evidence, so...

THE COURT: JUDGE BORTHWICK

Q. Yes, you might want to – break – just press into this, just a little, and just for the record you were there, you did actually write the application for the Stirling water permit?

5 A. That's correct.

Q. You did?

A. Yes.

Q. And you also appeared at the Regional Council in support of that application, at the Regional Council hearing, you know, one below the
10 Court?

A. The Court hearing I did.

Q. At the Court hearing –

A. At the Court hearing.

Q. – did you appear at the Regional Council level hearing or not or was it –

15 A. I don't think there was a –

Q. Don't think there was a hearing –

THE COURT: COMMISSIONER EDMONDS

There was no hearing.

THE COURT: JUDGE BORTHWICK

20 Q. So you prepared the application?

A. Yes, yes.

Q. So you are somebody who is familiar with reading –

A. Yes, yes.

Q. – plans and applying plans because this is all Council wants to press into
25 is how would you approach this definition which is actually a reasonable question –

A. Yes.

Q. - given that you work in this area, correct?

A. Yes, yes, yes and –

30 Q. And you do work in this area don't you because you prepare –

1605

A. There's I think there's two factors there your Honour that are in play. One is the – is about the primary purpose and the other we're talking is a measure of volume.

5 Q. Yes, well counsel is going to ask you, because you confirm that as a resource management consultant, I think that's how you describe yourself at the Stirling hearing in front of me that you prepare applications for water permits, correct?

A. Yes.

10 Q. And I think counsel is just interested to see how you would apply that definition which is being proposed in the joint witness statement for planners which is, I think a reasonable approach.

A. Yes, I think – I was actually a hydrologist.

Q. You were a hydrologist on there.

A. Hydrologist in that and I'm a hydrologist at this hearing.

15 Q. Okay but anyway you did prepare that application –

A. Yes, most definitely.

Q. And you prepare other applications too, is that correct?

A. Yes I have.

Q. Okay.

20 A. And that is really just in terms of an efficiency function for the client.

Q. But you are somebody who prepares resource consent applications and therefore somebody who –

A. Yes.

Q. – deals with regional planning and district planning documents?

25 A. Yes.

CROSS-EXAMINATION CONTINUES: MR MAW

30 Q. So, I want to understand whether the Stirling scheme would fit within the definition of community water supply as has been recommended by the planners in their joint witness statement and I understood the answer that you gave me was, "yes it would for a number of reasons". And I just want to make sure I've clearly understood that. So is that your evidence?

A. My evidence is that the – in the definition, it's got a primary purpose of supplying drinking water to communities. The definition makes no – has

got no indication of volume or percentage of that use so, I'm taking it as being read as for a primary purpose of supplying drinking water and the Stirling scheme, one of its primary purposes is for human consumption, drinking water. So without having any greater context of that definition counsel, I think it could fit – it could fit.

5

Q. It's useful to understand how you read that –

A. Yes, from a technical...

Q. – particularly through the lens of having put an application together for a territorial authority to replace a community water supply permit. So just on following your logic, you say that one of the primary uses of the Stirling community water scheme water was properties / household water within the scheme –

10

A. Yes.

Q. – and therefore the definition in proposed to plan change 7 for community water supply, as meaning a water supply for the primary purpose of supplying drinking water to communities, you say that that use fits within that part of the definition?

15

A. Yes. The scheme supplies that water to that use.

Q. In your mind do you draw a distinction between the phrase “drinking water” is used in the proposed definition and the range of uses which might fit within your category of property / household water within the scheme? Is that all drinking water?

20

A. Yes. My consideration of a drinking water supply for households, yes.

Q. Where is – so in looking back at this scheme again, is any of the water used for other domestic purposes? How's the garden watering accounted for here.

25

A. That is also part of household water use.

Q. Right, so drinking water is a component of the 208 cubic metres of water. Understood that correctly?

30

A. Correct.

Q. Any idea what proportion?

A. No idea.

Q. None the less you're satisfied that it's one of the primary purposes and thus fits within the proposed definition?

1610

A. Yes the water supplied to those 208 properties is true to drinking water standard and is supplied for the primary purpose of drinking water to those properties.

5 THE COURT: JUDGE BORTHWICK

Q. Just point of clarification, is the primary purpose the purpose delivering water treated to a drinking water standard or, which means that you can deliver, you know, it's a standard of water which is delivered to cows to drink or is the primary purpose dairy shed wash down? I don't understand where your evidence goes?

A. In my evidence your Honour I state the dairy shed wash down is one of the primary purposes.

Q. And frankly, aren't we only interested in the primary purpose because that's the language of the definition, means water supply for the primary purpose. Line up them, which one's your primary purpose in the Stirling case?

A. On a – that may be evident in terms of the planning fraternity your honour, but to a technical person, I see no indication of volume or percentage. Therefore, if I see a community water supply that is supplying water to the requisite number of households that enables it to be a community water supply, and that is drinking water, then I see that broadly, that fits within this definition. It may be just that the definition is not tight enough.

Q. Or it may be that you're ignoring the word "the primary purpose" singular?

A. Yes. It's a primary purpose.

Q. Yes which in Stirling's case it would be –

A. I can't make that judgement call your Honour –

Q. No.

A. – on whether or not different community water supplies fit with that.

Q. No, but your evidence –

A. That's not my –

Q. And this is critical, because again, if, and it may be the Territorial Authorities' case that any use goes provided all you – provided

you're delivering water to a certain standard, which is a drink- which is the drink water standard –

A. Yes.

5 Q. – it doesn't matter what use and maybe that evidence fits with that. It doesn't matter the use, what's been supplied is water which has been treated to a certain standard which is counsel's submission?

A. Yes and that is definitely the case that all of the water is provided as a drinking water quality water.

10 Q. And then it doesn't matter what you use it for, you can use it for 100% dairy shed wash down if you wish, you could use it for 100%, I don't know, irrigation, K-lines, for example, if you wish, it doesn't really matter?

A. Yes that is not the intention of these water supplies and that is not the model for these community water supplies. They do not supply irrigation water.

15 Q. Okay – so we're trying to – the uncertainty that's been created is the Territorial Authorities' own uncertainty with the manner that they're approaching this definition, so we're just trying to clear up in our mind how would an experienced resource management consultant go about applying this definition, but I think you're saying while that definition does want for clarity because if its purpose was to identify one purpose which is the primary purpose, yes the primary purpose can involve a multiplicity of purposes, is your approach. Now that might be your approach and, you know, your planner might say well that's certainly not the way that it's intended –

20

25 A. Yes, yes.

Q. – but if it is your approach –

A. Yes.

Q. – being a well-qualified by experience –

A. Technical person.

30 Q. - resource management consultant then, the definition wants for clarity doesn't it?

A. I believe that it -

Q. Unless of course it is your case that any use goes –

A. Yes.

Q. – so then in that case it probably is fine?

A. I believe it doesn't, it's, it may not be tight enough your Honour, there is scope there for, such as the Stirling scheme which – and I've been very open to the Court about what the uses of water are in the breakdown.

5 Q. But you weren't – anyway let's not get into the Stirling scheme –

A. Yes, yes.

Q. – and what was in the application and what was not, so –

A. This is just one scheme and –

Q. Yes it is one scheme.

10 A. – not all of the schemes are like this.

Q. And my expectation was that the Territorial Authorities would have done an audit to see whether there were other outlier schemes as it's been called, but at the moment we haven't got that evidence?

A. Yes, I'm not aware of any that –

15 Q. Yes.

A. – that are captured by Plan Change 7 that are like this?

Q. Yes and I – frankly I'd have to go very cautiously with this because of –

A. Yes.

1615

20 Q. - of what is now in play with the definitions and legal submissions in the absence of a proper audit, full audit of all permits.

A. Would that occur at the time of an application?

Q. That would occur in this hearing.

A. Okay. I don't have that information on me, your Honour.

25 Q. No, I know you do not.

A. And, in fact, that really wasn't the focus of my evidence.

Q. I know, I know, it was not.

A. My evidence was about water allocation irrespective of what the schemes supply their water for, and I have no control over that, but certainly, getting plan change 7 and the schedule 10.A.4 in a good way that is useful for that water allocation has been my focus.

30

Q. Yes, and I do not think – anyway, that is a matter for us.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Where do you want to take this? I mean, I look at like it does not mean any and all purposes. It does not say that, but, wow, if that is how a consultant would apply it, then maybe we do need to be looking at this further. It may want for other issues.

5

A. I can't advance it much further with this witness, I don't think, you know. It's certainly highlighted some of the challenges with its application, but also the fundamental issue as to use of water within these schemes on which we have very little evidence. In fact, the only evidence is now this evidence here in terms of a breakdown and a little bit of evidence in terms of the Dunedin City Council, which I'll ask some questions about as well.

10

Q. Well, yes. This witness is only concerned with Waitaki and Clutha, though, as opposed to Dunedin.

A. Oh, yeah, no, I was going to put those questions to the witness who has appended to his evidence some of that information, but otherwise, there is simply no other evidence in terms of the breakdown, and hence the council's concern in light of what it observed to unfold in the context of the Stirling case.

15

20 MR HELLER:

Your Honour, sorry, if I may speak. In my evidence-in-chief for this hearing, your Honour, I have provided a breakdown, as such, for the Waihemo – that's the Waihemo Palmerston – the Milton, and the Balclutha water supplies insofar as I discuss the uses of the water for those water supplies, and I provide the rate and volumes of water that are taken, and I think they would be three good examples to the Court of what a typical community water supply would look like because I think the Stirling example is a bit skewed towards what was probably inheritance by the District Court of a rural stock water scheme into their community supply scheme, so it's ended up being morphed into a community water supply scheme. They're supplying the Benhar and Stirling community, and some of the Balclutha, but they also ended up supplying, you know, the stock water and dairy shed uses to that rural area, and I think there are quite a few community water supplies around the country that have ended up that way, basically inherited from old stock water supplies, and in that, they've ended up

25

30

having to treat to drinking water standard, because the stock water supplies that supply the properties also supply the households.

THE COURT: JUDGE BORTHWICK

5 Q. And I understand all that, and the question that I think the Court is grappling with is whether, when you have schemes that are treating water to a drinking water standard but supplying for non-human-consumptive uses, they should all get a 30-year consent, particularly where, in the short term, you have got a registered six years' time, hopefully before then will have a comprehensive land and water plan that then looks at
10 integrated management of uses, and that is the council's dilemma that it is faced with, because it has got a water plan, as I understand it, that does not effectively manage the discharge of contaminant to ground or to – onto land or to land in circumstances which may enter water and doesn't have other methods to integrate land use discharge and air contaminants
15 which might be associated with the water take in use permits. There's no integration and it's wanting to get there and you're saying, well it doesn't matter, so do you consent?

1620

A. I'm not saying it doesn't matter your Honour.

20 Q. What are you saying then?

A. All of the uses matter, my response to the Court then was about the proposition that counsel provides the Court that you could only rely – the Court could only rely on, on this breakdown for the Stirling as an indication of community water supply make-up, that is incorrect in my view.

25 Q. Because -

A. I disagree with that your Honour, I –

Q. Yes, well that's good to know –

A. Yes.

Q. – and that's because you've addressed three schemes –

30 A. I've addressed –

Q. – one in Palmerston –

A. Yes.

Q. – one in –

A. Milton.

Q. Milton?

A. And Balclutha.

Q. And so you do the percentage breakdown of uses?

5 A. I state what the uses are and –

Q. In a narrative sense?

A. – the analysis is that for the Milton and the Balclutha –

Q. Yes.

10 A. – takes, there is no water used for dairy shed or rural stock water whatsoever. It is purely for those townships.

Q. Okay, and then for the other one, Palmerston?

A. The Waihemo, Palmerston? There is water supplied to one dairy shed. I think I mentioned this a little bit before and it's also supplied –

CROSS-EXAMINATION CONTINUES: MR MAW

15 Q. Well let's press pause on Waihemo, we did go over that, paragraph 36.

A. It is supplied to one dairy shed and it also supplies stock water.

Q. Also supplied to the balance of the rural command area?

A. Yes, yes.

20 **THE COURT: JUDGE BORTHWICK TO MR HELLER**

Q. What for?

A. For stock water.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. But you just said it wasn't provided for stock water?

25 A. No I don't think I did, I, I've been always –

Q. All right, might have been the -

THE COURT: JUDGE BORTHWICK

No, he d- yes it's stock water.

CROSS-EXAMINATION CONTINUES: MR MAW

A. In my evidence it says quite clearly that it provided for Palmerston township, for stock water for the balance of the rural supply area or command area and also to one dairy shed.

5 Q. But the difficulty we have here is we don't know what the proportion of use is and when you read the narrative it could be anything and the best breakdown that I've seen is the one from your earlier evidence which had 80% of the water going to that type of use?

10 A. That is a misconception counsel, that is biased towards a scheme which is predominantly sending water to rural by volume, as I said – my knowledge of the Waihemo scheme is that the majority of the water is supplied to Palmerston township. Secondly, for the Milton and Balclutha schemes, all of the water is supplied to the townships, there is no water supplied to dairy sheds or rural stock water uses whatsoever.

15 Q. Well, let's just press pause so you said the Milton scheme then?

A. Milton?

WITNESS REFERRED TO PARAGRAPH 37 OF WRITTEN EVIDENCE

20 Q. Yes in your evidence, your written evidence says, paragraph 37, "the Milton water supply serves the Milton township and some adjacent stock water requirements and industrial uses".

A. Okay let's get to that. 37 was it?

Q. Yes.

25 A. That is incorrect. As far as I'm aware it provides the Milton township and some adjacent industrial premises. As far as I'm aware it's not supplying stock water because the stock water for that area is served by another scheme which takes water from the Taierei catchment and it goes all around Milton. The Milton supply currently just supplies the Milton township.

Q. So tell me about the other supply.

30 A. The other supply, the Balclutha supply. The same applies counsel, it is solely supplying water to the township of Balclutha. The other schemes that are sort of the you know, it's got the rural component, they are supplying water to all of the farms you know around the outskirts of

Balclutha. In the same way that the scheme supplied Milton rural properties.

Q. So would those schemes be captured by community water supply schemes?

5 A. In terms of the definition, those schemes do also have a primary purpose of supplying drinking water. So...

THE COURT: JUDGE BORTHWICK TO MR HELLER

10 Q. Who owns that scheme? The one that does Milton which isn't the Milton – who...

A. That's the North Bruce that's supplied out of the (inaudible 16:25:40) elevation above Lake Wai– over the hill from Lake Mahinerangi.

Q. Who runs that one? Whose scheme is that?

A. Clutha District Council.

15 Q. So, Stirling is in fact not the only example of a scheme run by Clutha.

A. Oh, no.

Q. Which primary purpose is not household use, as in people drinking.

A. Well, there are quite a few schemes in the Clutha district –

Q. Yes.

20 A. – that supply water to rural areas. I can think of the South Richardson scheme also supplies to rural areas that also picks up the town of Kaka Point and I think it provides water to around the Finegand area. So again it's sort of what the district councils inherited from the old stock water supply schemes where they've picked them up and they basically had to
25 treat them to drinking water standard to supply the – supply drinking water.

CROSS-EXAMINATION CONTINUES: MR MAW

30 Q. How many others like that and let's stay with Clutha for now, that you're aware of?

A. That I'm aware of? There's also the Waitahuna scheme, Laurence supplies Laurence –

Q. So where does that supply?

- A. – there’s a Tuapeka scheme, there’s also the Clydevale scheme, I’m just trying to think of other schemes, there’s one at around the Clinton area. I know that the Clinton township is supplied separately, that may even come out of the Clydevale scheme now. I think there’s a (inaudible 16:27:21) scheme which also supplies rural. Now I’m not sure all of these schemes are actually in schedule 1B or 3B in the current ORC water plan.

THE COURT: JUDGE BORTHWICK TO MR HELLER

- Q. But they’re district council schemes?
- A. They are district council schemes. Quite right.
- 10 Q. There would – quite a number of them –
- A. There are...
- Q. – have deemed permits, the old mining privileges?
- A. No, I’m not aware that there’s any...
- Q. No they’re all – after that I think. In terms of when they started.
- 15 A. From my knowledge they are all resource consents.
- Q. Okay.
- A. Yes.
- Q. And do all of those permits have a range of uses? One of which will be supply potable drinking water for human consumption?
- 20 A. Yes your Honour and again that necessitates the treatment of *all* of the water.
- Q. Yes I know, I understand that you treat it to a drinking water standard but...
- A. Yes and there’s a considerable cost to that.
- 25 Q. But your evidence, the Court must not be left with the impression that Milton and Balclutha solely supply for township – potable drinking water for human consumption because that it incorrect in relation to Milton and Balclutha.
- A. Yes my apologies at – adjacent industrial premises.
- 30 Q. Mm, yes what do you mean by that? Is that the prison or something else?
- A. The prison is earmarked to be supplied. It’s partially supplied at the moment.
- Q. Yes, what’s industry to you?

A. It is partially supplied –

Q. Yes.

5 A. – by Milton at the moment and it's earmarked to be fully supplied. And there are also other industries in that area which have their own ground water supply but the ground water has proved to be insufficient.

Q. Mm. Anyway, Balclutha is solely township supply for potable drinking water for human consumption or –

A. Supplied to –

Q. – sanitary?

10 A. – supplied to the township your Honour.

Q. Okay.

A. You know as I said, even in Dunedin city there are a mix of uses.

15 Q. Okay but a range of other – but a number of schemes also run by Clutha, of which there are a range of uses and those uses can be both rural and urban and are not limited, where in the rural area, not limited for human consumption?

A. Yes but they are for human consumption and also other uses that's qui-

Q. And also other uses, yes okay. And so, that's interesting.

1630

20 A. I don't think that those sorts of rural schemes are reserved just for the Clutha District Council, your Honour.

Q. No, no, no. I expect if we press into the other councils, that is also the case, but the question is there are issues, very significant issues in play here in terms of the management of the water resource.

25 A. Yeah, I think, certainly, that will be a function for the new land and water plan. I don't think any of those other rural schemes would come up or come into play for plan change 7 for the duration of PC7, you know, very limited, but the one that would come into play would be when I talk about the Tuapeka and the Waitahuna schemes. They've got problems there
30 in terms of flow and water quality and, as I said before, your Honour, like to combine those into a mega-scheme at Clydevale, adjacent to the Clutha River, effectively surrendering and making good on the tributaries with sort of an equivalent take, albeit indexed to growth, so that the new

infrastructure can be appropriately designed and installed, giving the territorial authority confidence moving forward.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. And again, in relation to the range of uses in play on those consents, broad range, including the rural?

A. Yes, yes, broad range, counsel, that's correct.

Q. We haven't spent much time on the Waitaki, but what's your understanding in terms of schemes across the Waitaki?

10 A. Now, a lot of the Waitaki District schemes are now covered by ECan, and that's because the Oamaru water supply, which comes out of a race from in the lower Waitaki, and it's sourced from Black Point in the Waitaki River, that's an ECan consent, and now Waitaki have effectively distributed that water so far south that there are very few water supplies remaining that are to be consented by the Otago Regional Council, and
15 obviously, Waihemo Palmerston is one of those. So very few, counsel.

Q. I want to pick your hydrology brain next. When you think about a flow-on allocation regime on a river, when you think about a minimum flow imposed on a river, for that minimum flow to be effective, do you accept that all takes need to have that minimum flow limit accorded on them?

20 A. That is not in my evidence, counsel. I am not at this court, I have not provided any evidence on that. That would go to other scientists who were toying about effects on rivers and so forth, don't you believe?

THE COURT: JUDGE BORTHWICK

Q. It is beyond your area of expertise, is that what you are saying?

25 A. Yes, and that's beyond my expertise as it relates to the –

Q. No, no, is it beyond your area of expertise as a hydrologist? You cannot comment on that?

A. You're sort of putting me into a corner here. Okay, what was the question again?

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

Q. You've regularly given evidence and held yourself out as a hydrologist.

A. Correct, sorry, correct.

Q. So you understand what a minimum flow on a river is?

A. Yes.

5 Q. And you understand that where you have a range of water permits abstracting water from a water body, a river –

A. Yes.

Q. – in order for a minimum flow to be effective on that river, all takes would need to be so limited.

A. That is not absolutely necessary.

10 Q. Why?

A. If the river is large enough to sustain all takes whilst also sustaining the minimum flow.

Q. Right, so in that situation, provided the minimum flows were set well above the minimum natural flow in the river, then the issue wouldn't arise?

15 Perhaps I'll put my question a little differently. Is there a risk in terms of achieving a minimum flow on a river if not all water permits have a minimum flow restriction that is the same?

A. That's not necessary either, because there are other examples of stepped minimum flow restrictions or stepped environmental flows to preserve an instream allocation, and I would look to the Mata-Au River water conservation order as an example of that.

20

Q. Well, we don't need to get into a discussion about the Mata-Au water conservation order now.

A. Okay. You just said I was a hydrologist.

25 Q. Well, yes, as much as I'd like to go there, I won't go there in the context of this.

A. But you do understand that that's about, you know, preserving the proportional flow within the river. It's just another way of providing for a minimum of an environmental flow stepped regime.

30 Q. Yes, a series of bands to ensure that no more than 5% of the flow is taken above the (inaudible 16:36:36) Gore.

A. Gore, or above the Wyndham. Wyndham? Yeah.

Q. Well, let's stay there. So for that flow regime to be effective, all consents need to subscribe to that same regime, don't they? Otherwise it wouldn't work.

5 A. It wouldn't work insofar as it would be about timing and duration. I'm not necessarily saying it wouldn't work, per se, but there would be a potential for a duration of time where possibly minimum flow thresholds were breached.

10 Q. When you are establishing a flow and allocation regime to protect values in a river, do you accept that in order to ensure that flow and allocation is properly implemented, consistent conditions need to be applied to various consents, or all consents abstracting water from that resource? You can't have permits with different minimum flows.

15 A. Yeah, yeah, yeah, yeah. Also, just into the mix there is things like primary minimum and supplementary minimum, and there is a distinction, so not all permits may have the same minimum flow. You sort of understand where I'm coming from?

20 Q. Let's make it really basic so I can understand it. You've got five takes on one river, the minimum flow in the plan says that the river shall not drop below a flow of one cumec. You would expect to see that limit, then on each of the five resource consents.

A. If they were party to that particular minimum flow regime, yes.

Q. That's as far as I shall pursue that line of questioning.

A. Great.

Q. Right. Thank you, no further questions.

25 **CROSS-EXAMINATION: MS BAKER-GALLOWAY – NIL**

RE-EXAMINATION: MS IRVING

Q. Mr Heller, if I could just refer you please to appendix B of your evidence-in-chief.

WITNESS REFERRED TO APPENDIX B OF EVIDENCE-IN-CHIEF

30 A. Yes, yes.

Q. Can you just tell us what is included in appendix B, please?

A. This is a list of all water take consents held by the Clutha District Council and the Waitaki District Council and the Dunedin City Council, and this is in relation to each specific territorial authority community water supply.

5 1640

THE COURT: JUDGE BORTHWICK TO MS IRVING

Not sure I've got that. Maybe I do.

THE COURT: COMMISSIONER EDMONDS

(Inaudible 16:40:20) impossible to read (inaudible 16:40:22).

10 **THE COURT: JUDGE BORTHWICK**

The Clutha one is quite small, I would agree. So I've got -

THE COURT: COMMISSIONER EDMONDS

Perhaps we could have a size we could read.

THE COURT: JUDGE BORTHWICK

15 Font which is plus one, so I've got Clutha, Waitkai, Dunedin, is that it? Just the three?

MS IRVING:

A. Yes that's right.

20 **THE COURT: JUDGE BORTHWICK**

Okay, so perhaps you can go -

THE COURT: COMMISSIONER EDMONDS

It's just the Clutha one that's got the font problem.

25 **MS IRVING:**

Yes. Yes I'm sorry about that, I suspect it was intended to be printed on A3 but.

RE-EXAMINATION CONTINUES: MS IRVING

Q. So perhaps Mr Heller if we can start with the Clutha one and if we look at the columns, the fourth column from the right-hand side of the page?

A. Yes. Yes.

5 Q. Is that the column that identifies the expiry date for the permits?

THE COURT: JUDGE BORTHWICK

Fourth column from the right.

RE-EXAMINATION CONTINUES: MS IRVING

10 A. I can't see it. Yes I'll agree there is an – I think there is one there for expiry date, fourth. It's not fourth –

THE COURT: JUDGE BORTHWICK

Fourth from the right I think.

RE-EXAMINATION CONTINUES: MS IRVING

Q. Are we look- so perhaps if –

15 A. Yes that, yes that is expiry date and I can just make it out.

THE COURT: JUDGE BORTHWICK

It's going to make re-examination difficult.

RE-EXAMINATION CONTINUES: MS IRVING

Q. So you've found where that is and –

20 A. Yes.

Q. – you can read it?

A. Just.

Q. Just, all right, okay, that will do. If you move down that column, how many of the permits held by Clutha District Council expire prior to December
25 2025?

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. And that includes the dates they've gone. You know, because quite a few dates have gone previous years?

A. Yes.

5 Q. Yes, okay.

RE-EXAMINATION CONTINUES: MS IRVING

A. Yes. One that I can make out if I'm reading it correct.

Q. And is that for 25 litres a second from the Clutha River for the Kaitangata town water supply and Wangaloa rural water supply?

10 A. And that expires in 2024, is that what you're reading?

Q. Yes.

A. That's the only date I can see that's prior to, you know, including 2025, I can't make out the rest of it, I'm sorry.

15 Q. Probably without the witness actually being able to read the document it's not overly helpful?

THE COURT: JUDGE BORTHWICK

Right, because I can make out a heap, so.

MS IRVING:

20 Yes, yes.

THE COURT: JUDGE BORTHWICK

Just. What do you want to do?

MR HELLER:

25 That, okay, Wangaloa, Kaitangata.

THE COURT: JUDGE BORTHWICK

No, don't do eye strain, this is like – this should not have been presented this way, so don't worry about it, I just really want to know from Ms Irving, where does she want to go? Because we'll have to call him over tomorrow if, and
30 hopefully produce an A3 size document.

MS IRVING:

Yes, yes.

THE COURT: JUDGE BORTHWICK TO MS IRVING

5 Q. But I can count a fair few number that are due to expire before that date that you've just given?

A. Yes I think –

Q. Including the dates which are past.

10 **MR HELLER:**

Your Honour, I'm scheduled for surgery very shortly and I have –

THE COURT: JUDGE BORTHWICK TO MR HELLER

Q. Oh, as in tomorrow?

A. – consultant tomorrow. I've been holding off surgery for this –

15 Q. No, no, that, this stuff's, (inaudible 16:44:32) probably more important.

A. – and just for your information, I was in hospital the night before the caucusing –

Q. Yes, okay.

A. - but I managed to get out in time.

20 Q. Okay, all right.

A. So it's a bit of a knife edge so to speak.

Q. Well just talk to Ms – it will be unfortunately. Just talk to Ms Irving about the importance of it because –

THE COURT: JUDGE BORTHWICK TO MS IRVING

25 Q. Where do you want to go with this line of questioning?

A. Well the purpose of this line of questioning was to provide context around the number of applications for community supply that are going to be subject to the plan change 7 framework.

1645

30 Q. Well, my rough count, and it's really rough, is about 13, plus applications for new water, so we've got those two.

A. Yeah.

Q. So if you agree with 13, I do not know.

A. Well, it struck me when I was looking at this, there's obviously some there, that it extensively expired a couple of years ago.

5 Q. Yeah, that is right.

A. So I'm not sure what's happened with those.

Q. No, so that is why I said including the dates that have expired. So, including the dates that have expired, I think I got up to about 13, but that is pretty rough.

10 A. Yes. If those have been renewed already, which is possible, then they may have different dates. Because you have, perhaps in the questions earlier, and in some of the discussion with Mr Heller, I think you mentioned needing a full audit of the permits, and I suppose it is a question of how you would like us to death with this moving forward, whether you want to continue with the territorial authority case tomorrow, where we carry on in this mildly excruciating fashion, or whether you would like us to –

15

Q. Why is it excruciating?

A. Well, just that we have obviously got Mr Maw asking questions based on potentially limited evidence about this issue, and the impression I've got from your Honour's questions is that you are interested in more detail.

20

Q. I am interested to know what are the four corners of your case. I would be interested in everybody, in every party, on the same issue, what are the four corners, and there is work to be done overnight on the legal submissions. I think we have a definition which might (inaudible 16:47:12) in some respects, but I did not think (inaudible 16:47:15) in terms of your witness now opening it up, I would interpret the primary purpose as meaning a purpose. Well, that is a bit surprising, and the same issue came up with Claire Perkins yesterday, when she used "primarily included," and I queried her: "What do you mean, 'primarily'?" because she had grabbed all water uses when she was talking about "primarily the uses," and in fact, it was all types of uses, it was not the main use, and she came back and said, no, primarily is the main use, so there seems to be, you know, maybe the definition once, but the four corners of the

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council case is not clear. How do you handle it? I do not know. I mean, it is your submission, but you do not have evidence – in fact, probably now contradicted by this witness – that Stirling is an outlier. I do not know what you mean by outlier, but this witness is clearly saying the community water supplies, the supply of water by district councils to its rural and urban communities includes a large range of uses, he is clearly saying that. I do not know that Stirling is such an outlier on that basis. Now, you know, if you agree, yeah, it is not an outlier, there are other cases, and the proportions might differ, but there are other cases, then it seems to me, then we move, perhaps, to the planner case, and then that is the real rub, is it not? Why should district councils supply water for undocumented uses when there are wider issues in play, and those issues are the integration of natural and physical resources, which regional council is tasked with. That is more the planning case, though.

5
10
15 A. I mean, I suppose what I am slightly concerned about is that we spend a whole lot of time trying or concerned about or trying to bottom out the extent to which Stirling may be an outlier or not, and in that we might –

Q. You said it. That is the problem, when council offer, from the bar, something which is not substantiated in evidence.

20 A. Well, that was my understanding on the basis of the evidence that I had, so the conversation where this has gone –

Q. Has taken you beyond what your understanding was?

A. Yes, it was, and that was why I was wanting to come back to, well, what are the permits that are actually going to be subject to this regime?

25 Because if it isn't all in sundry and there aren't a whole lot of rural schemes that come up within plan change 7, then maybe the issue is not as acute, so I think –

1650

Q. Meaning the District Council can perhaps compromise its case?

30 A. Well, either that or where we are at the moment, which is the community supplies that we understand will be subject to plan change 7 don't suffer from the Stirling issue, and so we can carry on with those, and I have to confess, I don't know the answer, which way that would go.

Q. So it is an evidential problem, I think, for you.

A. Yes, agreed.

Q. And it may be that Stirling is the true exception, but I don't think that this is the evidence from Mr Heller, but if it was, then why would the environment bear the risk, which is Mr Maw's line of questions for other witnesses. Why would that be visited upon the environment when there is a land and water plan to come? If it was truly an outlier, all of the other TAs would say for goodness' sake, get on with it, it is all about urban use, or water for human consumption, that is what it is about, get on with that, let us focus on that. That is how I imagine the TAs would go if it as truly an outlier, but you do not know that, and now there is actually doubt that that is true.

A. Yes, yes, and so, I mean, we can carry on tomorrow and try and draw that out, or it may be more efficient for us to have an opportunity to go away and actually resolve that, prepare.

Q. I do not know about that.

THE COURT: COMMISSIONER EDMONDS TO MS IRVING

We still have questions remaining to the schedule, quite important ones, following on from what we were asking in relation to the Landpro witness and what now seems to be in the joint witness statement, that perhaps is specifically targeted at the TA activity, and there are two of asking questions on that, maybe three.

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. No, I was not going to ask any questions, but the thing is, you could take some time out to ascertain from your clients the facts, or you could take instructions in terms of the water supplies that they wish some latitude for. Is it urban growth in urban areas, is that what it was, and does this definition apply to uses within urban areas, and secondly, drink water for human consumption, rural, or is it everything? So I think that is actually a question for client instructions overnight. That is my sense of it. Where do you want to take this? And if you want to take it wide, then, if there is not a good evidential basis, you know, that we are missing some facts and we are going on the fly, then perhaps we do have to come back.

A. Yeah, I'm just slightly conscious of how we just keep blowing out the schedule and that there's other parties coming in, and if we may more efficiently deal with this if I have the chance to work through these issues with the territorial authorities, reach a position where we can clearly articulate to you the four corners of the case in a way that may avoid a lot of toing and froing with witnesses in the witness box that, you know, at short order may not actually advance matters, and everyone just gets more confused.

5

Q. I do not think I am confused, but what we want is an evidential foundation to say that Stirling is an outlier. That has now been contradicted. I do not think the cross-examination has been confusing, it has been helpful.

10

A. Yes.

Q. It was almost inevitable that counsel would press into Stirling.

A. Yes. What's not clear, what I don't know the answer to is the extent to which there are other cases like Stirling that will be caught by plan change 7 or not, and I don't know whether I'm going to be able to resolve that overnight.

15

1655

Q. So we will finish the Court's questions because the Court does actually have some important questions which are only about the scheduling. That has been off-topic as it is, but thoughts about perhaps adjourning the TA case in its entirety?

20

MR MAW:

This matter has been at issue and signalled pretty clearly by the regional council as to the reason as to why it hasn't been making an exception for community water schemes. That has flowed right through – excuse the pun – in Mr de Pelsemaeker's evidence, so the TAs have been on notice that there is an issue here, and it is up to the TAs to rebut that from an evidential perspective.

25

The TAs have sought to put forward some evidence in relation to a range of uses, and for example, Ms East's memo, which I've put to Mr Heller today, refers to the range of uses. Mr Twose attaches to his evidence a report from the Dunedin City Council that provides a breakdown for the uses within that scheme, so there is evidence before the Court which I would describe as

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inconvenient to the case which counsel for the TAs is or has been pursuing today, and in terms of seeking to backfill that evidential gap, which may or may not now exist, my concern is delay at this process, and the time that we may lose, noting how much has been pushed into our last two weeks of the hearing.

5 THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

Q. Which is a fair amount. Well, I shall talk about it with my colleagues and let you know. I do not want to make a decision off the hoof. You have not got an interest in this, have you, Ms Baker-Galloway, would you?

A. No, ma'am, no, I defer to Mr Maw on that.

10 Q. Okay, so you agree with?

A. Yeah, agree with him, yes.

MS IRVING

Can I just add, on the scheduling issue, I mean, I appreciate the timing issue
 15 and all of those things, and, you know, I am as reluctant as anybody to push things out, but because I think we could consume a whole lot of extra time tomorrow trying to work through this that it actually might be a worse outcome in terms of getting this dealt with as efficiently as possible, and also have other implications for the cases of the parties to follow, who I understand have other
 20 timing issues and constraints with other cases and mediations and everything, and that if the TA case pushes on into tomorrow and takes a whole lot of that time, that we then have, you know, follow-on effects that arise from that. Mr Cooper might be able to share with you some of those scheduling challenges. So, you know, I appreciate it might appear like I'm playing for time,
 25 but I'm really trying to find a way of dealing with this as efficiently as possible so that we minimise the timetable blowout to the extent that we can.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. All right. I am wondering, thinking about it, is it worth hearing from Mr Twose to understand what his understanding was?

30 A. I've been thinking about that through the lens of whether my cost should follow hearing the facts from the underlying representatives from the councils before he can give a useful planning opinion.

Q. Strangely, he is on next.

A. Yes, which struck me as odd.

1700

Q. Yes.

5 A. In terms of the order.

Q. Mmm.

A. I would have thought he would follow those others.

Q. Yes the evidential basis having been established.

10 A. Yes. I mean I'm ready to cross him and the foundation in a sense the evidence today has given me enough, what I need to cross him on.

Q. Yes.

15 A. And I was ready to go, had we reached him today. So, yes I me– and just in terms of what it is the TAs might do if they are given an opportunity to file further supplementary evidence for that to be of assistance I would have thought it would need to look like a breakdown by category of use for each of the schemes for which a replacement permit is going to be required under the PC7 regime.

Q. Mm.

20 A. And also a breakdown in relation to the range of uses for which new schemes might be put. Now it strikes me that that information, well no to be fair I don't know how easy it will be to obtain that information. It's either there or it's not.

Q. And then in terms of its long-term planning or five-yearly cycle (inaudible 17:01:16).

25 A. No in terms of the breakdown of the uses for water within schemes –

Q. This is for – yes for new permits though. They – that information should be there. In the medium to long?

A. It ought to be there when for example, applications are lodged –

Q. Ah yes.

30 A. – but when one looks at previous applications in the light touch in terms of the explanation of uses, I'm not sure whether the TAs have really turned their minds to this question.

Q. Yes I know and that was also a matter of interest from us to hear from Mr Twose on – what sort of, what goes into an application for a resource

consent and yes. Was the evidential foundation to establish for example what is growth? And what are the – on a new permit, what uses? Yes, what information is it? Yes. We had an interesting conflict in Sterling where the engineer disagreed with the planner on that and I appreciated his candour and I could certainly understand where it wanted to take the scheme but it wasn't for the reasons of growth or that wasn't the primary motivating reason. I think, we'll talk about it amongst ourselves, the bench. There may be some value in seeing what – hearing from Mr Twose initially and perhaps recalling him when we can try and establish through him what he sees the four corners as being, which might differ from you and that's okay because you got client instructions and he's, you know a witness. Okay, so once we hear from him, maybe adjourn at that point, but we need to talk that through ourselves, lift and shift the TAs to somewhere else, might actually be to shift them into a JWS environment, where we can start to push around the corners of this matter.

A. Yeah, that may well assist, particularly the understanding of the case and where it's at, and I appreciate my friend will take some instructions overnight. The more clarity around what is being pursued by the territorial authorities, the more efficient this process is going to be. At the moment, I'm a little unclear as to what's being pursued, which necessitates broader cross-examination.

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. – finish our questions from Mr Heller and any re-examination that you may have, and we will hear from Mr Twose as the independent expert for the territorial authorities. We expect him to be able to provide assistance to the Court in terms of the ambit of the territorial authority's case, and then, at that point, probably consider an adjournment for directions as to supplementary evidence, if, in fact, it is needed as to new takes, and those takes which are to be reconcented, and may yet direct into a JWS environment. That might prove more useful, may direct into planning JWS where the issues can be debated there. Would it be useful to get

your client's instructions? I do not think there are going to be too many dairy sheds in Dunedin.

A. Not in the city.

5 Q. I might be wrong, though, it is a big city and it does include a lot of rural area.

A. Yes, yeah.

THE COURT: COMMISSIONER BUNTING TO MS IRVING

Q. Did you have to go to each of the councils separately?

A. Yes, in short.

10 Q. Yeah, okay.

THE COURT: JUDGE BORTHWICK TO MS IRVING

15 Q. Each of the councils, because of their demographics, may have different interests in the outcome here. It could just be Clutha which is holding up the others, if you like, if they actually do have an urban and potable water focus – potable water, which is actually consumed by people, focus, but maybe that is not right, maybe they want a supply for all uses. It would be good to know what your client's instructs are, and it may differ from territorial authority to territorial authority.

20 A. Yes. Well, I do know that there are some differences between the territorial authorities about the extent to which they are exposed to plan change 7, and so some of them may say, well, we're not worried because we're not having to renew any permits, irrespective of where things land. Others, it's an issue that is of particular concern to them because of the level of consenting that's going to be required, and the proportion of their urban communities that that impacts on.

25 Q. Yes, but that is their urban community, and they may not be interested in stoush over how many dairy sheds get supplied by the Clutha District Council. So that is what I mean by the differing interests, they may not be commensurate interests in terms of an outcome here, and you can try for client instructions or we can just see how we go with Mr Twose and his evidence and how that reflects the different character of each of the district councils and then take instructions.

30

A. Yes, well, I'll see what I can do overnight.

Q. And what about legal submissions? I mean, I know the time it would take me to work up these statutory principles and then apply them, so it not just a case of giving me them, because I probably know them, but actually applying them, and that's actually a big job.

5

A. Yes, and I know from the time I have spent in trying to unpack all the various definitions that it is not a straightforward task.

Q. No, no, it is not.

10

A. So I was not looking forward to the lack of sleep, although I am well used to it at the moment, I have an 18-month daughter, so maybe I have been training for this for the last 18 months.

Q. But again, it might be an unreasonable ask, so it may be that you should not be doing that overnight, because I know for the time it would take me to research the relevant principles that I thought applied, then apply them, having established what the facts are, it would not be a job I would do overnight, so you need to think about that, but you do need to come back to it, and it may well be that your issue is not competing definitions as between competing pieces of legislation and competing planning documents, it may well be that the issue is focused squarely on what is a community water supply so that is just an issue in chapters 5 and 6, 15 and possibly 12, I don't know, of the water plan or maybe it's not that, maybe it's something that you're introducing to this PC7, but yes.

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1710

A. Yes.

25

Q. Yes but we need to have a clear idea where you wish to go, we don't want to create the argument only to get it wrong?

A. Well and that's I think, I mean in some ways, that question may well be further informed by what instructions –

Q. Yes it's client interest.

30

A. Where we sort of land in terms of the extent to which community water supplies might be affected by this and the ambit of that, so –

Q. And also -

A. - in getting to the bottom of that issue is probably going to inform that question.

Q. In terms of your litigation risk, if, for example, you've got a municipal water supply for urban use, and it's squarely forming, falling within the MPS4, what is it called, Urban Development?

THE COURT: COMMISSIONER EDMONDS

5 A. UDC Urban Development (inaudible 17:11:23).

THE COURT: JUDGE BORTHWICK

Q. Whatever it is, it's squarely in that category, plus you've got 20% dairy shed wash down. Then the question then becomes, well if that's actually what it looks like, should you get a 30 year consent with that? Should the component dealing with, should it be a 30 year consent for what is falling within the urban capacity, should it be 30 years at all? Should it only be six if there's no land and water plan in play, in other words, no integrated plan and play, I don't know, you see the – maybe part of your problem is that there's just a water plan, there's not an integrated plan, that's to come, so why is it that TA's are putting up their hand wanting 30 year consents when the land part of the plan is to come?

A. Yes, well and I think their answer to you in relation to that would be because we have other functions, particularly making sure we're providing adequate water supply infrastructure in that instance.

20 Q. But the thing is you can't supply infrastructure until you've got the land park there?

A. Into a vacuum.

Q. So yes I mean that's part of the problem as I understand with this current plan, is that you're planning to an evidential vacuum. You want a 30 year consent for Stirling for urban growth, putting aside the difficulty with that, how is that scaled up? Is that in strategic planning? Is it in its long term plan? Did they have sewers on tap and with plans to put sewers in for whatever urban growth was meant to be coming to Cherry Lane in Balclutha (inaudible 17:13:10) –

30 **THE COURT: COMMISSIONER EDMONDS**

Q. And was the land re-zoned, as well, you know, because -

THE COURT: JUDGE BORTHWICK

Q. And was the land (inaudible 17:13:12) for that? Don't know, so you know on, so that whole integration, how is that known under this regional plan or is that to come?

5 A. I don't, I think, I would, yes I think –

Q. That's for planning, yes?

A. – in terms of the regional plan, no. The regional plan is, has -

Q. And in even in terms of the district plan?

A. Well the district plans are at various stages.

10 Q. Yes.

A. And some of the counsellors have done their spatial planning and that's talked about in some of the evidence, we've got Queenstown, what would you say, half way, two thirds of the way through their district plan review, so they're certainly are, they're down a pathway towards identifying where
 15 their growth is and Dunedin of course, as your Honour knows, is – and its review in variation 2 has been notified which identifies more land for zoning, so they are on, at different stages in that process, there is very little I think communication across the district planning documents and the regional planning documents currently, but I don't think that the TAs I think
 20 would say well they can't sit and wait for the regional planning documents to pick up new areas of zoning and so on, they have obligations themselves under the MPSUD if you we take an urban environment example to have that infrastructure available and they need to be doing that now and not waiting six years. So it's –

25 Q. So, yes.

A. – the process is in some ways tripping over one another but practically the Territorial Authorities need to be able to continue to progress their infrastructure planning and so it's a question of how we best reconcile those different challenges.

30 Q. And yes it is a question of how do we best reconcile it and is it just as simple as saying, well just give us a deeded permit?

A. Yes.

Q. Don't know.

A. Yes.

Q. Yes. Thirty year permit for what?

A. Mmm.

Q. Mmm.

A. Yes I understand that's a question you're exercised by.

5 Q. Oh very exercised by it. So anyway that's the plan going forward, we'll finish with questions for Mr Heller so he can get off. We'll have Mr Twose so we can have a look at his evidence, may refer it to our expert conferencing or we just may allow you opportunity to take client instructions to attend to the statutory interpretation matter and bring back
10 your client's – witnesses with or without – it may or may not include directions around the evidence about the need to establish a firm factual foundation in relation to new permits and also replacement consents?

A. Mmm.

Q. How does that sound?

15 A. Yes.

Q. Probably want to get that transcribed Freda for the record, so I can remember what I've just said. So questions, and you had, you might have actually, it may be that you can't pursue the minute –

A. Yes I won't pursue the teeny tiny writing –

20 Q. Yes.

A. – so I'll leave that issue I think, because I think it'll –

Q. Okay we can come back to that if we need to?

A. Yes.

THE COURT: JUDGE BORTHWICK

25 Q. Right, so questions from the Court Mr Heller and I'm going to hand you over to Commissioner Bunting.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING TO MR HELLER

30 Q. Yes it's going to be very brief which you'll be relieved to hear. Can I ask you to pull out from your evidence-in-chief, there's page 6, page 7 and page 19 which have got information about the Milton permit?

WITNESS REFERRED TO PAGES 6, 7 AND 19 FROM EVIDENCE-IN-CHIEF

Q. So I think in your early part of your evidence you were concerned about using the average maximum and the effect that that would have, is that a pretty brief summary of what it's about, yes?

A. Correct.

5 Q. And then the second part you said if you could use the actual maximum, that would solve your concerns, is that a fairly simple way of describing it?

A. Yes and that's in relation to the previous use or the past use up to current, present day.

10 Q. And that's what has been agreed in the - by the -

A. Yes as I understand it, yes.

Q. - your hydrology?

A. Yes.

15 Q. Yes. Can we just, I was just looking at those three plots in figures 1, 2 and 3 and one of them is daily take and then that one at the top of the next page, I think the heading's at the bottom of the previous page but anyway, that's monthly, is that correct?

A. Yes that's right, that's correct.

20 Q. And then you've got annual. You seem to have one particular record there which is substantially above the rest and when it's around about 2018 or thereabouts is that - would that be -

A. That's, yes, t-

Q. Can you read it, it's pretty small writing, but -\

A. 2018, '19?

25 Q. Yes somewhere about there.

A. 2018, '19, yes.

30 Q. Given, and there's one other spike further back in 2011 or something like that, I suppose the question is, when you come to look at that, would that, is there, would there be some reason that you need to investigate to say why is that one so much higher?

A. Yes definitely Commissioner. Most definitely.

Q. And how would that be captured for within the schedule? I mean you've got a method for capturing, exceedances, for margins or error and all this?

A. Yes.

Q. But is this an outlier or?

A. I'm, to the best of my ability –

Q. Yes.

5 A. – in reviewing that data, I don't believe it is an outlier. No just to give you
some context to this, the data that I received for this from the Regional
Council had already gone through the process of them pushing the button
for a PC7 outcome, so this data should be good. They've already gone
through and assessed that data. Now there was some – there's an
10 appendix A in my evidence which talks about some concerns that the
council had with the data but it was with the later 2021 data which I
haven't used in this evidence Sir. I reviewed that data, I found spikes,
gaps, outliers still contained within the data that the Regional Council had
supposedly pushed the button for PC7 and said, "this was all good". So
I've further gone through and checked that data and with removal of all of
15 the errors that I still found in that data, Sir, this is what I've ended up with
in terms of the record for that water supply.

1720

Q. So you haven't gone back and tried to gain some sort of understanding
as to why and make particular (inaudible 17:21:06)?

20 A. I haven't gone back to the District Council to get their breakdown if you
like in terms of whether or not that was, you know due to an unusual
circumstance –

Q. Yes.

25 A. – but I – the period that we're talking about is actually not a one-off period.
It's quite a reasonable duration of time and that again is a – that's a filter
in terms of looking at data and trying to establish where you've got
outliers, spikes and so forth. So, there's no indication that that isn't
correct. And it's certainly within the consented regime for the take, so it's
not exceeding the...

30 Q. The current consenting?

A. The current consent regime, yes.

Q. Okay.

A. And that's really just, you know in terms of being able to analyse data, it's
not just as simple as pushing a button.

Q. (inaudible 17:22:09).

A. I mean, you know, you need expert people to be able to go through this data and analyse it. It took me a day, per data set to go through and analyse it because we're looking at different types of data. We're looking at the instantaneous, the daily, the monthly and the annual data sets to actually look and see where there were errors and in some cases where the Regional Council had provided the summaries of the data, it didn't add up, some of the monthly volumes were inconsistent with the annual volumes and so on and so forth. So I've had to through and correct that. But, I'm not saying that that's a fault with the Regional Council that is just data and the point I'm trying to make her Sir is that there is no simple push of the button.

Q. Sure.

A. That's going to do that.

Q. I just wondered because it is – as it stands out rather that whether you might have gone and talked to the council, discussed with them, you know as there something in the system that caused that happen was it...

A. I've taken the audited data at face value Sir but I must admit, I did remove more errors and gaps that were presented to me in the data by the Regional Council.

Q. So in terms of the schedule as it's now agreed with your technical colleagues, that would represent then the maximum which would be the agreed figure under schedule 10A 4, a replacement permit?

A. Yes and that's for legitimate data.

Q. Okay well...

A. Yes, so as far as I can determine this data is legitimate for the purposes of the schedule 10A 4 assessment.

THE COURT: COMMISSIONER EDMONDS TO MR HELLER

Q. When you say *legitimate* do you mean that all the steps that have to be followed have been followed under the methodology at the beginning of – well throughout schedule 4A, under the heading *Methodology*?

A. Yes well, you know it's pointless having data that you're analysing that still contains errors. So all of those errors have to be removed or treated

to a standard where you are making a reasonable analysis. However in saying that, with this move with my caucusing colleagues that the taking of the maximums over the – for the periods in terms of the rates and the volumes, it does make it far simpler to analyse the data.

5 Q. So I'm just puzzled why you're referring to *legitimate* when you mean legitimate are you saying, provided you are following the methodology then the end result is what is legitimate?

A. I haven't – I think I made some comment about the methodology in my evidence. I can't remember what comments I made but what I'm saying
10 here is that if the methodology provides the sorts of data files that I ended up with from the Regional Council in respect of these water supplies, then I'm not confident that the methodology works. However in saying that, through caucusing, the methodology is sort of changed away from the averaging to the maximums and that does make it far easier to pinpoint
15 those particular items from a data set.

Q. So I had a question in relation to the methodology for calculating the rate of take and so we have a series of steps to go through, things to be calculated and removing --

A. Yes.

20 Q. – something and then rounding something else down and then we have four – a step which it seems that isn't to apply to applications for community water supplies. Now I am unclear as to the reason for that so, I wanted you to explain to me why it was felt to be necessary to make that step four not apply to applications for community water supplies. You
25 probably need to have this marked up version of what schedule A4 looks like, we provided with an order to answer this question. To you have that there?

A. No I don't. I'm a bit confused by that. The schedule should look, like along the lines of, for the rate it takes essentially the maximum of the
30 prevailing data set once it has been assessed for validity. And this is why I talk about data that is applicable to deriving those items. It's just a matter of removing all of the errors and what you're left with is the real data.

Q. So I'm sorry but I very confused as to what it is –

A. Okay.

Q. – that you're accepting of here or not accepting and what the reason is so, perhaps I'll just park that for the moment and go to another question that I have and that is the – in the *controlled activity rule* which is where this schedule comes into the play, if the community water supplies are going to go down the controlled activity rule path at all, there used to be a limitation on the water years for the data that could be considered and that was the period 1 July 2015 to 30 June 2020.

A. Yes.

Q. And so I was wanting to understand or, one whether that was something that you had seen as particularly important in terms of community water supplies and whether that was a reason for the striking out of the limited time period.

1730

A. In the technical expert caucusing, we all agreed that the, as large a length of dataset would be applicable to or for analysis of community water supply takes under the schedule and that is, I believe, included the water metering dataset right up to present day.

Q. Okay, but going back the other way.

A. Yes.

Q. So going backwards, how –

A. Going right back.

Q. – far back were you thinking you might be going?

A. Well, I think, you know, water metering regs around about 2010, then that certainly is a, is a point to go back to, some territorial authorities will have water metering prior to 2010 that they're collecting through these data systems and all their, their evaluation systems in house and that data is still good data.

Q. So you're suggesting just any data, not limited by the 2010 metering regulations or anything, just any data?

A. I believe that we agreed that a, that there wasn't a limit on, on that data period.

Q. So I guess my question is what might have happened between, at the stage at which you were initially exercising these consents and things that might have happened since that that in fact might have meant that you

were perhaps more efficient in terms of what you were taking under the approval. There may have been things that had been done to in fact reduce the, perhaps even the demand for water in terms of leak tracking down and fixing and those kinds of things.

5 A. Yes, that, that certainly can be –

Q. Yes.

A. – the –

Q. So –

A. – you know, part of that dataset. The, probably the largest variability is,
10 and I won't refer to it as seasonality because that's more akin to the primary sector. It is just the, I suppose the demand seasonality in the community water supply and then couple that with, with a growth factor over a period. That's where the major differences lie.

Q. So what you're suggesting is that you might have got efficiencies but
15 you've also got a growth in demand, whether it's a whole lot of people coming on holiday and requiring more water for –

A. That, that's certainly a seasonality.

Q. – example. Is that one thing?

A. That is a seasonality effect and there's also a compounding growth effect
20 on that as well.

Q. Of people servicing that?

A. Yes. I mean more people choosing to stay in Kaitangata for their holidays
but I mean it's a –

Q. Not a place I've ever thought of going but anyway. Sorry.

A. But it's, it's the example. The reality is that the larger the dataset gives
25 us more of an appreciation of where the water supply has come from and where it is going to. I would expect that the community water supplies that are experiencing growth would be, we'd be seeing the larger numbers in terms of the volumes, if they haven't yet reached a peak yield under
30 the consent, they would be hit later in the period of record but it's not necessarily so because this example that –

Q. The Milton example?

A. Yes. This example shows that it is not necessarily the, well, it's certainly
later in the piece. It's around 2020, 2019, 2018, 2019, but certainly not in

the latest annual period. So there's, whilst there's that growth component, there's also that variability year on year.

Q. So we're looking at what looks like a bit of a spike back in, is it 2010 or 2011 or something as well. Is that what we're looking at?

5 1735

A. Yes.

Q. And what do you think might be the reason for that?

A. I think that was just a very short period where a lot of water could have been used, or was used, and that may well have been, you know, where
10 storage reservoirs had been drawn down within the scheme.

Q. So refilling.

A. And you've got to refill.

Q. Refilling storage reservoirs.

A. And that is, you know, part of a scheme operation as well.

15 **THE COURT: COMMISSIONER BUNTING**

Q. (inaudible 17:35:35) seems to me that the later one (inaudible 17:35:40). If that was on my workload, I'd want to try and get behind the numbers. You know, you crunched the numbers okay, but wouldn't you want to go down to the council and say, look, this seems not typical of what's
20 happened over the last few years, and try and get some understanding of that, rather than just accepting the numbers at face value after you're done your sifting out and all that sort of stuff?

A. Yes, I agree, that would be an approach, perhaps, that the regional council would take as part of a reapplication process, I agree. However,
25 I've got no information to hand that suggests otherwise.

Q. So you've just taken the data and analysed it and checked it and so on without going to that step?

A. No, I haven't been back to the district council for them to validate, and I doubt that the district council will have another set of records to be able
30 to validate, sir, unless they had record of a specific event that may have caused that, but this is, as I said before, it's quite a long period of time, and it doesn't to me look like it would be a one-off event. It looks to me like it's a seasonal event.

Q. So you don't do a seasonal comparison to try – you know, that's another check, if you like.

A. I just have to take the data at face value. If I'm comfortable that all of the errors have been removed.

5 Q. Okay, all right, well, thank you.

A. And that's what the schedule –

Q. Provides for, yes, I know.

A. – 10.A.4.

10 Q. But this just sort of stuck out there and thought is there anything else that needs to be included?

A. Yeah, no, that is a valid point, you know, if you get things like that, you could possibly resolve that by going back to the applicant.

Q. Yes. Okay, thank you, thank you, your Honour.

THE COURT: JUDGE BORTHWICK

15 Q. It is late in the day, and so I think I have missed what your answer was to Commissioner Edmonds as to, I think, the reason why the community water supplies are excluded from step 4, which has been introduced into the schedule methodology. Could you just go over that again?

A. I'm actually surprised, what was step 4 again?

20 Q. Have you got the JWS in front of you?

A. Yes, I have the –

Q. It is incapable of being summarised.

A. That was 4?

Q. So you have got to look at it.

25 THE COURT: COMMISSIONER EDMONDS

This was the version that was attached to the planner's JWS, and then they had a set of provisions, and they'd changed the schedule 10.A.4.

THE COURT: JUDGE BORTHWICK

Q. So have you got the planner's JWS?

30 A. I've got the planner's, yes.

Q. Okay, and you've got their edits to the plan change?

A. Which page is that?

THE COURT: COMMISSIONER EDMONDS

It doesn't look like you do, it looks too skinny for that. Oh, well, maybe not.

THE COURT: JUDGE BORTHWICK

5 Q. Yours is too skinny. (inaudible 17:38:57), could you just have a check to see what the witness has got?

A. This is the joint witness statement planner's schedule 10.A.4.

Q. So you were wanting this. This is the attachment to the –

A. Ah.

10 **THE COURT: COMMISSIONER EDMONDS**

Q. Might be stapled on the back, might not.

A. I don't think so. Oh, what's that? Yeah, that looks like it's marked up.

THE COURT: JUDGE BORTHWICK

Q. That looks like it, okay, so just have a –

15 A. That's it?

Q. Yeah. So we are under the, again, it is not page numbered, but we are looking at schedule 10.A.4, methodology for calculating assessed actual usage for surface water and connected groundwater takes methodology. So it's clause 10.A.4.1, have you got that?

20 A. Yes.

Q. Yeah, last line: "Except that step 4 does not apply to community water supplies." What was your reason for that? Or what do you understand the reason to be for that?

A. Yeah. I was not aware of this, your Honour.

25

1740

THE COURT: COMMISSIONER EDMONDS

Q. This might just be the planner's take on what they thought had come out of your community water suppliers JWS, so if you have a different take

on it, perhaps you should explain to us what that is, what you think should be there.

- A. I'm actually uncertain as to why step 4 does not apply. I mean, there's obviously somewhere in step 4, which is not useful for community water supplies, or where we've got hydroelectricity generation.

THE COURT: JUDGE BORTHWICK

Q. Yeah, but the person they would have got that from is you, isn't it?

A. It is not.

Q. It is not?

- 10 A. Correct. I'm not sure what's going on here.

THE COURT: COMMISSIONER EDMONDS

Q. So would there, in other words, in your opinion, there, would there not be a problem having four applying to that step 4, applying to community water suppliers?

- 15 A. I would have to analyse what step 4 is.

Q. I guess I do appreciate that there were two of the technical witnesses that might have been involved in your community water suppliers JWS that were present at the planners conferencing, so they may have had an influence on this, I don't know.

20

MS IRVING:

I think 4 might have been a response to the issue in the primary sector conference around legitimate overtaking, and so that perhaps because Mr Wilson and Ms Bright were part of the planners' conference, they've sort of put in a solution to deal with the primary sector and just left out the community and hydro because that legitimate overtaking issue, I don't think kind of came up.

25

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Because they always legitimately overtake?

- 30 A. Yeah.

Q. Oh, no.

A. I mean, the legitimate overtaking thing –

Q. No, I think you could well be right.

A. And so I just –

Q. Okay.

5 THE COURT: COMMISSIONER EDMONDS

Q. Well, perhaps we won't trouble you any more.

A. I can explain now.

Q. All right, would you please explain?

A. I think where this is coming –

10 Q. Yes, do that, thank you.

A. – where this is coming from, it's looking at general patterns of taking, and so I think that at the planner's conference, there's been a recognition that there's a different pattern of taking that emerges from community water supplies. It's not the same as the primary sector pattern of taking, so
15 whilst you can apply 4 to the primary sector, I'm not making a statement about that, but that appears what it's been applied for. It's not necessarily applicable to community water supply or hydrogeneration because there isn't that set pattern, there is a variability.

THE COURT: JUDGE BORTHWICK

20 Okay, Mr Twose can confirm that tomorrow, though.

THE COURT: COMMISSIONER EDMONDS

Q. All right, well, thank you for helping me get to the bottom of that.

A. Thank you for pointing it out.

THE COURT: COMMISSIONER BUNTING

25 I think we were going to (inaudible 17:44:30).

THE COURT: JUDGE BORTHWICK

Q. Well, maybe. I think what had to happen was that it had to be taken back to the technical group, and for their confirmation, and it may be just a primary sector matter, as Ms Irving has said, of no (inaudible 17:44:52) to

community and hydro, but Mr Twose can confirm his own understanding about tomorrow.

QUESTIONS ARISING – NIL

THE COURT: JUDGE BORTHWICK

- 5 Q. Well, sorry to let you go in circumstances that you have got tomorrow, you know, with the consultancy, and I hope all that goes really well, yeah.
- A. I won't be available until mid/end of May, your Honour, from here, so that's the recovery time.
- Q. Yeah, well, that is important information.
- 10 A. Mid-May.
- Q. No, I have forgotten what the schedule looks like, it is just a blur at this stage. What is another week? Where are we running to? Second to last week of May? Okay, all right.
- A. The community water supplies and their proposals for schemes, we could
- 15 get that quite quickly in terms of which ones, but it's just that breakdown of the uses will take some time.
- Q. And I think it is the consideration from a planning perspective, whether all uses are, notwithstanding the plan to come, have long-term consents, or whether what is important to the territorial authorities is that the long-term
- 20 is secured for potable drinking water for human consumption and other urban uses, and shorter term consents, if that is possible. I do not know.
- A. It is all the same pipe, though. That's the issue.
- Q. Oh, I know, and I have reads Mr Twose's evidence, it is all the same pipes, so, sorry, we cannot do anything about that, and there is a risk in
- 25 maintaining that approach.
- A. I mean, be great if we could separate it out, different pipes, but –
- Q. Yeah, and it may well be the answer in six years, unless you can get creative.
- A. – really expensive, I wouldn't like to say.
- 30 Q. It is not about new infrastructure, it is about the ability of this council to go in and review permits in line with its new plan, and that is not really a

matter for you. It is now a matter that we have got quite conflicting evidence about, even for the primary sector.

A. I've only told you exactly what I know, your Honour. I mean, it is what it is in terms of those community schemes, but they're all quite different.

5 Q. Okay, all right, well, anyway, best of luck, and we will probably see you again, late May.

A. Thank you.

WITNESS EXCUSED

DISCUSSION - TIMING (17:47:50)

COURT ADJOURNS: 5.49 PM

COURT RESUMES ON WEDNESDAY 14 APRIL 2021 AT 9.02 AM**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Morning anything arising overnight? No, yes?

5 A. Two issues of housekeeping, first I need to seek leave for Ms Mallet's absence today, she is unavailable and secondly, I'd like to seek leave for Mr de Pelsemaeker to sit at the table at the back there.

Q. Yes.

A. If he may so that he can work away on drafting and such likes in a more comfortable manner.

10 Q. No that's fine I think we've got plenty of space now.

A. Very good thank you. That was all.

15 Q. Okay and one thing from me overnight it's just been noticed that transcript is not transcribing the submissions of counsel and they should be. So I'm not quite sure why that's not the case but evidently they were missed from the Dunedin hearing so we'll be looking to get that all transcribed but they are transcribing for this hearing so – my usual practice is transcribe everything yes. So there will be a fix on that shortly, hopefully, yes. Okay so we are with you Ms Irving.

20 MS IRVING CALLS**MATTHEW WILLIAM TWOSE (SWORN)**

Q. Good morning Mr Twose, your full name is Matthew William Twose.

A. It is.

25 Q. Yes and you are the technical director for planning at Harrison Grierson Limited based in Auckland?

A. Yes that's correct.

Q. You have prepared a brief of evidence dated 5 February for this hearing?

A. That's correct.

Q. And a supplementary brief of evidence dated 29 March 2021?

30 A. Yes.

Q. And you have also participated in and been a signatory to two joint witness statements, the first in relation to community water supplies dated 31 March 2021?

A. Yes.

Q. And joint witness conference and statement for the planners in relation to schedule 10A.4 –

A. That's correct, yes.

5 Q. – dated 8 April 2021.

A. Yes.

Q. Do you have any amendments that you wish to make to either your brief or supplementary brief of evidence?

10 A. Not per se to the – both the evidence-in-chief and the supplementary but to both of those I attached the track changes version of plan change 7 and I guess this reflects many of the other witnesses, that's been a movable beast so I signal there's been changes to that.

Q. Okay. So in light of that, will you confirm that...

THE COURT: JUDGE BORTHWICK TO MS IRVING

15 Q. We, sorry didn't follow that.

A. Well I think he's – clarify me if I'm wrong Mr Twose, I think just saying that we've got a number of versions of plan change 7 attached to his evidence but I suppose is in part in relation to the conferencing and so on...

20 Q. You'll have to have your witness confirm which version of plan change 7 he currently supports or whether there has been changes since in addition to the JWS – planners' JWS in addition to briefs that he has filed with attachments.

A. Okay.

Q. That's a question after you've confirmed all the evidence.

25 EXAMINATION CONTINUES: MS IRVING

Q. So will you confirm that your evidence-in-chief and supplementary brief of evidence are true and correct to your best of – knowledge and belief?

A. That's correct.

30 Q. So if we follow on then to the version of plan change 7, if there's that your currently working off which version would you consider to be your current position on plan change 7?

A. It's the version that's attached to the joint witness statement planners, dated 8th of April and the version itself I think was originally dated 1st of April but is the version attached to the JWS.

5 Q. Thank you. Now I don't have any further questions for you so I'll leave you for questions from my friend and the Court.

CROSS-EXAMINATION: MR MAW

10 Q. Good morning Mr Twose. Just want to make sure I've understood that which you have just explained to me in terms of the version of the plan change that is now supported and I understood you to say that you now support the version attached in appendix – as Appendix 1 to the joint witness statement from the planners? Have I...

A. The changes in that joint witness statement, yes I do.

15 Q. Yes. Now just so I'm really clear that is the version of plan change 7 that the territorial authorities are now pursuing or that's the version that you are now recommending as an independent expert?

A. Yes the – with the joint witness statement version, that was obviously within the scope of what we were able to discuss in the conferencing. So that addresses the schedule 10A for and obviously the policies and the conditions' rules. What we did not address in the joint witness statement was probably the key issue for the TAs which is around duration and so that that still remains as an issue to be resolved through the process. With – in prior editions of my, you know the two versions I attached originally to my evidence-in-chief and then to my supplementary, like the other planners involved, my wording changes around an exemption moved as – and (inaudible 09:09:45) essentially seeking a line of best fit with other witnesses who were seeking similar changes, all with a purpose of ensuring it's – concise and integrated as possible.

0910

30 Q. I understand, and that's helpful, I just need to be really careful that I've understood what it is you are now recommending in terms of the community water supplies and whether they should be excluded from the provisions of plan change 7 or not, because when I read your

supplementary evidence in the version of the plan change contained therein, there is what I describe as a carve out for those uses.

A. Correct.

5 Q. Whereas when I look at the joint witness statement, that carve out no longer exists, and I don't understand. I think what you're telling is that you've moved beyond a carve out for community water supplies and you're content with the schedule in plan change 7 as addressing the needs of community water supply, but you're flagging an issue with duration.

10 A. That's correct. So just, again, it's more just to reemphasise that point, because I do accept it is an important one, the issue of duration, there were fixed positions which had been clearly conveyed to the Court through prior evidence, so that was, from what I can see from the agenda, that was put to one side.

15 Q. Yes.

A. What the joint witness statements – and I think quite successfully – progressed, firstly with the technical experts and the community water supply conference, and then subsequently, the one with the planner, is to go through the workability, if I can call it that, particularly of the rules and also the schedule, an outcome of the JWS, and quite significantly, in my view, is a definition, now, of community water supplies. So that's not, as you say, a carve out, but we've now got proposed in PC7 a very specific reference to community water supplies, and what are they?

20 Q. So just so I'm following, you're no longer recommending that community water supplies be excluded from the provisions of plan change 7?

A. Well, yes, I am, so the position is around, and to quality that, it is squarely on the issue of duration so for further specificity, the carve out, to use that term, would be to the policy 10.A.2.2 and 2.3, which relates to that term of six years, either, in the case of 2.2, for new consents, or 2.3 for applications for renewed deemed permits for consents expiring 30 4 December '25.

Q. So let's just focus on the policy 2.2, so the new consents, is it still your opinion that plan change 7 and that policy should not apply to those applications?

A. When I looked at PC7, and I'll need to expand out on this to give a full response to you, Mr Maw, I mean, put simply, the purpose of PC7, at the heart of it, was to address this imminent issue, as we know, around the expiry of the deemed permit in October 2021. I think, apart from that, the whole focus and energy of the ORC would be on preparing the new regional land and water plan. In saying that, the focus has brought in a number of quite key considerations from the perspective of the TAs, and in the scope of what I'm dealing with, community water supplies, and that, I think, just reflects the regulatory statutory landscape that we're in with two quite significant NPSs, the urban development and the freshwater management, both of which have to be given effect to in, amongst other plans, the regional plan and water plan. From my perspective, the key thing with PC7 is to ensure there's as best or as smooth a transition to that new regional plan. That is the focus in my view, for the ORC. When I looked at the general tenor of PC7 it was very much around its process orientated, it needs to be kept very clear, kept very simple, as narrow as possible. In contemplating – so essentially to me there were two pathways, the first is community water supplies you just simply carve it out as you say, exclude it. The second you incorporate it, you accommodate it, you anticipate and provide for it within the scope of PC7. For me, that second option put simply is possible but it would involve Plan Change 7 essentially close significant component of it being devoted to community water supply, so possibly with a new, I don't know, an RDA or DA consent regime inserted into that plan, I also had the broader consideration of Te Ngnana o te Wai under the freshwater management MPS, that all councils with regional functions, regional council's unitary authorities are all having to address and it seemed to me that this issue is not one that's specific only to the ORC and through the witness statement we ended up with a definition of community water suppliers in the document and that's addressed some of the workabilities but within that, but – and so for me that just solely leaves the question of duration. It is appropriate that community water suppliers, their term is six years along with everyone else.

0915

Q. Now that's a very lengthy answer to a question as to whether policy 2. – whether your evidence was that policy 2.2 should still apply to community takes and your answer is leaving me, I guess in a state of confusion as to precisely what it is the Territorial Authorities are seeking by way of relief for Plan Change 7. So I've got the joint witness statement and I understand that and I've got your supplementary evidence and I understand you to be saying that's no longer the version you're pursuing, but I now hear you telling me that there needs to be significant additional text put into Plan Change 7 may be a restricted discretionary or a discretionary activity to manage community water supplies and I haven't seen any text or any recommended wording in relation to any of those options, so I'm left really unclear about precisely what it is that the Territorial Authorities are seeking and you are recommending to this Court in terms of what to do with Plan Change 7. So we might have to go a little slower in terms of step by step.

A. Sure, yes.

Q. So that I can try and get a picture of what it is that you are recommended?

A. Okay, so just to clarify, it is, I signalled there were two pathways but the first pathway which is a carve out and exclusion is both the TA's relief and my view. I outlined pathway 2 just to give an indication of what an alternative could be and the implications of that.

Q. Right, so it is your opinion that the carve out for the community water schemes are that PC7 just simply should not apply to those schemes, is that – that's your primary opinion?

A. That's correct yes.

Q. And in terms of the version of Plan Change 7 that I should then look at, that achieves the purpose, which version is it?

A. It would be the one attached to my statement of Supplementary Evidence where I sought to incorporate changes that aligned with those from the witness for the hydro.

Q. Right and then so I've understood what you've described as a second pathway, as an alternative option, if the Court doesn't accept that community water supply should be excluded from the reach of

Plan Change 7, your evidence is that a more bespoke set of provisions would be required to manage consenting of those schemes?

A. That's correct yes.

Q. And also applications for new water permits for those schemes?

5 A. Yes that's correct.

Q. But in relation to the wording that would achieve that outcome, you haven't yet put forward wording that would achieve that?

A. No, no I haven't and I would, as I said, this issue essentially runs to the core of implementing the MPSFM. If the Court wished to go down that
10 second pathway, to me practically it sounds like the – rather than just myself preparing provisions, it would be almost what I call a Governmental response, eg, MFE, ORC and myself on behalf of the TAs. The three of us in another witness conferencing session because these are complex provisions.

15 Q. I understand the complexity, but in terms of putting forward provisions for consideration, the opportunity for that is typically in evidence isn't it?

A. That's correct yes.

Q. And to be fair, you've put forward in evidence your primary position which is, and I'll describe it as a complete carve out from PC7 in relation to
20 community water schemes?

A. That's correct for the reasons I indicated.

Q. Now in terms of those reasons, there are a number of layers to those reasons, as I read your evidence. You referred to some provisions in the regional policy statement and the partially operative regional policy
25 statement?

A. Yes.

Q. You've referred to some provisions in the national policy statement for urban development?

A. Correct.

30 Q. The national policy statement for fresh water management, and you've also taken into account evidence provided by other witnesses for the Territorial Authorities in relation to their operational desires in terms of infrastructure and future infrastructure plans?

A. That's correct yes.

- Q. Now I'm going to need to explore each of those subjects with you, but before I get onto that, I want to explore with you and get an understanding of what your understanding of the uses to which water is put when water is supplied by community schemes across the Otago region. Now you've
- 5 addressed this issue in your evidence at paragraph 49, if my memory serves me correctly?
- A. Correct yes.
- Q. And you've referred to a memo attached to your evidence from somebody by the name of Ms East?
- 10 A. That's correct and she is a policy analyst at Dunedin City Council.
- Q. Now she's not before this Court, but you have read her statement and you give – (inaudible 09:22:57) essentially adopted that information?
- A. That's correct. I saw it as information and quite informative, so I adopt.
- Q. Yes and when you look at that range of uses, how would you describe
- 15 them?
- A. All encompassing.
- Q. And when you think about the drinking water component of those uses, do you have any factual information that informs you what proportion of the community water takes are for drinking water consumption?
- 20 A. Looking across the five TAs, the document that I did source was attached to my Supplementary Evidence which was the water conservation management plan, again from Dunedin. There were some caveats in that plan and around the accuracy of the data but they indicated that 57% was for household residential which I would categorise as being drinking water and then the remaining just for completeness, 19% I think was described
- 25 as unaccounted for and then the residual industrial.
- Q. We'll come back to that document shortly, but you were in Court yesterday when Mr Heller was giving evidence?
- A. That's correct yes.
- 30 Q. And I mean you will have heard the evidence he gave in relation to the Stirling scheme?
- A. That's correct yes.
- Q. And there, the proportion of water for drinking water or perhaps household needs approximately 15% in relation to that scheme?

A. That's correct yes.

Q. So I want to explore a little with you, the information that you've appended to your Supplementary Statement of Evidence in relation to the Dunedin water supply and if I can take you to page 16 of that document and there you'll see section 2.2, "Current Water Consumption" and you were bang on with your 57% as indicating the proportion of water in relation to this – I'm going to say this scheme, but perhaps we could go back a step, what's your understanding as to the scheme or schemes that have been taken into account in relation to the proportional use of water in section 2.2?

0925

A. In terms of those categories, the three categories?

Q. No, just what geographic area are we looking at? Are you looking at a single water supply for Dunedin City Council, or are we looking at a range of schemes owned and operated by Dunedin City Council?

A. My understanding from this document is it's urban Dunedin areas.

Q. Okay, so we now look at section 2.2, and we can see there a helpful pie chart showing the 57% for residential need, we have unaccounted use at 19% and commercial industrial at 24%. Now, when you look at that residential component, is that what you look at and think of as the drinking water component for human consumption?

A. That would not be the complete use of water, as we know, but it would be for human uses, so it could be, obviously, ablutions, or it could be cleaning a vehicle or something amenity-related, such as gardening.

Q. When you think about the irrigation of sports fields and the like, would that fit into that category?

A. I would have thought it would fit – unfortunately, the pie chart doesn't have another slice in it for what I would perhaps term recreation or other sort of public uses, but just by way of exclusion, I wouldn't have thought that's residential. Possibly, it fits in commercial or industrial.

Q. So, staying on the residential, this document gives us some other clues as to what might be included in that, and you've touched on one of those uses, being the water used on gardens and such like. Do you recall the percentage of that component that's used for garden watering?

A. No, I don't.

5 Q. I'll take you to page 27, and you'll see there, under the heading "demand strategy – managing customer demand" you'll see some bullet points towards the bottom of the page. In the paragraph immediately preceding those bullet points, you'll see a reference to garden watering.

A. Correct, yes, I see it, yeah.

Q. And that accounts for 25% of total domestic usage, so a quarter of the 57% is used for, we know here, garden watering.

A. Yes.

10 Q. So if we're thinking about the proportion being used for human consumption, human drinking water needs, we'd deduct off that 25% of the 57%.

A. If it was limited solely to drinking water, then yes, that's correct.

15 Q. And so, when we think about the water being used for human consumption, in this context, it's not the majority use, if you're thinking about it as more than 50% of the take.

A. Yes, and I mean, there could be a quibble around, coming back to human consumption, gardening, as in, you know, growing vegetables or crops, but I think, more realistically, it's gardening as recreation as amenity, so yes, I accept that.

20 Q. I want to turn back to page 16, and you'll see there, underneath of the pie chart, some further information about the uses to which some of the commercial and industrial sites' water is placed, and you'll see in that paragraph reference to including some farm/irrigation activities. So some of the 24% water is used for those types of activities.

A. Yes, that's correct, and it's also referenced in Ms East's memo as well, she acknowledged that as well.

Q. And when you think about farm and irrigation type activities, do you think about those as more rural-based activities?

30 A. Yes.

Q. But we don't know from looking at this document the proportion of water being used for those types of uses, all we know is that included within the range of uses are those types of activities.

A. Yes, that's correct.

Q. And you have no further information or evidence in relation to the further breakdown of water use in Dunedin city?

A. That's correct, I don't.

5 Q. And you have no further evidence or information in relation to the breakdown of the various uses across other schemes in the Otago region?

A. No, I don't.

10 Q. So what we do know is that there are a range of uses, and that, in relation to the two examples where we do have that breakdown, the drinking water component is either a relatively minor percentage, 15% in the context of the Stirling scheme, or somewhere in the order of 40%, potentially, in relation to the Dunedin City Council scheme?

A. That's correct.

15 Q. So when you're thinking about how community water supplies should then be treated in terms of the planning framework, were you clear in your mind when you were preparing your evidence that there was a wide range of uses to which the water was being put, extending into areas well beyond the purpose for human consumption?

A. Yes, I was.

20 Q. And when you carried out your analysis of the planning documents in relation to the provisions that you say support treating community water supplies differently, did you have in your mind the range of uses that the water was being put to?

25 A. Yes, I did, amongst other considerations, including the practical one around severability, which was referenced in both my evidence and also in the discussion yesterday.

Q. Perhaps highlights the biggest challenge here, it's the same pipe taking the water from the source.

A. That's correct.

30 Q. And thus you accept there is a real tension in terms of how those other uses should be treated in the context of water allocation?

A. Yes, that's correct.

Q. And that also creates a tension in terms of how plan change 7 should approach this issue?

A. Yes, it does, I agree with that, but I just, as a further additional comment to that, is the fact that as I said at the outset, PC7, although it does not give full effect to the NPSFM, given timing, it will be transitioning to a new plan that has to, and this issue will be fair and square, needing to be addressed.

5

Q. Rest assured, we will come back to the NPSFM, but not just yet. Do you accept that one of the functions of the regional council is the manage the use of water or the uses to which water is put, including for the purposes of managing the quality of water?

10

A. Yes.

Q. I want to turn now to the provisions in the proposed regional policy statement, or I should say the partially operative regional policy statement. You have noted some of those provisions in your evidence-in-chief, and your counsel referred the Court to some of those provisions yesterday, and I want to start by getting an understanding as to what is covered or what your understanding is in terms of the meaning of infrastructure, as that term is used within the document, and to start that exercise, I thought we might usefully start with the definitions in that document. Right, so we're in the partially operative regional policy statement, which is in common bundle 2.

15

20

WITNESS REFERRED TO REGIONAL POLICY STATEMENT

A. It's on its way, thank you.

Q. Tab 3. I'd like to start on page, common bundle, 649. Now, you're working off the common bundle?

25

A. That's correct.

Q. Very good.

A. Page 649.

Q. Thank you, and there, you'll see a definition of infrastructure, and you'll see, if you cast your eyes down to subparagraph (e), a reference to a water supply distribution system, including a system for irrigation. Now, tell me if you've read that definition or you're familiar with the definition?

30

A. Yes, I am.

Q. That's the relevant part of the definition in terms of community water supply schemes.

A. It would be a subset of (e), yes, that's correct.

Q. And when you look at (e), do you have in your mind that when infrastructure is used, it's the pipes and the system that is being referred to, it's not the water or the allocation of water that's conveyed through the system?

5

A. Yes, that's correct.

Q. And when we move over to page CB615, there's a further definition that was touched on yesterday.

A. Sorry, just bear with me, I just have to find the bundle with that in it.

10

Q. Sure.

A. Sorry, 6?

Q. 615.

A. Oh, yes.

Q. Three pages over.

15

A. I have it now, thank you.

Q. Yeah, and you'll see there the definition of "municipal infrastructure," and it's subparagraph (a) that's relevant in relation to community water supply schemes.

A. Yes.

20

Q. Now, when you read that definition, so that incorporates the definition of infrastructure, so we're talking about the pipes and the systems, not the water?

A. That's correct, yes.

Q. And then when we look at subparagraph (a), it further restricts the parts of a scheme which are covered by the definition of municipal infrastructure to the conveyance infrastructure between source and its point of treatment.

25

A. Yes.

Q. But not beyond that point.

30

A. Yes.

Q. So, in simple terms, I understand that it's perhaps covering the pipe between the river or the intake gallery and the treatment plant, but it's not covering the pipes and the distribution system beyond the treatment plant?

A. That would be my understanding, yes.

Q. So when we're looking at the policies which refer to municipal infrastructure, we're looking about policies dealing with the pipes and the conveyance infrastructure between source and treatment station?

5 A. Yes.

Q. And that's how those policies – that's the relevant part of the policy that should be being looked at in the context of these schemes?

A. Yes, that's correct.

10 Q. So, with those definitions in mind, I'd like to go back to the policies that were referred to yesterday and in your evidence, policy 4.3.1 and 4.3.2, common bundle 562, and you'll see – sorry, are you with me?

0940

A. Yes, I am, thank you.

15 Q. So starting with policy 4.3.1, manage infrastructure activities, that's manage the activities of the pipes and the system, not manage the abstraction of water –

A. That's correct.

20 Q. – or the allocation of water, and then when we look at policy 4.3.2, there's a reference there to nationally and regionally significant infrastructure, which incorporates reference to municipal infrastructure.

A. Yes.

Q. And likewise, that's not dealing with the supply of water or the allocation of water.

A. Correct.

25 Q. And when you look at policy 4.3.4, adverse effects of nationally and regionally significant infrastructure, when you look down that list, it's focused on the effects of the infrastructure itself, as opposed to effects of taking or allocating water.

A. Yes, that's correct.

30 Q. So when you think about these policies and their relevance in the context of plan change 7, they don't really assist us, do they, in terms of the allocation or the supply of water, which is really what plan change 7 is about.

A. Purely in terms of the management and control of water takes, yes, that's correct.

Q. But that's not the end of the matter in terms of the proposed RPS. There are some policies that do deal with the allocation was water within what
5 I'll describe as the water chapter, and that's chapter 6, as I understand it, and you've referred to this in your evidence-in-chief at your para 20.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Sorry, which plan are we looking at now?

A. That's a very good question.

10 Q. Is that chapter 6 of your operative water plan?

A. I think it's chapter 6 of the regional policy statement.

Q. Regional policy statement, okay.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Actually, I've taken you back in time to the regional policy statement, and
15 that's what you're referring to in this.

A. The operative?

Q. Yes, in this part of your evidence.

A. Yeah.

Q. And you accept that chapter 6 is the chapter dealing with water and the
20 allocation of water?

A. Yes.

Q. And you note in your paragraph, it's at the end of your para 80, which is easiest to find if you look at page 22 of your evidence-in-chief.

A. Yes.

25 Q. You will see a heading there, "proposed regional policy statement."

A. Yes.

Q. So the paragraph immediately preceding that.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Sorry, I am not quite with you yet. We are talking about the operative
30 regional –

A. Policy statement.

- Q. So we are not talking about the document found at tab 3, that is another document?
- A. It is a different document.
- Q. Okay, right. Which tab would you like us to go to?
- 5 A. It is possible that that document is not in the common bundle.
- Q. That is okay.
- A. So I've been working off the relevant provisions that were pulled through into the brief of evidence.
- Q. Yeah, well, what we could do is take a copy of what you need, because
10 the line of examination is really important. So you are examining now from about para 80 onwards, are you?
- A. Yes.
- Q. Of the evidence-in-chief?
- A. Yes.
- 15 Q. And so that commences the explanation to objective 6: "for one (inaudible 09:46:51) to be able to meet economic and social, cultural wellbeing of Otago's people." Am I on the right page?
- A. You're at the right place, yes.
- Q. Okay, and so you have got two choices, is the text which has been
20 included in the brief of evidence comprehensive, or should be simply get a photocopy or flick onto the screen the operative RPS? Because we can do that, if we had enough time. Unfortunately, it is not in the common bundle, so we would be needing to take it out of Google. So how would you like to proceed?
- 25 A. I might put my question to the witness, and then, depending on the answer, we might have to go back through the provisions. They are relevant to the issue, looking at the way that they've been pulled through in the evidence-in-chief, I suspect that it's picking out the relevant parts as opposed to the full text.
- 30 Q. Yes, that is what I am concerned about.
- A. Which is the risk.
- Q. That is the risk, you might not have the whole context, and context is everything.
- A. I might check with the witness.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So when you've pulled out these relevant provisions, is this the full text of these provisions, or is some of the material excluded on the basis that you didn't consider it relevant?

5 A. I'd be cautious and say it's probably the later. I've tried to be succinct and not verbatim dropped statutory text into the document, so I couldn't be confident on that.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Okay, so do you want to see if we can get it up on the screen?

10 A. Yeah, let's see if we can do that.

Q. So, Frida and Charlotte, do you know what we are after? We are after the operative RPS for Otago. There are two documents, there is one for proposed, and one is an operative one, and we are wanting to put that up onto the screen, the operative. We are in the fully operative one now.

15 A. Yes, the fully operative.

Q. Yeah, we are sort of backtracking in time.

MS IRVING:

I'm just looking at the council's webpage, so if you search "regional policy statement" on Google, but it does say that the regional policy statement for Otago 1998 is now revoked, so things have perhaps moved on.

20

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Moved on. If you want to check that through with Mr de Pelsemaeker, he will know.

25 A. So there isn't actually a copy of it on the website anymore.

Q. No, no, I'm struggling to see it when I search.

A. I have a hard copy back in the office.

Q. No, no, no.

30 MR MAW:

That's probably why it's missing from the bundle.

THE COURT: JUDGE BORTHWICK TO MR DE PELSEMAEKER

Q. Okay, so Mr de Pelsemaeker is not shaking his head. It has been revoked, has it, the operative plan, the operative RPS?

5 A. It was only the freshwater chapter that was not operative in the proposed RPS, but it is now, effectively.

Q. Oh, we are talking about your old document, your old RPS.

A. Yeah, so it's been, yeah.

Q. It is gone, you have revoked it?

A. I will double check, if that's okay.

10 Q. Okay.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. This, of course, the timing and sequencing of your questions are important. Do you want to take a five-minute break whilst Mr de Pelsemaeker checks through?

15 A. Yeah, that would be helpful, and I can then move on to the proposed regional policy statement, which also includes some relevant provisions.

Q. Okay.

MS IRVING:

20 Just perhaps on a timing, public notice of the now operative one was the 5th of March, so it's come in following the evidence-in-chief, which is perhaps the source of confusion.

THE COURT: JUDGE BORTHWICK TO MR MAW

25 Q. Okay, yeah, this leapfrogging happens. Okay, so I'll take a five-minute break and come back, and Mr de Pelsemaeker can confirm that that is so.

COURT ADJOURNS: 9.51 AM

COURT RESUMES: 10.04 AM

MR MAW:

Thank you for the indulgence.

5 **THE COURT: JUDGE BORTHWICK**

That's okay.

MR MAW:

We have on the screen the partially operative Otago Regional Policy Statement
10 2019, amended as at 15 March 2021.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Okay, right. So it's that which is in the bundle as opposed to some 20 year
old RPS which is gone is that right?

A. Yes, and so the 20 year old that's gone is not in the bundle.

15 Q. Yes.

A. So that's convenient.

Q. That means you don't have to –

A. Because it's not a relevant matter, so I don't need to go through chapter 6
of it.

20 Q. Yes.

A. In relation to whether the objectives and policies in that document gave
any preference to community water supply schemes.

THE COURT: JUDGE BORTHWICK TO MR TWOSE

Q. Yes, and so just Mr Twose, can you confirm that there is a section –
25 whether there is a section of your evidence which no longer is relevant
because the plan is being withdrawn or whatever the technical term is?

A. Thank you.

Q. What are the paragraphs. If that is so, what is the paragraphs?

A. Thank you, yes so that in my evidence-in-chief commencing at
30 paragraph 74 and concluding at paragraph 80 on page 22 of my
evidence-in-chief.

Q. Okay, so 74 through to paragraph 80 inclusive, no longer – I get, to be deleted? Because the plan has been withdrawn.

A. Correct.

Q. Okay.

5

MR MAW:

“Revoked” is the term used.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. “Revoked”. I was going to say there will be some...

10 A. It is a bit of an anomaly in terms of the language in the Act.

Q. Yes, no that’s okay.

A. But we say they are “revoked”.

Q. I have never worked for a regional council or district council so I don’t know. So anyway, it has been revoked?

15 A. Gone, right.

Q. Therefore not relevant. Okay. And so now we’re looking at, and indeed there’s now an amended plan as of 15th of March 2021 and those provisions are not in the bundle that are on the screen is that right?

A. Yes although –

20 Q. Yes.

A. To be fair, the provisions in the bundle will be pretty close to what’s on the screen, I just haven’t done the comparative analysis in terms of what’s changed.

Q. Yes, okay.

25 A. What I will do is I will provide to the Court hard copies of the 15 March version.

Q. Yes, okay.

A. But in terms of the questions for the witness, as we work through the provisions we’ll have them on the screen. I’ve quickly cast my eyes over them and they appear to be the same in terms of the partially-operative version, so yes.

30

Q. Yes.

A. They do not appear to have been changed.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Now, just to check with you, Mr Twose. Have you analysed this most recent document or were you unaware that that had become partially operative since you put pen to paper in your evidence-in-chief?

5 A. I haven't re-reviewed it, but yes like everyone else I did look at the website last night and saw the revoked, yes.

Q. Very good. One step better than me, I'm afraid. All right. So in your evidence-in-chief you've stepped through what you say are the relevant provisions in terms of the partially – or the, I'm going to call it the
10 “partially-operative regional policy statement”. And just as I've said that, it's probably the operative regional policy statement, the –

THE COURT: COMMISSIONER EDMONDS TO MR MAW

Q. (inaudible 10:07:41).

A. No, no I've confused myself.

15 CROSS-EXAMINATION CONTINUES: MR MAW

Q. It's the operative regional policy statement.

A. We'll possibly compromise, operative in part. But it's again subject to Council reservation, I guess.

Q. I think it has the seal on it. Yes, no it will be, it's the – yes. It's a quirk,
20 it's still referred to in the foot, the footer as the: “Partially Operative Otago Regional Policy Statement”.

MS IRVING:

If you look at – scroll down a bit further, there are some provisions that remain
25 subject to court proceedings (inaudible 10:08:21).

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Yes, exactly on the page that we're on there.

A. Yes.

Q. Is that something to do with Otago Harbour or something?

30

MR MAW:

It's the Port.

THE COURT: JUDGE BORTHWICK

5 Port, okay.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. Right, partially operative. Now, you step through the relevant provisions from your paragraph 81. Now, we've already traversed those in parts in chapter 4 in relation to infrastructure so we're not going to go back over those provisions but we are going to look at the provisions relating to water allocation. And you've set out in your evidence what you consider to be the relevant objectives and policies. The first one that you refer to is objective 1.1?

A. Yeah.

15 Q. And when you read objective 1.1 on its face it's a very broad objective?

A. That's correct.

Q. And it does not single out community water schemes in terms of the wording in the objective?

THE COURT: JUDGE BORTHWICK TO MR MAW

20 Q. So perhaps if we could just throw that up on the screen, objective 1.1?

A. It's page 19 of the electronic?

Q. Yes.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. There we have it. Can you see that from where you're?

25 **WITNESS REFERRED TO OBJECTIVE 1.1**

A. Thank you. Yes.

Q. Yes very good, so when you read that objective, it's a very broad objective as perhaps you'd anticipate in a Regional Policy Statement, it's not drilling down to a level of detail in terms of specific activities?

30 1010

A. That's correct and it just reflects section 59 and it's 1.1 so it's up front.

Q. Yes so some colour is given to that objective and the policies that then follow, policy 1.1.1 relates to economic wellbeing and again a fairly broad policy which doesn't single out community water schemes?

A. Yes, that's correct.

5 Q. And so we then move to policy 1.2, 1.1.2 and we see a little more specificity in relation to that policy?

A. Yes, that's correct.

Q. There's no direct reference to community water schemes in that policy?

A. No, it's still talking very generally around resources in the round.

10 Q. But in fairness you have referred to subparagraph (e) which you point to in your evidence promoting community resilience and the need to secure resources for the reasonable needs for human wellbeing so that's starting to add a little more colour but again it's cast in fairly broad language and that could apply to a range of uses beyond community water schemes?

15 A. Yes, that's right. I'm looking at that and thinking resources, you need to secure water resources as amongst many other resources for human wellbeing.

Q. And it's not about allocation of resources, it's as much about securing the health of resources if we think about a river system?

20 A. That's correct and it's also with the preference to undertaking subdivision use and development, well in fact everything under section 59. It is around giving the fundamentals I'd call it to the community.

Q. So we then move through into chapter 3 which deals with the values including intrinsic values of ecosystems and natural resources recognised and maintained or enhanced. If we scroll through to page 31 of the electronic. Are you familiar with this objective?

25 A. Correct.

Q. And again when you read this objective this is about securing important values, ecosystems and natural resources so it's about sustaining the natural environment. It's not an objective dealing with allocation of water resource?

30 A. That's correct.

Q. And you've referred to policy 3.1.3 which does then provide a little further colour in relation to the water allocation and use and there are three

subparagraphs of that policy and those are the provisions that you've pulled through into your evidence-in-chief?

A. Yes, that's correct.

5 Q. And when you look at those, the language still is very broad, not directed specifically at community water schemes?

A. That's correct.

10 Q. And then you have also referred to 3.1.3 subparagraph (b) which is the avoiding of over allocation and phasing out existing over allocation. Do you accept that community water supplies may need to play their part in relation to how over allocation is phased out?

A. Yes, that's correct yeah and they also, the NPS FM which we'll get to obviously.

15 Q. And then for completeness you've referred to policy 3.1.4 in relation to water shortage and again this is not dealing with the allocation upfront of water resources. This is policy providing some, a policy position as to how water shortage issues may be managed in the event of water shortages?

A. That's correct.

20 Q. So when you look at the objectives and the policies and chapter 1 and chapter 3, those objectives and policies do not single out community water supply schemes for priority treatment when it comes to the allocation of freshwater resources?

25 A. They, they don't by themselves but we've touched on the chapter 4 provisions around infrastructure but no with, with the tapes themselves there isn't that privacy.

Q. Now just so we're on the same page, you did accept that the chapter 4 provisions dealing with infrastructure did not relate to matters associated with the allocation of water?

A. That's correct, purely on infrastructure.

30 Q. I want to move on now to the National Policy Statement for urban development. Now that is in the common bundle volume or at least volume 2 of my folder, no volume 3 I'm sorry, tab 6.

WITNESS REFERRED TO VOLUME 3, TAB 6

Q. Do you have that, yes?

A. I do thank you.

Q. Well done. Now if I understand your evidence-in-chief correctly, you point to the NPS UD as a reason as to why you say the allocation of water to community water scheme should be treated differently or excluded from plan change 7 so I've understood that that's one of the reasons?

A. Yes, that's correct.

Q. I just want to work through to understand how you reached that conclusion by looking quite closely at some of these provisions and I want to start with the definitions again so if we look at page 6 of the document, CB787, you'll see there some definitions. The first one I want to take you to is development capacity?

A. Correct.

Q. And you'll see that that definition in subparagraph (b) incorporates the provision of adequate development infrastructure to support the development of land for housing or business use and development infrastructure is then further defined immediately below?

1020

A. Yes that's correct.

Q. And when you look at subparagraph (a) of that definition, network infrastructure for water supply relevantly, that's one of the provisions that you've referred to in your evidence?

A. Correct, yes.

Q. And when you look at this definition, you accept it's the infrastructure, not the actual water supply, that's the focus of the definition?

A. That's correct and that just reflects it is in MPS regarding urban development, yes.

Q. So just to tease that out a little bit, you say the MPSUD is about the infrastructure, it's not about the allocation or supply of water?

A. That's correct yes.

Q. I want to move to part 3 of the document and again this part is dealing with the requirement for providing development capacity?

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Sorry which – where are we at?

A. Page number 14, CB795

Q. Yes.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. Now this part incorporates a number of the definitions that are set out at the front of the document including the two definitions that I've taken you to, you accept the focus again here is on infrastructure, it's not about water allocation or water supply?

A. Yes that's correct.

10 Q. And then when you turn over the page to part 3.4, you'll see that this part deals with the meaning of plan enabled and infrastructure ready?

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Do you want us to read the whole thing?

A. I might just step – it might help actually because I do step through it.

Q. Okay. So just bear with us. Okay.

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

Q. Now throughout this clause there's reference to short term, medium term and long term, those phrases are defined, so short term is what?

A. Up to three years, medium three to 10, long 10 to 30.

20 Q. Thank you. So when we look at the obligation in relation to development capacity being infrastructure ready, so I'm at subclause 3, it steps through the requirements in relation to infrastructure ready in relation to each of those time frames?

A. That's correct.

25 Q. So in the short term, subparagraph (a), the requirement there, so between up to year 3, is that there is adequate existing development infrastructure to support the development of the land, so the infrastructure needs to be in place in the short term –

A. Yes.

Q. – that's the obligation?

30 A. Yes, good to go put simply.

Q. Yes and then we look at the medium term, so years 3 to 10, the obligation changes doesn't it?

A. Yes correct.

5 Q. So the infrastructure can either be in place or alternatively, funding for the adequate infrastructure to support development of the land is identified in an LTP?

A. Yes that's correct and actually one of the quite principal concepts within this is to integrate the long term planning infrastructure provision with land use planning.

10 Q. But the obligation in terms of having infrastructure ready, it's in a three year window isn't it? So the infrastructure doesn't need to be ready to go into the medium term, but the funding needs to be in place or identified in an LTP?

A. That's correct yes.

15 Q. Now when you think about what a regional council is to do with the MPSUD, the document itself provides some indication as to when it might need to give effect to the document and perhaps how it might need to give effect to the document and some information or guidance is provided in part 4 of the document in relation to timing, I can take you to page 30,
20 CB811?

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. CB811 was it?

A. Yes.

CROSS-EXAMINATION CONTINUES: MR MAW

25 Q. And there in clause 4.1 1 it indicates the relevant documents that might need to be amended to give effect to the MPSUD?

A. Yes.

Q. And when you look at those documents, can you explain to me what documents they are?

30 A. Well yes the reference is to local authorities, so both regional in the relevant district or city councils, so they're at the top of the hierarchy, the

regional policy statement and then in terms of the urban development and this is land use planning, so it's the district plan to give effect.

Q. And so what's missing from that list is reference to a regional plan?

A. That's correct.

5 Q. And Plan Change 7 is a regional plan?

A. That's correct.

Q. And when we think about what a regional plan's doing and what Plan Change 7 in particular is doing, it's dealing with the allocation of water isn't it?

10 A. That's correct.

Q. And the MPSUD is dealing with infrastructure, not the allocation of water?

A. Yes that's correct.

Q. And so it has no relevance to Plan Change 7 does it?

A. To the – in terms of the – I guess the, the pathways because behind this is obviously section 30 and 31 of the RMA which – and in the case of the Regional Council it has dual responsibilities around infrastructure planning as well as obviously the control and management of water takes amongst other things, so it's that integration aspect which I think is the key here because no council creates infrastructure out of the ether without the purpose behind it which is provided for both and to ensure conveyance, but I do accept the fact that the actual management and consenting of water takes, so it's separate to this.

20

Q. In terms of the integrated management that you refer to, that you say sits in behind all councils' functions, in terms of the MPSUD, that provides a framework for establishing a future development strategy or an FDS?

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1030

A. That's correct, yes.

Q. And in the Otago region and others when is that required to be completed by?

30

A. Well, that would be under the 5th – sorry, I'll just get back to the provision, but it'll be the standard three years, sorry, six years is the – just bear with me I'll just find the FDS.

Q. Sure.

A. So that's under, it's on the common bundle page 799 and on that page sub-part 4, it's section 3.12, sub-1 which sets out the requirement.

Q. And so when you think about the establishment of the FDS in the Otago region, it hasn't been done yet?

5 A. Correct.

Q. But it is going to be done over that period? Your obligation is to do it?

A. Is to give effect, yes, it will have to do it, yes.

Q. And in a sense, when you think more broadly about the regional council's planning framework to come, so the new land and water regional plan, the FDS will dovetail quite nicely into the timing around that document won't it?

A. Within six years, yes and that comes back to the overall integrated management function.

Q. Do you accept it's important not to preclude the opportunity for the appropriate integrated management of resources to be achieved across the region?

A. Sorry, could you please the question, I didn't catch the last bit?

Q. Do you accept – I'll put it a different way. It's important to ensure that the integrated management of resources across the region is important?

20 A. Yes.

Q. And it will be important not to preclude the integrated management of resources occurring in terms of enabling a future planning framework to be implemented?

A. Yes, that's correct.

25 Q. Let's move to the national policy statement for Freshwater Management and you address this document in your evidence-in-chief. Perhaps I could take you to your paragraph 7 in your summary on page 2.

A. Sorry, I'm just not – be the desk, apologies. Yes.

Q. And here you record your opinion that the forthcoming land and water plan is the most efficient and effective way to ensure water takes community water supplies are managed in accordance with the NPS for fresh water and in particular the hierarchy of obligations that hiccup to te mana o te wai?

30 A. That's correct, that is my view.

Q. So when you think about how that framework might be implemented, it will need to be implemented in a timely fashion in order to give effect to te mana o te wai?

5 A. That's correct, in accordance with the requirements in the RMA and the process that's set out in the RMA as well.

Q. And so when you think about that and you think about the importance of that document in the context of the allocation of fresh water, it's important isn't it that fresh water is not allocated for significant lengths of time or significant durations which would preclude the giving effect to or the achievement of the Te Mana O Te Wai outcomes?

10 A. The, with regard to community water supplies I think the key thing with, as we know with Te Mana is the three tiers, so absolutely the first tier, the health and wellbeing of the water space. That's, that is, that is the default and that fundamental concept, but then you do have two gradations below that. As we know with the health needs of people above the social and economic benefit of communities.

1035

Q. Mhm.

20 A. So, the issue then becomes, is, when to achieve priority 1, in instances where you do have — well I'll put water quality to one side if you've got degradation but with water quantity then decisions have to be made around allocation and I think it's outside this, this exercise but it, this sense of priority runs counter to you know like for example of first in, first served type approach. It's, it's that you know it is a — in summary a fundamental change to help water managements exercised in this country.

25 Q. But isn't what the territorial authorities are trying to do here is to perpetuate a, first in first served, philosophy by seeking long-term consents for community water schemes?

30 A. I think they, they have their drivers and they were discussed yesterday, so for example um, they're not in the business of generating new, new water use per se. They're to manage it, they're there, they're, they're there to — they've got the requirements to provide infrastructure as we've, as we've just discussed for you know to accommodate growth. To even

accommodate growth that they may not themselves have planned for and then have a competitiveness margin and the like. What that then means is that the TA's role means that they, they do need, they do need that certainty of the take for their, for their, you know for infrastructure so that they can confidently say that they have sufficient to, you know to accommodate the growth or all their existing communities.

5

Q. So do you say that a tier 2 Te Mana o te Wai requirement or priority trumps a tier 1 in the context of a community take?

A. Absolutely not. That's the priority remains, the health and wellbeing of the water.

10

Q. You can't get to priority 2 until you've resolved priority 1 and the health needs of the water body, can you?

A. That's correct.

Q. And then when you think about the breadth of uses to which water is being put in these community schemes, it's only a small proportion or a smaller proportion that might fit within tier 2.

15

A. It, I think this comes back to just the reality of, of, as, as, I think as we discussed previously, the infrastructure is geared up around single delivery systems, so you're then looking at, well what is it principally used for? and there was very much a sense of you know, a gradation and I think as we discussed yesterday from water supply schemes where the supply (inaudible 10:39:17) which you think would fit within the second tier priority is probably ancillary to the primary which would be, you know essentially rural irrigation purposes. The reverse of that is the major urban schemes which we've just talked about.

20

25

Q. Well is that really correct when you think about the percentages we talked about in relation to the Dunedin City urban area?

A. Well, in terms of the absolute percentages, I think it's more the end use. The provision of the water, it's treated, it's potable, it's circulated to the community. Beyond that, unless there's, you know, exceptions like shortages and things like that, generally, a TA won't involve itself in regulating or manage that, and then there's economic aspect, metered water is obviously expensive, it's not used, generally, for irrigation and

30

the like, or there are other restricted or unrestricted supply schemes in place.

1040

Q. So do you subscribe to the view that once the water is treated, it's water for drinking consumption?

5

A. No, I couldn't say that, given the breadth of uses, which the TA folk have indicated.

Q. And this is where there's a problem or a challenge, when you look at the three priorities in terms of Te Mana o te Wai, perhaps the majority of the uses to which water is put would fit into category or tier 3.

10

A. That could well be the case, yes.

Q. And again, that makes the potential achievement of the tier 1 responsibility in terms of the water-centric approach and putting the health needs of the water body first even further at risk?

15

A. To my way of thinking, there's two sides to the ledger, so with this priority system, with Te Mana o te Wai, the health needs of people, it would be reasonable to me that if priority is accorded to community water supplies, and accepting the fact that that would be at most a principal use or a primary use, you know, for the most part, is used for, you know, drinking or other human consumptive purposes, but there are many other uses. I think the other side of the ledger to this is –

20

Q. Wait, what do you mean by "the most part" in that context? It's important.

A. I'm thinking in terms of if you're defining something (inaudible 10:42:16) primarily, then that would be what I would consider to be – to a primary purpose is, you know, this is the chief purpose, or if it's primarily, then it's for the most part.

25

Q. Does that also – and it's relevant to the definition –

A. Correct.

Q. – but we'll explore it a little bit now, so do you see that as the main part, say, by volume of the water taken, or are you thinking of it in a different sense?

30

A. I think it would be primarily in terms of volume in this case, or possibly rate of take, but more so, I would have thought just the quantum of water that's been used under a headline of community water supplies.

Q. And the quantum of water used for what?

A. If it's principally for human drinking water, then it'll be human consumptive purposes, such as some, obviously, drinking, but also health and those sorts of things.

5 THE COURT: JUDGE BORTHWICK

Q. Sorry, that's for human consumption, but also?

A. Well, for example, ablutions and the like. So water coming into a residence is used for cleaning or for washing, drinking and the like, food preparation, all of which would, in a general sense, fit within that, because
 10 I'm always going back to the Te Mana o te Wai priority too, which refers to the health needs of people, so from what I can see, drinking water is not exclusive, it's an inclusive list, but it's of that nature, health needs of people.

CROSS-EXAMINATION CONTINUES: MR MAW

15 Q. When you think about the three priorities, Te Mana o te Wai, do you accept that priority 1 or tier 1 needs to be secured before you move on to tier 2 and tier 3?

A. Well, yes, you'd need to know what the baseline is in terms of health and wellbeing.

20 Q. And when you think about the work programme that the Otago Regional Council has committed to, it will be seeking to establish the allocation framework to give effect to Te Mana o te Wai in its new land and water regional plan?

A. Yes, that's correct, and the associated work, as you reference, the
 25 freshwater management units.

Q. And that, perhaps, is why you say that it is that plan that is the most efficient and effective way to ensure that water takes for community water supplies are managed in accordance with the NPSFM 2020, and you'll link to that document.

30 A. Yes, that's correct, yeah.

Q. Yeah.

A. And just further to that, as I mentioned before, potentially down the track, there could be hard choices to be made between community water supplies that would generally in tier 2 and tier 3 uses.

5 Q. And that'll be part of the allocation discussion and consideration when it comes to dealing with that framework.

A. Yes, that's correct.

10 Q. And if you're thinking about, more broadly, an over-allocation of water within a catchment, and you start to think about how that over-allocation might be dealt with, do you accept that those priorities might inform how the over allocation is resolved?

A. I would have thought so, given that it is a very clear hierarchy.

Q. And so, again, it's important that tier 3 priorities are not locked in place for significant periods of time prior to that framework being established.

A. That's correct, yes.

15 Q. I want to move next to understand how you consider an application for a community water supply would be processed and treated if community water supplies are carved out from the reach of plan change 7. So I read your evidence and understand your opinion to be that plan change 7 shouldn't apply to community water takes, at which stage, they will be
20 reconseented under the operative regional plan water.

A. That's correct, yes.

Q. And in preparing your evidence, have you reviewed any of the recent applications that have been lodged with the council to renew water permits?

25 A. No, I haven't.

Q. Do you have any understanding of knowledge of the durations that have been sought in relation to these?

A. No, I haven't.

30 Q. Are you familiar with the Environment Court's decision dealing with the Stirling community water supply scheme?

A. Yes, I am, I read that back in January and reread it more recently.

Q. Do you recall the duration sought in that?

A. Consent was granted for 25, and then the appeal related to seeking the full term available under the RMA, 35 years.

Q. And so the effect of long-term durations will lock in place the allocation made to schemes for that period of time, absent a review?

A. Absent a review, yes, that's correct.

5 Q. Now, you've considered the relevant provisions in chapter 6 of the regional plan water in your evidence-in-chief, and in particular, at your para 103, you have set out and current policy which guides the decision-making as to the duration of a consent to take water.

A. Yes, that's correct, 6.4.19.

10 Q. And when you read that policy, there's nothing in that policy that pushes towards short-term consents?

1050

15 A. Well in some ways this is a policy drafting but each of these policies has a fairly lengthy explanation that follows it but just purely looking at policy 6.4.19 it's just simply the consideration under (a) the duration, the purpose of the use and a TA, that making application we're pointing to the 50 plus year life frame of the infrastructure and then possibly also (f) the cost of that provision of that infrastructure so that would be the fundament – fund, the rationale for seeking that long term but there is, yeah, but I agree with that, that's how I can make the comment.

20 Q. So the platform is there for the argument to be made for 35 year permits?

A. Well that's correct. I mean at the end it's – any applicant can apply for that term, seek to apply for that term.

25 Q. Yes and based on the only application that perhaps you're familiar with having peruse the decision in *Stirling* again confirms or highlights that the territorial authorities are seeking lengthy durations on permits for these schemes?

A. To give themselves certainty around their infrastructure investment then yes.

30 Q. So if we think about your drafting of or your recommendations in terms of the drafting of plan change 7, in respect to community schemes plan change 7 simply is not relevant, that's how I read your supplementary evidence?

A. It comes back to those two pathways and –

Q. Oh no let's not get into the second pathway.

A. Okay so – no, no.

Q. Let's stay with your principal –

5 A. I have no intention of either Mr Maw but no it, yes, that's correct so in terms of the, in term of community water supplies it is and again comes back to the linkage with the responsibilities and drivers you could call it for TAs to plan and provide for growth.

Q. So in a sense business as usual under the current operative plan?

A. In terms of applying for resource consents for takes yes.

10 Q. Yes. And the experience tells us, lengthy duration sought in relation to that infrastructure?

A. It would well be, yes.

Q. So that would be the likely outcome of the business as usual or the status pro approach continuing if plan change 7 doesn't apply to community schemes?

15 A. That would be the case, yes.

20 Q. I want to move now to the second pathway that we just said we weren't going to talk about but we will so this is the work from the joint conferencing of the planners and just to be clear this is an alternative in the event that the community water schemes are brought into the plan change 7 regime and work was undertaken to ensure that the methodology in schedule 10(a)(4) would be able to calculate an appropriate rate and/or volume of water for the community water schemes?

A. Yep.

25 Q. And my understanding is that you accept that the schedule as now amended would be fit for purpose in that regard?

A. That's correct, yes.

30 Q. Now a question was asked by Commissioner Edmonds yesterday in relation to step 4 which is the step in the methodology used to remove atypical data and that is on –

A. It's not page numbered sorry.

Q. It's on page 9, every second, the even pages are numbered for reasons I can't explain but you have the methodology there?

A. I do thank you, yes.

Q. And you'll see there that step 4 doesn't apply to community water supplies or where the primary purpose is for hydroelectricity?

A. Yes, that's correct.

5 Q. Now Mr Heller was unable to advise the Court why that carve out was there because my understanding is he wasn't at the planning conferences for obvious reasons. Are you able to provide some clarity as to why the step 4 isn't used or isn't to apply to community water schemes?

10 A. Yes, I, I certainly can and this, you know without breaching the confidentiality of the joint, I can confirm there was a considerable amount of time on this topic so if we, if you look at the methodology and go back to step 3, the preceding one, there's a change there so if I just read it out. "Any measurement that exceeds the authorised (consented rate)" and then there's a cross out of the words "by less than the margin of error of the water meter," "is rounded down to the authorised rate" so that, if I can, 15 if I can convey what our discussions is that, that meant the headroom of the consent there were pop, exceedances pop out switch, could be poor data, could be errors whatever. They're rounded down. Step 4, again if I can just notionally say this is the headroom of the volume or take of water were ones that were within that and that was occasions and this 20 applies to both hydro and community water supplies where you get random spikes that go up but are still within the headroom and then the discussion was around, well how do you then address those? Community water supply is simply because you do end up with peak spikes, a small community might I don't know, have a large event on a certain day and have the whole equivalent of the population turn up, it's still within that 25 ceiling of the overall allocation but then how do you, when you're working out the take over a long duration of say a year, how then do you then treat that and so the discussion around 4 was actually set out in methodology for that and there seemed to me and two schools of thought around this 30 atypical data is a matter of professional judgment of a hydrologist as to what do you do when you get these instances of error in data as opposed to let's be really clear and set out a methodology for the hydrological staff or consultants to manage this which is the steps for sub (a) to (g).

Q. So why wasn't that relevant for the community water? I just didn't quite – I've lost the thread at some point there?

5 A. It's simply because over a continuum of a year you have this little, small blip which you, which from a hydrologist they, it's atypical data it's an error so rather than counting that as being, you know so again the, the headline is up here, you've got a year, say a calendar year of results and it's a reasonably you know seasonal thing and then suddenly you've got a little blip that goes up or another one here, is how do you address those? That was my understanding of the conversation.

10 Q. So it's perhaps a valid blip if I could describe it poorly I must say compared to say just an error blip. There's a legitimate reason for it in the context of community supplies?

15 A. That's, that's right yeah so it was to ensure that the measurements reflected are a maximum use but without the data being distorted by small individual one-offs, valid or not valid.

1100

THE COURT ADDRESSES MR MAW (11:00:13)

Q. Time for a break?

A. Yeah, that'd be great.

20 Q. I know that other five minute break we just worked and you guys were working as well. Right and I take it that you have access to coffee if you need it.

A. Yes.

Q. We will take a quarter of an hour.

25 **COURT ADJOURNS: 11.00 AM**

COURT RESUMES: 11.16 AM**CROSS-EXAMINATION CONTINUES: MR MAW**

- 5 Q. All right, we will move onto the definition of community water supply as recommended by the planners in the joint witness statement and it's on page 8 of that document. Now I want to understand each of the constituent parts of this definition to get an understanding for how broad or how narrow it is or how it might be applied and how it might be interpreted because if it's to come through into plan change 7, it's important that it says what the draft is meant it to say, if that makes sense.
- 10 You would accept that that's a desirable outcome?
- A. Yes, that's right.
- Q. So when we look at the first few words there, it means a water supply for the primary purpose of supplying drinking water to communities and start with Primary Purpose and I'm interested to understand what the primary purpose means and we touched on this briefly before the tea adjournment. So when you read the phrase Primary Purpose in the
- 15 context of this definition, what do you understand it to mean?
- A. Well, it's first drinking.
- Q. Sorry, I missed that.
- 20 A. Oh, sorry, correction, it's first drinking essentially, it is the key purpose.
- Q. Now the key purpose in the context of a community take, you were here yesterday when Mr Heller gave evidence?
- A. That's correct, I was.
- Q. Now he read this as meaning "a range of takes could all be the primary
- 25 purpose". Do you share his opinion on what this phrase means?
- A. In short, no, I don't.
- Q. So when you read the primary purpose, it's a single purpose?
- A. The – well, as a primary purpose, it is singular, but from the exercise we went through, it is the key purpose. So it is a singular, but it is the key,
- 30 the key one.
- Q. So then when you think about the breakdown of the uses to which water is put, do you think the uses and the proportion of water used for those uses is relevant to determining the primary purpose?

A. Well, yes, but I think also with the definition as you mentioned at the outset three components and if it assists, we were mindful of trying to strike a line – no, sorry, nothing even as something as that, but there’s an overall quantum from the Stirling example where it’s down at 20% in essentially, the primary purpose is a rural irrigation as I recall it versus the Dunedin or Queenstown end of the spectrum.

5

Q. So let’s press *pause* now because I’m interested in the application of this definition to the Stirling scheme. So when you look at the proportionate use of water there what would you say is the primary purpose of that scheme, and it might help if you have the table 1 from Mr Heller’s evidence before the Environment Court which is exhibit TA1 which I’ve filed somewhere.

10

A. Got it.

Q. Page 11.

15

A. Sorry, just bear with me, I’ll just read through part of the -

Q. Yes, please.

A. – part of it, I haven’t seen it. Sorry, I won’t scribble on it, I’m just making a notation to the paragraph. Thank you I’m at table 1.

Q. I’ve done some Maths while you were reading that and I’m going to give you some percentages in relation to each of the three uses in that table. So the proportion of properties/households water within the scheme 208/1353 represents 15%. The next category stock water and dairy shed uses 80% and the remainder in the last category 5%. So when you look at this scheme by way of example, what do you say the primary purpose of this scheme is?

20

25

A. Well, it’s the 80% of the stock and dairy shed uses.

Q. Now, hypothetically, what happens if the numbers in the first two boxes, the household water scheme and the stock water percentage start to get closer together? How is it that the phrase “the primary purpose” might be interpreted? So is it the one that simply take the largest volume for a particular use or was it more nuance than that?

30

A. I think it would be more nuance than that. The difficulty and the sole reason why you’ve got in this definition “general terms such as primary purpose” is the difficulty of attaching some metrics around that. So if the

(inaudible 11:23:53) water supply is the single key purpose and you've got two, like two components that say 50% each, then you do have a, yes, you do have an issue there in terms of determining. I think in that case you've essentially got two, two takes of water: One for community and one for the rural use.

5

Q. In your experience have those uses ever been separately consented even though they're taken through the same pipe?

A. No.

10

Q. So the only other example we have to work with is the Dunedin City Council percentages. So we apply the same exercise there. My recollection was 57% for what's described as "residential uses". When you think about that 57% though and you look at the community water supply definition, it means the water supply primary purpose of supplying drinking water, would you have to look at the drinking water component of that 57% as a first step?

15

1125

A. Well yes, yes you would but you'd um, the overall evaluation 'cos it does, the definition does proceed on to address the industrial and business uses so it would in some total pass, but yes you're correct and my view is that the starting point would be to ask yourself the question: "what component is for drinking water?"

20

Q. So, what we know so far in relation to that 57% is that 25% of the 57% is used for watering of gardens so that gets the 57 down to about 40% give or take. Now, there will no doubt be other domestic uses that are not uses for drinking water supply such that that 40% may in reality be less than that. So, hypothetically, what happens to that supply if the drinking water component's in the order of 20, 25% does that cause an issue in terms of this definition?

25

A. As terms of it being community water supply which is inclusive of industrial and business, again fact and degree would be difficult to ascertain but I think it would s — the primary purpose would still be drinking, drinking water.

30

Q. Is the intention to have for example the Dunedin scheme covered by this definition. That, is that...

A. I, when I look at the three parts of it, the primary purpose including industrial and business the second part where it references TA's with their responsibilities under the statutes, and then thirdly that that one metric around 25 or more people, 60, then yes, it would.

5 Q. So help me understand the relevance of the reference to industrial and business uses, is that additive to the drinking water component such that those activities together are the primary purpose?

A. The primary purpose remains drinking water to communities and then the comma, that may also be used for industrial and business uses is starting
10 to send a signal that there's a range of uses additional and I wouldn't term them ancillary 'cos they're not, but additional uses.

Q. I guess the point I'm grappling with here is going back to the Dunedin City Council example if only 20 to 25% of the residential component is drinking water, do you accept there might be an
15 interpretation that says, well at that level it's not the primary purpose of that take?

A. That could arise where say for example there was a I suppose an out, out of centre development which was primarily industrial or commercial in it's nature, with possibly a small component residential then I that would be
20 a valid thing to look at, what is — is it a take for a community or is it for an industrial or business use. An airport for example would be a good example of that.

THE COURT: JUDGE BORTHWICK

Q. I am struggling a little because there has been no explanation of the
25 community water supply and the wording which has agreed and so, did I hear you say that drinking water supplied to a range of uses including for consumption by households, industry and commerce are all examples of primary purpose of supplying drinking water? Or were you saying something else?

30 A. Well I think it, this I think is a, Ma'am, is a fundamental issue is that it's — nothing is clearly delineated so the definition that's arisen through the joint witness statement is drinking water to communities —

Q. Well that would actually.

A. Yeah.

Q. I will just stop you there.

A. That's all right.

5 Q. Well it maybe different down in Otago but where I am from councils either do or do not treat water to a drinking water standard.

A. Yeah.

Q. And I can think of plenty of communities where you are not meant to drink the tap water, and it says so.

A. Yeah.

10 Q. But assuming in Otago everything is treated to a standard fit for human consumption, all water delivered by a Territorial Authority in Otago is drinking water to communities? Would all water, which is treated water satisfy the first part of the definition "primary purpose of supplying drinking water to the communities" because it has all been treated?

15 A. Yes.

Q. Or is it something different?

A. I think it would be that, yes.

Q. Okay, that is helpful so that we are sort of back onto Ms Irving's definition?

A. Yes.

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

Q. Which I am now grappling with, because my understanding Mr Twose was that you had a different view of what drinking water, treated drinking water was if it was used for those other uses. I put a question to you earlier this morning about that.

25 A. Mhm.

Q. So let me see if I can clarify what your opinion on this topic is. Do you consider that once drinking water is treated, irrespective of it's use, it would fit within the first part of the definition being "supply for the primary purpose of supplying drinking water to communities?"

30 A. Yes, yes I would.

Q. So then when we apply that situation to the Stirling example, all of that water is treated at which stage the Stirling example would fit within the definition.

A. Except that it's not the primary purpose of the overall — mean it's, it's literally an 80/20 rule in that case.

5 Q. You're going to have to help me understand then, when I read the definition how I come to a different conclusion to that scheme compared to the Dunedin scheme.

A. I think it comes down to the primary, the primary purpose and that's if you've got — with Stirling and 80% use going into rural irrigation that's not drinking.

Q. But you've just told the Court that —

10 A. Yeah.

Q. Once it's treated it's drinking water irrespective of it's use, so then the enquiry doesn't go any further.

A. If, yeah, it's the proceeding to a water supply for the primary purpose of supplying drinking water.

15 **THE COURT: JUDGE BORTHWICK**

Q. Would it help if we just took out of the definition the word drinking, so now the primary purpose is one of water supply?

A. Well that would probably —

20 Q. And is that closer to what you are thinking so the TA is delivering water, its primary purpose is what? Is, so it means, I see, yes, in fact you may already be there. So it means water supply, so any water supply for the primary purpose of supplying drinking water. So it is any water, regardless of it's treatment but the primary purpose is drinking water for human consumption.

25 A. Essen —

Q. Is that kind of more where you are at?

A. Yes, essentially so that would include drinking, sanitation, household uses.

30 Q. But if it was just — and to use an over the top sort of example, if it was solely water supply for the primary purpose of supplying a dairy shed, it would not qualify?

A. That's correct and as — when we ran through this in the conferencing, it was I think acknowledged by most the folk present that it's really difficult

to have a metric that establishes a line and so hence there were the three components. The first sentence that Mr Maw has been talking about and then the second one which narrows it to the Territorial Authorities with their statutory responsibilities and then thirdly there is a metric which is essentially bringing over from the regional plan that 25 people. So in other words that's — it is trying to distinguish between what in the circumstances where an assertion is made that this is a community, this is a community water supply therefore we should be exempted from PC7, but the reality is that its primary purpose is something else, albeit a component of its supply does go to for example, households.

1135

CROSS-EXAMINATION CONTINUES: MR MAW

Q. What I'm struggling with is how we draw the line between Stirling and the Dunedin City Council scheme through the lens of this definition. Because if your evidence is that Stirling shouldn't be captured but the Dunedin City Council example should be captured, I don't understand on your reasoning how the interpretation of this definition draws that distinction?

A. I can only say that it would be literally the 80/20 rule in both, in both cases. So with Dunedin, they record 19 as well un – unknown, that leaves the remaining 80% industrial, business and residential. For Stirling from what I could see from the Court's decision and then more recently from Mr Heller's statement is the other way around.

Q. So, you put the industrial and the business use on the domestic? Or the –

A. No, I'm just saying the –

Q. On the community supply line?

A. They would be part of the bundle of uses for a – that a community water supply would, would service.

Q. When you look at the definition for "industrial and business uses", do you accept that water use for dairy shed washdown is a business use?

A. It is, yes.

Q. Water used for irrigation would be a business use?

A. That's correct.

Q. And so on the definition, those activities are captured by the definition?

A. In terms of the primary purpose? No I wouldn't have thought so, because they're not drinking, per se drinking water to communities. So that would be distinct from let's say a bottling plant or something else, which does have – or dry-cleaning or something like that in an urban setting which does require water which has a – I think one of the, and this, it is, it challenged us in the joint witness statement for obvious reasons to arrive at even this definition. But as I've mentioned before, the key driver was to look ahead to the MPS FM again and the 3 tier to priority and have something in place that gives some certainty as to what is tier 2 as distinct from tier 3.

Q. All right. So your definition, sorry, the joint definition.

A. Yes.

Q. And you're first up, which is –

A. Thank you.

Q. An honour and a privilege I'm sure. The definition set out there includes dairy shed washdown and dairy shed use. It fits within those words, but you say they shouldn't fit within those, that's not what was meant?

A. That's not what was meant, no. And I get, I guess even though I am first up as a planning witness, as I suspect other planning witnesses will defer to myself or Mr de Pelsemaeker. So I'll answer as best I can at this stage. I mean, one of – as I say, all unitary authorities, regional councils have the responsibility in the same time. We have a plethora of various water, drinking water-related definitions not just in Otago but you, know, across the country. The genesis of this water supply definition was actually one I actually referenced in my supplementary evidence at para 29, which was from the operative Waikato RPS where it's termed domestic or municipal supply. And aside from terminology such as a reticulated supply rather than a water supply, and also it provides for publicly or privately owned, the general ingredients are there as per the joint witness statement definition.

1140

THE COURT: JUDGE BORTHWICK TO MR TWOSE AND MR MAW

Q. Save that the title is limiting isn't it, "Domestic and Municipal"?

MR MAW:

5 A. Yes it is.

WITNESS:

A. That's correct, yes.

THE COURT: JUDGE BORTHWICK

10 Q. And that's actually the key component missing?

A. Yes.

Q. Possibly missing in your view?

A. Yes, yes.

CROSS-EXAMINATION CONTINUES: MR MAW

15 Q. When you think about a municipal use and you think about the Dunedin scheme and you will recall there's reference to some of that water being used for farms and irrigation -

A. Yes.

Q. - there's still a challenge in terms of whether they'd be in or out?

20 A. I don't think so because at the end of the day they've 120,000 residents, so the primary purpose is to supply water to those folk. Yes there probably will be some folk on town supply who are in the rural area.

THE COURT: JUDGE BORTHWICK

25 Q. To give you another example perhaps, with the Canterbury context where dairy farms can, you know, take (inaudible 11:41:20) the volume of which represents a small town, so I hear on a daily basis -

A. Yes.

30 Q. - so we've got one large dairy company taking and using water, a large volume of water which is the equivalent of say, I don't know what figures are out there recently, but just say 5,000 households, and the taking use, the demand for the 5,000 households, what would you say is the primary

purpose of that scheme, so the scheme supplying the single dairy farm and 5,000 households, roughly 50/50, what would you say is the primary purpose?

A. At 50/50 it is – it's difficult.

5 Q. Oh I thought you were going to call it for the households?

A. Yes –

Q. I thought volume –

A. No.

10 Q. – would in fact volume in that scenario is irrelevant, the fact that you've got a big farm out there -

A. Yes.

Q. - taking a lot, it's actually still a domestic water scheme –

A. Yes.

Q. – but obviously not and so that's interesting?

15 A. Well my thinking behind this is the fact that again Te Mana, I'm trying to translate it through into that threshold, so that later on when the health and wellbeing of the water bodies has to be determined and then there has to be delineation between what is tier 2, what is tier 3 and what takes priority, that's (inaudible 11:42:46) and when you're into a 50/50 scenario,
20 that's – it, I don't think it just – I don't have a ready answer for that, but I don't think it would just be solely on the volume, because if there is over allocation and a decision needs to be made, then obviously I'm pitching for tier 2, that the households retain their allocation subject to efficiency and everything else but a decision has to be made around whether that
25 business can take the amount of water it can.

Q. Yes that's the dairy business?

A. Correct.

Q. Hence my thinking –

A. Yes.

30 Q. – that it's probably, it's still probably a scheme for domestic use, even though you've got one large outside business entity –

A. Yes.

Q. – also drawing down on the scheme but –

A. Yes.

Q. – that’s not your thinking or...?

A. It’s (inaudible 11:43:44) to the example I just gave Mr Maw earlier of an airport, albeit that’s obviously more clear cut since that’s purely usually, purely in, you know, purely a commercial use but where we’re faced when
 5 in the same circumstance we are (inaudible 11:44:06) supply to an airport includes residents (inaudible 11:44:10) and the like, I, yes, I don’t have a – I think it’s very hard to make that delineation if it’s literally the infrastructure based with one pipe servicing both.

Q. Yes but why one pipe servicing both, I actually don’t know that that’s so
 10 relevant, but –

A. Just simply because the infrastructure’s set up.

Q. Yes I understand how it all works –

A. Yes I unders- yes, yes.

Q. But –

15 A. Yes.

Q. Why is that even important when it comes to defining (inaudible 11:44:53) a community water supply or not?

A. Because the other component is the second component around the TAs managing and providing for that infrastructure, yes.

20 Q. Yes that’s a bit that you could drive a bus through with this definition I think –

A. Yes.

Q. – and it won’t, you know, my view is that it can’t stand like that.

A. Okay.

25 Q. Just simply because it’s all things to all people and probably will be when it comes to be implemented?

A. Yes and look I readily acknowledge that and the witness conferencing. We had the time that we had to work through this and it was from the planner’s – or from all of us involved, an attempt to in the absence of very
 30 clear delineations and metrics try and arrive at a definition which kept it as or tried to be as clear as possible put simply and the reason for that is because there was further back into the document, around, there was exception for community supply, so then obviously we were then charged with creating a definition of what that is.

Q. It may be more useful to pursue it – well it's over to you entirely –

A. Yes.

Q. – and I'll shut up in a moment but, to pursue the thinking behind it and I'm more just sort of, let's not look at the words but just broadly, what were we intending to capture and not capture?
5

MR MAW TO THE COURT: JUDGE BORTHWICK:

Yes and I've touched on that and the two examples where we have a breakdown are quite useful examples which might be at different ends of the spectrum we don't know.
10

THE COURT: JUDGE BORTHWICK TO MR MAW

Yes.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. But so picking up on that thread, if you think about the Stirling scheme and the Dunedin City Council scheme, was it the intention that both schemes be captured by the definition?
15

A. The Dunedin scheme yes but I wouldn't have thought that the – from – as it's been described, the Stirling scheme would.

Q. And then we go back into the circular debate about where you draw the line –
20

A. Yes.

Q. – and it gets really difficult as –

A. Yes I acknowledge that yes.

Q. – as the percentages come down, because again on the math, the Dunedin scheme, if only 20% of that water is actually used for drinking water and the rest is for those other uses which are, you accept, tier 3 uses under the MPS? The industrial and business?
25

A. Industrial business? Yes they would be.

Q. You may end up in a situation where it's not too dissimilar to the math on Stirling, but it's useful to understand that the thinking behind the definition is to capture the – in this context I may say the urban scheme, but not the one that has a higher rural component if I can – in those terms?
30

A. Yes that's right and if you were to – because this, I mean it's just this fundamental challenge with any policy drafting is, it's almost like a bell shape curve and we're addressing the, both the out – the ends of the curve and trying to make sure the policy stretches to accommodate 100%,
 5 it's challenging. One – the only way I would see through that is – as Judge Borthwick mentioned, is that domestic municipal supply is that's clearly understood to be, from what I can read, urban, you probably would need something else around rural which had – which frankly probably may be easier to have some clearer metrics around it. That could be the
 10 alternate way of drafting a provision such as that to give, as you say, certainty where you're dealing at literally both ends of the spectrum.

Q. So when you speak of putting some metrics in, are you thinking putting some percentages in, for example, as to the volumes used for different uses or?

15 A. I haven't seen percentages in place and I think to be honest, probably all of my colleagues in regional councils and out have probably hit the same thought process and used words such as "primarily" and "primary" as we, as the planners here have, and including myself have. I don't have, I would not have the knowledge base or skill base to say it's 42% or 15%
 20 or the like.

Q. Do you accept there are some issues with the wording as currently expressed and that it's not capturing the outcomes that perhaps were intended?

1150

25 A. I think it's as with any policy drafting it's not there yet.

Q. Now we've spent quite some time on the first part of the definition. I do want to just ask you a question in relation to the middle part which is a conjunctive part and is for the purpose of enabling TA's to meet their responsibilities for the supply of and where we have drinking water under
 30 the Health Act and the LGA. Now when we say "or the purpose of," what do we mean there? Is it a subset? Is it all of it? Is it some of it?

A. I think it's all of it because it was again trying to put some degree of certainty and specificity around the breadth of this term by linking it back to TA's and more specifically their statutory responsibilities.

- Q. So when you think about the Health Act, my recollection is that the definition there was perhaps down the narrow end of the spectrum. It focussed on drinking water supply?
- 5 A. Yes, it did and that's obviously you know given the driver of, I understand the Health Act to ensure you know safe, safe water supply.
- Q. Whereas under the LGA the responsibilities are perhaps broader?
- A. That's correct, yes.
- Q. When you look at those two references conjunctively in this sentence and is for the purpose of enabling TA's to meet their responsibilities for drinking water under the Health Act and the LGA, how do the business and industrial uses fit within that part of the definition?
- 10 A. I think they'd fit under the LGA one because if you drill down further into the LGA you've got general and specific obligations which Ms East referenced in her memo so just without having to go back to that document to summarise those, the general one is the all encompassing statement that the LGA provides for the community including industrial business uses. This specific would be the responsibilities that we touched on around like lifeline infrastructure or firefighting, those sorts of things.
- 15 Q. The challenge then that perhaps occurs is that this part of the definition is focussed on drinking water under each of those pieces of legislation?
- 20 A. Yes.
- Q. And so those business and industrial uses, they don't fit within that category of drinking water under those pieces of legislation do they?
- A. No, but they fit in the one above, industrial and business uses, water supply.
- 25 Q. But when you look at the construction of this definition the second part it's conjunctive with the first, isn't it, it's both?
- A. That's correct and that again was the drafting of it. It possibly could be an "or" disjunctive.
- 30 Q. So if you put an "or" in there it has the potential to broaden out the –
- A. That – correct and that was the concern and that sorry that was the, that was I recall one of the concerns in the JWS and the general ethos of "try and keep it as contained and as precise as possible."

Q. So the joint witness statement definition landed on the more constrained interpretation?

A. Correct and you'll see an example of the alternate to that in the Waikato example which is para 29, in the supplementary evidence where it is a, it was disjunctive, it is an "or."

5

Q. So then when you think about the outcome that was intended and the outcome was you say to include for example the Dunedin City Scheme which is supplying industrial and commercial water, doesn't the second limb of the definition then knock that out given that it's conjunctive?

10

A. In terms of drafting it would be, I'd have to say it would be better if it was disjunct – it was an "or" it was disjunctive but yes it does seem to, it does seem to be the effect of it.

Q. If it was "or" it in fact would serve no useful purpose though would it because the first part of the sentence is much broader?

15

A. Yep.

Q. It would capture those uses anyway?

A. Yes.

1155

20

Q. Now, I do understand the third component in terms of 25 or more people at least 60 days a year and that's, that's reasonably clear and objective, so. So having been through the exercise, do you accept that there is still some drafting uncertainty in terms of whether this definition is meeting the outcome that the planners jointly had on their minds?

25

A. Yes, I think so. And as I referenced before, I mean you know, through any sort of first, first instance of policy development this can occur.

30

Q. I want to test with you now how critical or otherwise the definition is in the context of Plan Change 7. So let's say that the Court doesn't accept the primary position that community water supply should be excluded from Plan Change 7, and so they're captured by Plan Change 7 and perhaps two things might happen. The first situation is that community water supplies are simply captured by the existing framework, as in there's not a bespoke set of provisions added in to deal with the schemes so they would be like all other users able to apply for that six-year permit, either through the controlled activity or the RDA if that finds favour, but it would

be non-complying for anything longer. In that situation the schedule would apply to enable calculation of the volume and the rates of water, and you say that now reflects the use for those or the needs and accommodates growth for the schemes. So in that situation, do you
 5 accept it probably doesn't matter if the definition's a little, a little broader because in a sense, the uses are being treated like other uses and the critical issue is it's a six-year permit?

A. Well, yes. Also the RDA relates to anticipated growth, that is, that's always within the head room of the consent so that would still leave the
 10 pathway for a new consent, and then the only consideration as we've mentioned before is this, the duration to the six-year term.

Q. Yes. An alternative scenario might be what you've described as your alternative pathway, which is the bespoke set of provisions to enable a longer duration for community water supplies within Plan Change 7? So
 15 if you think about that as an option where a longer duration might be appropriate, the definition becomes more critical at that point doesn't it?

A. Yes, that's correct. And further to that, Mr Maw, I think as I've been mentioning several times, because we're in the middle of giving effect to the NPS with a new regional plan then yes, care would need to be taken
 20 with this because I imagine it would be brought over into the new plan and knowing planning in this country probably adopted by other regional councils and possibly unitary authorities as well at the same time.

THE COURT: JUDGE BORTHWICK TO MR TWOSE

Q. Don't put that on me.

25 A. Yes, it's just – it's just this, the amount of – I mean both – I mean just as an aside, I mean both of those NPS's are almost in my view they're de facto planning statutes, so they do establishing a new platform, they're very sig- yeah, they're significant changes.

CROSS-EXAMINATION CONTINUES: MR MAW

30 Q. All right. I think we might leave the definition there for now. I want to move on to what hopefully will be the final topic of questions, and that relates to the drafting in your supplementary statement and I see that

you've gone in to bat for hydro and have recommended that the hydroelectricity schemes are carved out from the reach of Plan Change 7 as well? And I'm looking at your attached version of the Plan Change with some yellow highlighting on –

5 A. That's correct, yeah.

Q. Your supplementary evidence? And you say that hydroelectricity generation should not be captured by Plan Change 7 either?

1200

10 A. Yes, sorry, I'm just trying to find the preceding paragraph where in the supplementary evidence – oh yes, sorry, I've got it now, it's para 14 on page 4 and where I say, and sorry, it's about four sentences down: "Having now read through the other planning witnesses supplementary evidence, I have sought to ensure my recommended wording changes align more closely with those put forward by my colleagues." So just as a clarification it's for yourself and for the court, I'm not advocating for hydro-electricity generation, I'm just trying to bring together and there were – I'm not sure how many different versions of PC7 were in the various bits, but I was basically trying to get in line with the best fit with other evidence just to streamline things a little bit, so I don't have any position of hydro-generation, but I just thought the approach was good.

15 Q. So and in a sense the place to tack-on the "carve out the community water supply" has fitted neatly with the carve out being sought by the –

A. Correct –

Q. – hydro generators?

25 A. – that's correct, but I emp, as a point of emphasis, that's just as I said before just to ensure – well, it's you know, a streamlined approach. If hydro resile from that, then those words come out and the community was supplied it could stay.

30 Q. Right, so you're not expressing an opinion on the appropriateness of carving out hydro-electricity generation?

A. Absolutely not, this is just simply trying to ensure drafting is consistent.

Q. And do you have an opinion on that topic or is that simply not something you've turned your mind to?

A. On hydro, no, I haven't turned my mind to it.

Q. I just want to say I did have a question with you about your drafting in relation to policy 10(a)(2).

A. Point?

Q. 10(a) 2.1.

5 A. Yes. And Mr Maw, I just put the joint witness statement the one alongside the changes to that as well.

Q. Yes, sure.

A. The plan is joint witness statement.

10 Q. Now, you've sought to add in some categories of use into this policy, the first of which appears at sub-paragraph (b) and you've constrained the application of the following four sub-paragraphs for consents to take and/or use water for irrigation.

A. Correct.

15 Q. And then at (c) you have dealt with consents relating to hydro and community water suppliers?

A. Correct.

Q. So when you think about the range of uses to which water is put, are all uses covered by irrigation electricity generation or community water supplies?

20 1204

A. (Inaudible 12:04:10) I should answer that directly but I'd also just go back to my (inaudible 12:04:16) is that we work through the joint witness statement and the hydro planning specialist was there and as I affirmed at the, I think close to the outset of this, I was happy with the 10A.2.1
25 change as the result of the joint witness statement, so for point of clarification, they supersede the changes that were in my supplementary evidence. In there you'll see in the joint witness statement at 10.2.1, actual- probably – a simpler and clearer way of doing it because that's – the takes other than community water supplies and then you've got the
30 two ones around the instantaneous- and volume of extraction, so that seems to me to be a clearer way of addressing 10A.2.1 than what I had proposed along with my colleague for hydro.

Q. Sure, so the gap that I'm perhaps concerned about disappears with the joint witness statement wording and that is your preferred wording now?

A. That is correct yes.

Q. For that policy?

A. Yes.

5 Q. No that clarifies that for me thank you. Thank you, I have no further questions.

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Re-examination?

A. Yes just a few.

RE-EXAMINATION: MS IRVING

10 Q. The first one I'd just like to go back to is the conversation you had with my friend about municipal infrastructure, so if we could perhaps go back to that definition in the partially operative regional policy statement which I think was Volume 3, Tab 3?

WITNESS REFERRED TO VOLUME 3, TAB 3

15 **THE COURT: JUDGE BORTHWICK TO MS IRVING**

Q. It may be Volume 2?

A. Yes sorry.

Q. So you want to go to the wording or the ...?

A. Yes, so the page CB –

20 Q. The old wording, not new wording?

A. How do you mean sorry?

Q. Not the absolutely current up to date wording?

A. Well yes I think the municipal infrastructure definition is the same across the versions we had on the screen and the one that's in the bundle.

25 Q. Okay.

WITNESS:

Thank you I've got the document.

RE-EXAMINATION CONTINUES: MS IRVING

30 Q. Yes so CB651 in the common bundle?

WITNESS REFERRED TO CB651 - COMMON BUNDLE

Q. And looking at paragraph (a), I just wanted to clarify I suppose the extent of the infrastructure network that is captured by that paragraph being the conveyance of untreated water from source to and including the point of its treatment, because I think my friend put to you a question that it was simply the conveyance infrastructure from source?

5

A. No this would include the, well the treatment, but then the (inaudible 12:08:13) - excluding its distribution within the urban environment –

Q. Yes.

10

A. – eg, local –

Q. Yes.

A. – pipes down, subdivisions and the like.

Q. I understand that. Can I also take you to the definition of functional needs in the RPS which is back at page CB648?

15

WITNESS REFERRED TO PAGE CB648

A. Yes.

Q. And if you could read that definition please?

A. “The locational, operational, practical or technical needs of an activity including development and upgrades.”

20

Q. And if we’re thinking about the operation of water supply infrastructure, what is your opinion about whether or not it is a functional need of that infrastructure to have access to water?

A. It’s essential.

THE COURT: COMMISSIONER BUNTING

25

Q. Say again?

A. It’s – to, - if it’s water supply infrastructure, then the ability to source water is essential.

Q. Thank you.

THE COURT: JUDGE BORTHWICK

30

Q. So water supply infrastructure is essential to source water? Okay.

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Was that the point of your question or not?

A. Yes.

Q. It was, okay.

5 RE-EXAMINATION CONTINUES: MS IRVING

Q. And so if we could go please to the provisions that relate to infrastructure in the regional policy statement, so that's CB564 to start with perhaps? And policy 4.3.3 which relates to the functional needs of infrastructure that has national or regional significance?

10 WITNESS REFERRED TO CB564 AND POLICY 4.3.3

Q. And you'd agree with me that municipal infrastructure is identified as regionally significant in the RPS?

1210

A. That's correct, yes.

15 Q. So does your view about water availability being a functional need of water supply infrastructure influence your view on whether policy 4.3.3 is relevant in the context of Plan Change 7?

A. It would be relevant insofar as you need, yeah, as I said before, you need water to — the take of water to support the infrastructure or for the, it was conveyance via the infrastructure.

20

Q. And if we go back one page to CB652 and looking at policy 4.3.1, would your view be the same in relation to providing for the functional needs of lifeline utilities?

A. Yes I would, yes that's correct.

25

Q. I'd now like to —

THE COURT JUDGE BORTHWICK ADDRESSES MS IRVING (12:11:25)

Q. Just pause there a second. All right carry on.

RE-EXAMINATION CONTINUES: MS IRVING

30 Q. If we could go please to the national policy statement on urban development, which is tab 6, and so CB782 and over to the definitions of infrastructure ready at CB796. Would you consider development to

capacity to be infrastructure ready if the pipes are in the ground but they can have no water in them?

A. Functionally no.

5 Q. Finally, oh that's actually two, two more parts. My friend asked you some questions about the terms that have been sought in relation to community water supplies and I think he specifically referred you to the Stirling example. Now, is it your understanding that that application was made prior to the MPS FM 2020?

A. Yes, that's correct and also prior to PC7.

10 Q. So, if you were preparing an application for the renewal of a community water supply today, what would your approach be to the matter of term?

A. I would be most interested in the actual function of it which is actually delivering water to people and so it's the, it's the planning and provision of the infrastructure. The water itse — to get that water and treat it and convey it.

15

Q. So it would be, well perhaps if you could elaborate. Is it simply going to be a matter of just asking for the maximum term or would it be a more nuanced exercise than that?

A. I think it would be a more nuanced way because you are giving effect to the MPS, or sorry correction it's the resource consent application, so having regard to that but presumably there will be at some later date a plan, you — for me I think the key considerations around the term would, coming back to infrastructure would be alignment with, speaking as a if it was a TA applicant with their design planning including long-term planning processes and as has been signalled, or sorry, set out in the various pieces of evidence, that's quite a long-time frame. So in other words LTP is a 10 year term and refreshed every triennial period, every three year period. So include the design of infrastructure on top of that you're looking at a 15 year term. That would be my, that, if you're, if you're asking a question around the, essentially a shortened duration, then that would be, that would be what I would consider to be the minimum.

25

30

Q. Lastly, I'd just like to take you back please to the appendice to your supplementary evidence that Mr Maw discussed with you at appendix 2

and the page of the document with the pie chart setting out the proportions of water consumption.

A. Thank you I've got that.

5 Q. Now he took you through I think, the various uses that might be encapsulated within the residential component of that, but I'd like to talk to you about what is encapsulated in the 24% of commercial and industrial and ask you to look at the paragraph above the pie chart.

A. Yes.

Q. Can you tell us what is included within that 24%?

10 A. As described, diverse water use such as industry, farming, retail, restaurants, hospitals, university and schools.

Q. So would it be fair to say that there are some uses within the commercial industrial component that would relate to the health needs of people?

15 A. Yes I would, particularly where it's the institutional, the schools, the universities and the like and then also obviously restaurants, food preparation and possibly also retail, they'll have potable water acquired for their staff.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

20 Q. So we have heard a lot of paradigm shifts to come out at Te Mana o te Wai and then you MPS, so I guess my question for you is, wouldn't a paradigm shift under the new way of looking at water also be required for territorial authorities going into the future, and I am thinking of things like garden watering, people thinking about how to provide for that themselves, whether it's large tents and roof water collection or whatever

25 it is, I mean are we going to get into more of the Australian sort of pattern in terms of grey water and separate systems, what about metering, there is quite a lot that you read about metering changing behaviour and driving down demand when people realise it is going to hit them in the pocket specifically not just in terms of general rate? Do you think in the future

30 but I guess is also is part of the land and water, plan exercise that's going to go on that these things are going to have to be more actively thought about and addressed?

1220

- A. The short answer is yes absolutely and if I can just expand on that. For me there's two sides to the ledger. Territorial Authorities are seeking exception from PC7 but the other side of the ledger if I can summarise it Commissioner is around efficient and sustainable use and might be slightly coloured by the fact that I reside in Auckland and you know we are subject to a water shortage and with the nature of climate and that, that's going to continue on so I would, I would see that efficiency side being quite paramount with, if you look back, 15, 20 years ago its sort of methods or its encouragement I think we'll be stepping more into regulation as we're, as we're seeing with efficient use for example rainwater, detention reuse for household residential purposes that don't need potable water, veggie gardens or all the, you know the toilet or laundry. I think it's very much, say following the Australian example as we have to manage water more efficiently. In terms of how that's affected in a RMA sense, efficiency is touched on in the existing plan so could conceivably go through into consent conditions for future consents or perhaps through the, possibly through the review of consents because one of the things I did see when I saw that water conservation and management plan is the exercise that Dunedin City Council says it is going through to encourage efficient use so I think there will have to be a step change but that's the starting point.
- Q. So just thinking about the duration of consents forming, you have very long consents, what's the driver for a step change?
- A. Well I think if, as I mean there are a number of means, I mean the first one would be once the new land regional water plan is operative then you know there is, is there any opportunity to use section 128 to review those consents from TA's or a selection of them? The other way I think as I said before is to and maybe this is just the, delineation between regional and district city councils in the Otago region but when I saw that water conservation management plan conceivably it could be recast as an RM type document that requires certification by the ORC in different instances as a condition of a consent for a, for a take.

THE COURT: JUDGE BORTHWICK

Q. Sorry can you say that again? I was just making a note of your previous comment.

A. Yes.

5 Q. What was the second comment you just made yes?

A. So the second comment was around, the water conservation and management plan which Dunedin City Council has produced under their, as are required to do under the Local Government Act. It seemed to me that that, a document such as that could translate quite well into an RMA sense of being a management plan required for certification by the ORC
10 in an RMA regulatory sense. I think that's probably a little bit too general at this stage but there could be clear metrics around for example that 19% that is lost unallocated in terms of a condition which sought to bring that 19% down in theory that –

15 Q. Yes, in theory. We've heard a lot about that on *Stirling* how that was not possible but, for its losses?

A. Yes, yes.

QUESTION FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

Q. So just, you talked about the review potential in terms of consent reviews
20 but by that time you've already done your planning and your design and you built something and you've got a whole lot of sunk investment so how realistic is it to think that you're going to get a paradigm shift?

A. I think it would be –

Q. Without starting on thinking about that now?

25 A. Well yes I agree, the thought needs to start, needs to definitely start now. I think that it would, the consent review has said that two sides of the ledger would be more around that second side around efficiency as looking at how the consent has been or the end uses of water for which the takes have been used because if it's, if it's resulting in wasted water
30 then to me that would be the key or one of the key drivers of a review process would be to look at that.

Q. So I'm thinking that you talked about headroom?

A. Yes.

Q. But if you were to do or if you were to look at some of the measures that might be possible in terms of the Territorial Authority itself, limitations on what can be used for watering gardens and all those kinds of things, couldn't you use some of that headroom for the future development?

5 A. Well yes I agree because I mean the concept of a TA treating, having all that infrastructure and the cost of running it in place to produce potable water to you know spray across the lawn, that's I guess that's what I'm coming back to around the inefficiencies. You would want to see a sinking lid on that sort of use through things such as you know rainwater reuse and detention of reuse and those sorts of initiatives to ensure that coming back to the three priorities that you're making the best use of the water you currently have allocated to you before seeking further volumes or rates.

10 Q. So I guess I was just trying to understand the JWS planning, the revisions to that and how that might relate to some of the things that we've talked about so if you have that there –

A. Sorry I just – yes, I have it.

Q. So I'm just looking at the 10(a)(2)(i)(d) which I think Mr Maw asked you about.

20 A. Yes.

Q. So that one carves out community water supplies, that policy?

A. Yes.

Q. So that means that you're not looking in terms of community water supplies to have no increase in the historical and simultaneous rate of a distraction?

25 A. Yes, that's correct.

Q. So I might have missed your answer to a question in relation to the RD so I just need to make sure that I'm clear about it so if we could just have a look at the RD?

30 A. Yes.

Q. Now so the RD we've got matter (a) which talks about within the limits of historical water use and then we've got (aa) for the community water supplies so my question to you is the limits of historical use, they wouldn't apply to community water supplies?

- A. In terms of (a) well yes they would because (aa) is referring, is the need within the headroom of the consent, if I use that term again, for population growth, but with A, that's more around just basically getting the data together, and importantly, the period within which the data is collected.
- 5 For community water supplies, and bearing in mind, a prior version had 2015 to 2020 –
- 1230
- Q. I'm going to ask you about that next.
- A. Oh, sorry, okay, sorry, yeah, okay.
- 10 Q. So perhaps we won't go there. I was just trying to understand the answer to your question, Mr Maw's question, I think, in terms of I came and had a look at A and B and I thought that you said that you'd still be working, community water supplies would still be working within the limits of historical use, but then, when I had a look at AA, it talks about within
- 15 existing water permit volume and rate limits, so that's what the permit says, that's got nothing to do with the historical use. They may be the same, they may not, so I was just unclear as your answer. I know it says "and" so I mean that (inaudible 12:31:29) A and AA, so I just didn't think that I was clear.
- 20 A. Oh, sorry, yes, and that's on my part for not being clear enough in my response. AA is, as you say, additive to A, so it is within the limits of historical use, with the extra over to accommodate growth, but all within the envelope of the water permit.
- Q. The existing water permit.
- 25 A. Correct.
- Q. Volume and rate.
- A. Yes, correct.
- Q. So if we could just now come back, then, to the historical use and the move away in the drafting that we have from the window that the council
- 30 had in its version, five years or whatever it was.
- A. 15 to 20, yes.
- Q. 20 back to 15.
- A. Yeah.

Q. So I just wanted to find out what is your understanding of what that might mean in terms of community water supplies, removing that window?

A. Well, I think it just reflects when, as distinct from, perhaps, other uses, rural irrigation and the like, with community water supplies, because of growth, you'd want to look at the period as close as you can get to the period within which you're applying for a renewal or a new consent. In other words, you know, communities grow and it may not necessarily be for the 2015-2020 freeze frame, there may be a need to consider what's happened since then, so that within the scope of the headroom of the consent, you're not – let's say, for example, that a significant development occurred in 2021, with a large subdivision or the like. So it's for a community water supply, it's just ensuring, and this is just generally, it's that you just basically look at the data, and from what I recall, up to or close to the time within which you're making an application.

15 **THE COURT: JUDGE BORTHWICK**

What data are you talking about? Sorry, are we talking about – I thought my colleague was asking you a question around 15 years and what justifies that, yeah. Is that right, Commissioner?

THE COURT: COMMISSIONER EDMONDS

20 Q. No, I was obviously not clear in my question, but you've got – the original council version had a date in 2020, going back to 2015, and that was when the historical use was to be ascertained during that period, and that period has now been struck out.

A. That's correct, and sorry, just to clarify again, that seems to be appropriate, in my view, for community water supplies because of the nature of continuous growth, with urban growth in particular.

Q. Well, I guess there's two elements to that, and I don't think all the planners are on the same page over going right up to the point at which you might put your application in.

30 A. That's correct, yes.

Q. I think there's some disagreement over that, but you're suggesting that, for community water supplies, I guess there still remains that issue,

doesn't there, about what is community water supplies in terms of the discussions that have been had, but if we lead that to one side, thinking about it in terms of population growth, for example, that's why you're suggesting that it should be the nearest date to when you're going to put your application in.

5

A. Yes, because it would probably work hand in glove with the capacity work, where the TA would start from the most recent data in terms of population projections rather than looking back in time to the 2015-2020 period as a starting point.

10

Q. So that's the forward-looking stuff, but what about the backward looking stuff? Why is there a need to be going further back from 2015 and to have it so open-ended, particularly when it may not be very clear as to actually what was going on at a very early period in terms of what the water was being supplied for?

15

A. I don't disagree in relation to community water supplies, because yes, why would you go back in time when, potentially, the population was a smaller population of what it is when you start commencing your development planning?

THE COURT: COMMISSIONER BUNTING

20

Q. Yes, just to follow-up on that thing about population growth, and Commissioner Edmonds talked to you about more efficient use of water, and we've seen how the water is used for drinking water and other purposes, should there be a wider consideration than just population growth if you're applying for a replacement permit in terms of those other uses, whether they could be some of that water shared or used more efficiently?

25

A. Yes, I'd agree with that, in terms of justifying your take of water as being as efficient as you can make it.

30

Q. So do you think that warrants any reconsideration of the matter of discretion for community water supply, in terms of the way you've drafted it currently with your colleagues?

A. In terms of the considerations for consent?

Q. Population growth, which is what, 10.A.3.1, it's matter AA.

- 5 A. Coming back to AA, commissioner, that's an interesting point, commissioner, because the question of efficiency is not anywhere on A to F, so yes, in terms of the regional council discharging its responsibilities in terms of the efficient use of the end use of water, then that should be a consideration, in my view.

THE COURT: JUDGE BORTHWICK

- 10 Q. I just want to turn back to that definition, which you have discussed at large. I was not entirely sure where you're landing in terms of what you're hoping to communicate via the definition, so I'm not asking you to redraft it on the hoof, but just speak to it generally. What were you trying to include and what were you trying to exclude?

1240

- 15 A. I guess I can just come back to that analogy, Ma'am of the 80/20 and I guess the earlier comment I made in response to one of Mr Maw's questions around the drafting is inherently challenging, because it's difficult to – you know, and I use the analogy I think of a bell-shaped curve is to try and cover the, the I guess the extreme ends, one situation being a rural supply for rural industrial, you know, rural uses I should say, irrigation probably predominantly but also has a couple of households that are linked in. At the other end of the spectrum is obviously a, you know, a major city.

- 20 Q. Yes, so what were you – and again, what are you trying to – firstly what is excluded from community water supply, if anything? What – again, I don't understand where you, what you wanted to capture within this definition, what falls out of the definition. Yes.

A. And I'll use the (inaudible 12:41:23) if I may so that –

Q. (inaudible 12:41:25).

A. So that, through the joint witness statement.

Q. You and Mr de Pelsemaeker.

- 30 A. Although as I, well that's, yes that's correct.

Q. Yes.

- A. That I think is a somewhat select club within the, the planners involved. But it – and just coming back to you know, the line of questions for

Mr Maw it's just extremely challenging to define or draw a line which is why there is general terms such as prim – you know, "primary" or "primarily" which are used here and in and other regional plan documents. I think the key thing was bearing in mind the Stirling example and others is to give some degree of or enclosure if I can call it that of ensuring that –

5

Q. For human consumption? Or drinking water for human consumption, sanitary, food preparation? You know, some definition under probably the Health Act?

10

A. Yeah, that – correct, so if there was a further iteration then it prob – it would be, should be broadened in that respect.

Q. So I've noted primary purpose drinking water for the purpose described in the, in your evidence I think in under the Health Act or was something else or?

15

A. Yes.

Q. Let me get to it. I just –

A. Yes, sorry that's in the supplementary.

Q. That will be in the supp I think, supplementary evidence. Or maybe not – oh yes, maybe. National planning standard definition, did you have that in mind or did you have the NES sources of human drinking water definition in mind? Or Ministry of Health, yes. What, which –

20

A. I thought it –

Q. Broadly speaking, where's your starting point for drinking water?

25

A. Well, it's broader than solely the – we need, sorry, turn it around the other way. The NPS definition is a subset of community water suppliers, but coming to drinking water if it's a defined term in the, in a regional plan change such as this then it, then logically it is a National Planning Standard definition.

30

Q. Yes, okay. Just let me think about that. So it means water supply primary for the purpose of drinking water as defined by the National Planning Standard 2019? Would that be right?

A. That's correct, yes.

Q. And that's what you've got in mind?

A. That's correct.

Q. That's primarily that?

A. Yeah, yes.

5 Q. Okay. And – okay. But not solely that because it could also be used for industrial and business uses as you've noted?

A. Correct.

Q. Yes.

A. Yeah.

10 Q. And in providing for that primary purpose of drinking water as defined by the National Planning Standard, there's a second purpose and that is that the it's also for the purpose of enabling territorial authorities to meet their responsibilities under the Health Act and Local Government Act –

1245

A. Yes.

15 Q. – but that's limited to drinking water and again it's that drinking water in the second conjunctive part also drinking water with the national planning standards definition in mind or something else?

A. Yes. I, I'd have to look at the wording and I'd agree with Mr Maw that it needs to be disjunctive, in other words the responsibility under the
20 Local Government Act includes firefighting which I don't think you need drinking water to close a building down so I think it should be an "or" rather than an "and."

Q. Okay so let me think about that. And so if it was a disjunctive "or" then what were the purposes vis-à-vis the Health Act that you had in mind, but
25 again it's actually qualified by drinking water?

A. Yes.

Q. But as you say you don't need drinking water to put out a fire?

A. No, that's right so that should just be simply be water because otherwise there's no point in it being disjunctive.

30 Q. Okay so supply of water under the Health Act, what did you have in mind under that Act?

A. What, I think what we had in mind there was to and this is part of the, coming back to my bell shaped curve analogy of what TA's, first of all there's a specific reference to TA's or conceivably other parties who are

as agencies who are acting on behalf of a TA and under the Health Act it would be the requirements under that for drinking water, well potable. Sorry correction potable water I think is the term in the Health Act.

Q. For what – potable water for what purpose?

5 A. Well that would be as defined in the Health Act which I recall having gradation of for example end uses in terms of population and the like and one of those has come through albeit circuitously via the regional plan of that final statement around 25 or more people at least 60 days a year. I think that is also, had its origin in the Health Act.

10 Q. What section of the Health Act did you have in mind? Is that 56(g) or something else?

A. I think it was section 69 but I stand corrected on that. I'm not certain and it's a fairly lengthy section with subparts so...

15 **MS IRVING:**

Your Honour (inaudible 12:48:12) drinking water part.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

20 Q. I'm really interested in what this witness has to say what he had in mind because it's not, yes, this witness what he has in mind so I've now got the Act up in front of me and it's not section 69 because that's the duties and powers of harbour boards unless you had harbour boards in mind?

A. Most assuredly not no.

Q. Okay so it's not that one.

25 A. I did qualify by saying I stand corrected and I'm very happy to in this case.

Q. Okay so you know for the Court's perspective really important, what do we have in mind the harbour board, possibly not, we've excluded that or something else.

A. Yes.

30 Q. So you know that would be a definition I would be happy with because –

A. Yes.

Q. – as I said you could run a bus through that so what did you have in mind? Again you don't have to take me to the Act because I'll probably get you to take me on some other occasions?

A. No, that's fine.

Q. But what did you have in mind, so potable water for what end use is the question, my question?

5 A. Well it's really, even though it's, well it should – it's either an "or," it's really
assuring that the – all the statutory functions of the TA's and I referenced
firefighting just previously. The specific statutory are included within the
definition of a community water supply when I take is you know required
specifically for that purpose so in other words the take isn't to ensure that
10 the households or residents have drinking water but also there is a, you
know a supply of water for the other parts that are essential to the
community, eg, firefighting so really there hasn't been a great deal of
thought into this I guess co-defying or specifically enabling parts of the
Health Act or even the Local Government Act. They're just there as in, in
some ways as a distinction point between the TA's which are you know
15 creatures of the statute and have statute responsibilities as oppose to I
guess any other entity out there that seeks to take water. Ma'am I think
that's probably the depth of sort of investigation on that.

Q. I probably would, if we're interested in pursuing this, would direct more of
an explanation so that we can understand what you had in mind more
20 fully because you know I took from your answer TA's have a responsibility
to put out fires and need water for that purpose and that's fine but has it
also got a responsibility to meet supply demand from any developer, any
residential developer or any dairy farmer?

A. Potentially it's all inclusive of all of this.

25 Q. Okay so yes so that's –

A. Potentially it would be under its Local Government Act.

Q. And it's under the Local Government Act?

A. Yes.

Q. So that's why this definition isn't adequate because it doesn't actually tell
30 the Court what are the four corners of the case.

A. Yes, yes.

Q. So just moving away from that. You've talked about efficiency and the
TA's having responsibility to ensure that the water that it supplies to users

wherever the users are, is efficiently used as opposed to measuring you know 100% supply and demand from users.

A. Yes.

Q. Do you agree with that?

5 A. Yes, yes.

Q. And I wonder does, insofar as you have an interest in the end use, the water effects, is insofar as Territorial Authorities have an interest in the end use of water and the effects of end use of water, is it simply limited to one of efficiency of use?

10 A. I think it – well there would also be the fiscal component and they have to, I mean it is expensive infrastructure they have to maintain, upgrade it et cetera so it's in their interests to keep it to a minimum, I would've thought necessary for the supply.

Q. So insofar as the territorials have an interest in the environmental effects of use of water, what is its interest?

15 A. It's like well aside from, I'm just thinking in terms, I'm just casting my mind back to section 31 of the RMA and how it, because obviously the controlled more rest, the management rests with the regional council under section 30 but in, under the local, I think under the Local Government Act as I mentioned before there is both general and specific requirements. I think at a high level it would fit under a general requirement of a council of a Territorial Authority.

Q. Of a Territorial Authority so a district council –

A. Correct.

25 Q. – would have an interest in the effects of end use of water?

A. It would if it's resulting in inefficient use and waste.

Q. Yes, that's inefficient use and when you say "waste" are you also meaning inefficient use?

A. Well that's correct yes but it's –

30 Q. Does the regional council have an interest in the effects of end use of water?

A. Well I – water –

Q. Which are not, which are environmental effects?

A. Yes.

Q. Not efficient, not associated with the question of efficient use or in addition to?

A. Okay well aside from water quality and water quantity –

Q. Yes, that's what I'm getting at.

5 A. – should be welded, you know to –

Q. Water quality and quantity need to be welded and by that you mean what?

A. By that I mean if we end up in a situation where there's over allocation of water it's resulting in minimum flows, it's resulting in an impact on the water body then that's, then there's an issue there for water quality as well as for other end uses, increased sedimentation for example.

10

Q. Yes.

1255

A. So yeah it's, it's not that the two can be completely get separate from each other.

15

Q. No, and I was really interested in understanding how this kind of all works because if you've got an application by a territorial authority to take water for a purpose of supplying a scheme which uses include industrial and commercial uses, both rural as well as urban and those end uses of water, the rural and urban end uses may have an adverse effect on the environment. Is that something that the regional council can look at when it comes to assess the territorial authorities' application or not?

20

A. I think it would come down to the wording in whichever regional plan it was under the extent to which they've reserved their discretion, yeah but.

Q. And is it your experience elsewhere, well say Auckland, that when applications are being made for taking (inaudible 12:56:30) permits either urban and/or urban and rural purposes that those applications are usually integrated with territorial zoning decisions, in the case of residential growth urban or rural, discharge permits as may be required, land use consents as may be required. In other words, it's being con – the water permit is then considered in a context of development?

30

A. Well, yes at the macro level it is, integrated catchment management planning.

Q. Yes, yes.

A. And also with you know, Auckland being what it is it's through one Council controlled organisation called Watercare.

Q. And is that also the case elsewhere in the country that there's integrated catchment planning?

5 A. I, I don't have the briefing (inaudible 12:57:24) to extend beyond that, yeah.

Q. But is this what's been driven in terms of a paradigm shift also in the NPS for Urban Development I think it's called –

A. Correct.

10 Q. So there's – correct.

A. Yes.

Q. So there's two paradigm shifts?

A. Correct.

Q. You've got the one represented in the NPS for Urban Development –

15 A. Yeah.

Q. You've got one represented in the NPS for Freshwater and they're both driving quite different thinking at a regional and district council level. Correct?

20 A. Well yes, that's correct. So the, I mean as I've think I've mentioned, I gave my view that they were almost de facto planning statutes given the scale of them, importance of them. But in terms of the urban development one, it is driving TA's and regional councils hard to provide for capacity and then even when they've done that, is add another 20 per cent on as a competitiveness margin, and then on top of that also be receptive to
25 whatever else arrives that can, you know, that can provide additional urban, you know, urban growth. So it's quite – yeah, as opposed to the very clear, you know, Te Mana o Te Wai.

Q. But it's not – but the two MPS's have to be understood together, don't they?

30 A. Correct, yes.

Q. The NPS Urban Development –

A. Yes, yes.

Q. Or providing for development capacity is not to the expense of the outcomes under the NPS for Freshwater Management and the health of water ways?

5 A. Absolutely correct, and I mean it's not too much of a stretch to go back to, you know, part 2 of the Act and, and I don't think it's ever been the case under the RMA that growth is uncontrolled to the point where significant, you know where there's not a consideration of its environmental effects. So in this case you've got a very – you've got I guess to bring the two together in this context, it seems very clear that
10 under, with regard to water takes to support urban growth and development it's going to sit in tier 2 or tier 3 and be subordinate to tier 1.

Q. Mmm.

A. Which then leads to potentially hard choices around: "Is your urban growth in the right spot?" or "can you make the end use more efficient if it's, if there is a capacity or allocation issue?"
15

1300

Q. Yes, and those are hard choices, aren't they? So in other words, supply-demand does not trump the outcomes of the NPS freshwater management, particularly the fundamental principle of Te Mana o te Wai.

20 A. That's correct, that is my view, yes.

Q. And so if this regional council has a concern about whether it has a fir for purpose regional plan, and it's my understanding that it does have that concern, and the Minister for the Environment shares that concern, that might be a legitimate or relevant factor that it takes into consider when
25 looking at durations under plan change 7.

A. Plan change 7, yes. Well, yes, but again, I just think ahead to when the new land and water regional plan becomes operative, and yes, there's a new regime placing its full effect to the NPS, what then? To me, the process, because the drivers for the TAs, the other NPS is pushing them,
30 it's driving them towards making quite significant long-term financial decisions around infrastructure provision and the like.

Q. But what is not driving them to look at the critical issues that identified under the NPS freshwater management is my development located in the right water catchment?

A. Correct.

5 Q. Is it efficient in terms of use of water development? Is it development which will result in the lowering of any over-allocation, whether it's quantity or quality? There's no driving ahead of a plan, there's no driving district council's thinking ahead of a land and water plan which is compliant with MPS freshwater management.

10 A. Well, with respect, no, it actually should be the reverse of it, with the responsibility, in this case, with the ORC under s 59 to have a regional policy statement that represents integrated management of natural, physical resources, and also plan their responsibilities under s 30, so elsewhere, there are regional growth strategies which ensure that there are smart choices made around land allocation that represents either areas of high environmental value or significant constraints.

15 Q. So the smart choices are being made by regional councils in terms of where growth is to be directed for land use, or the smart choice is being made by district council elsewhere?

20 A. Well, ultimately, it's actually both, because first, we came back to the MPS UD, it references local authorities, and so for Queenstown and Dunedin, for example, that's a shared responsibility between regional and the relevant TA, but there's also a regional planning function, which can sometimes get – no, I won't say, no, correction, I'll withdraw what I was about to say, but it's an important function, and it's there in the RMA, and it's for regional councils.

25 Q. Both territorial and regional councils have distinct but overlapping functions, do they not, to implement the NPS for urban development and freshwater management?

A. That's correct, yes, they do, and it's most marked with urban development one.

Q. Pardon?

30 A. And with the urban development one, it's almost a shared responsibility.

Q. A shared responsibility?

A. Yeah.

Q. Right, okay.

QUESTIONS ARISING – NIL

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK TO MS IRVING

Q. Well and truly time to take the lunch break, and that is you for the time being, I think.

A. Yes, I was just wanting to check that that was still the plan.

5 Q. Well, I think so, probably because you sent your witness home.

A. Well, I have. Well, they chose to leave, so, yeah. Spend some time on the phone at lunch if that was not the plan. So if we are adjourning the rest of the TA case now, I think yesterday, there was a flag of possibility of looking at conferencing on the issue, if you thought that was useful. I don't know whether you want to discuss that further.

10

Q. We need to discuss it as between ourselves, and it would only be, now, to answer, I think, the Court's questions, as opposed to not answering the Court's questions. Yeah, anything else, yeah. We could certainly invite questions from counsel, and that might be useful as well. We need to think about that. I am also in a position, like I was in Dunedin, where I have got this minute and it is half way drafted, and it is like, is it in, is it out? So why it has not been released is this very question about do we ask questions or are we just warning people that Mr Maw is going to announce next Wednesday whether there was a deal done or not, and, you know, so we are sort of trying to get ahead of that just to let everybody know what the go is, that they might all be back into conferencing on the schedule, so we needed to alert people to that much, and I have not landed it because, you know, there may be other things we want to do whilst we have them in the same room.

15

20

25 A. Okay, no, that's fine. In that case, I would ask to be excused also.

Q. Very good, okay, no, very good, you are excused.

A. Leaving Philip to run amok.

Q. And we are down to one lawyer. I was going to say you can go and I will take it from here. That is all good, so we will just adjourn for lunch, and we will make it quarter past 2.

30

COURT ADJOURNS: 1.07 PM

COURT RESUMES: 2.15 PM**THE COURT:**

Q. We are now going to hear from Beef and Lamb. Ms Phillips. Hello. So have you got an opening submission?

5 A. Yes, Your Honour I have and Mr Maw has kindly agreed to assist me with swearing in the witnesses.

Q. Oh yes, that is fine.

A. Thank you so much.

Q. And have you printed that off, yes you have, got it.

10 A. Yes.

Q. We are in your hands.

A.

MS PHILLIPS READS OPENING SUBMISSIONS

So may it please the Court, thank you for the opportunity to be heard in
 15 relation to Beef and Lamb New Zealand and Deer Industry New Zealand or
 DINZ submission is on the proposed Plan Change 7 to the regional plan water
 for Otago, or the plan. My name is Lauren Phillips, I am the Environment Policy
 Manager for Beef and Lamb New Zealand. Beef and Lamb is an industry good
 body funded under the Commodities Levy Act through levy paid through the
 20 producers on all cattle and sheep slaughtered in New Zealand. It's mission is
 to deliver innovative tools and services to support informed decision making
 and continuous improvement in market access, product positioning and farming
 systems. DINZ is a levy funded industry good body, established by the Deer
 Industry New Zealand Regulations 2004 under the Primary Products Marketing
 25 Act 1953. It's vision statements is to promote and assist the development of
 the New Zealand deer industry. A strong, stable, profitable industry for all
 participants. DINZ levy payers are producers and processers of venison and
 velvet. As already detailed in our submissions on PC7 4 May 2020, deer
 farming has a number affinities with the sheep and beef sector and in fact about
 30 80% of deer farmers also farm other livestock species. Both organisations are
 engaged in environmental issues that affect the pastoral production section and
 in building farm specific capability and capacity in these areas to ensure that
 the industry supports an ethos of environmental stewardship together with a

vibrant, resilient and profitable sector. Maintaining and where degraded, enhancing the health of fresh water, aquatic habitats, biodiversity across the region is important to the people of the Otago region. It is important to our economy and it is important to farmers. The sheep and beef sector alone
5 employs approximately 92,000 people in fulltime equivalent roles nationally. Dry stock farms or farms where livestock are raised for meat are an integral component of the Otago primary sector and they contribute significantly to the region's economy, communities, landscape and culture. PC7 has a potential to affect the dry stock sector, particularly extensive farm systems,
10 disproportionately to the sectors environmental impact and would have the effect of regulation for regulations sake rather than for environmental benefit. Beef and Lamb and DINZ have submitted that there are numerous issues with the proposed plan which affect dry stock farmers for which stated relief is sought within the original submission. This statement builds on the substantive issues
15 raised there and introduces a background for Beef and Lamb and DINZ expert witnesses. I am speaking to the submissions made by Beef and Lamb and DINZ to PC7 submitted 4 May 2020. Beef and Lamb and DINZ submitted mostly in opposition to PC7 and this statement will focus on the three main issues where Beef and Lamb and DINZ have opposed provisions in plan.
20 These issues include the purpose and approach of the plan change and provisions which grandparent water use and therefore nutrients and solutions to the issues within the plan change. The effects of the proposed provisions in PC7 may be intergenerational, potentially devastating to many dry stock systems, disproportionate or blind to the actual risk an activity poses to the
25 environment and therefore without will benefit to the environment. The purpose of PC7 was to address to address the Otago Regional Councils or the Councils looming problem of 1080 water permits or more than 50% of the regions water permits expiring before a full plan review can be completed. It is envisaged that a full plan review would reconsider water allocation across the regions and
30 water use in some areas might need to be reduce once the appropriate modelling has been done. PC7 was supposed to provide an interim regulatory framework a solution for water users to continue operating legally without rendering any future water allocation changes impotent. Beef and Lamb and DINZ support that intent to ensure that the Council is not faced with having to

replace more than half of its region's water permits on long duration permits before it can determine how much water and where and for use by whom is sustainable on a sub-catchment level.

5 1420

In light of that intent, it is not appropriate to use this plan change as an opportunity to claw back water allocation, grandparent land use, undermine land value and establish a nutrient allocation framework outside of the proper
 10 process and with the scientific, economic, social and consultation guidance to do so through the full plan review. Provisions like policy 10A.2.1, reinforced by rules 10A3.1.1 and 10A3.2.1 purport to do exactly that, however. Furthermore, Otago's startlingly diverse in its landscapes, conditions and climates even at a sub-catchment level. The Council's s 32 evaluation report for Plan Change 7
 15 acknowledges this when it mentions that some areas of the region are over-allocated for water use and some are not. Reducing water allocation for permit holders who may be using that water has permanent, not interim effects on the permit holder. They are extremely unlikely to ever regain lost water. The broad brush approach of this plan change will result in permit holders losing water
 20 allocation, even in freshwater management users where water is not over-allocated.

On the second topic, grandparenting provisions, PC7 should allow for water use, land use and development which have been legitimately undertaken within
 25 the bounds of a valid permit. Provisions like policy 10A.2.1, reinforced by rule 10A.3.1.1 and 10A.2.1 do the exact opposite. Those provisions have had the effect of grandparenting land and water use and therefore nutrients. Grandparenting sometimes needs little clarification, and the approach and its affects can be understood through an analysis of Farmer A and Farmer B and
 30 their land use or nutrient loses as modelled through Overseer.

So for example, in 2019 Farmer A's nitrogen number was 68 kg's of nitrogen per hectare per year. Farmer B's N number was 12 kg's of nitrogen per hectare per year. Both farmers are grandparented to those 2019 N numbers and may

not increase over them. That is grandparenting. They are also then required to make 10% reductions in their nitrogen losses, as modelled in Overseer. At 68 kg's of N per hectare per year, Farmer A's system is a high impact, high risk intensive system and would generally have high inputs. There are a number of inefficiencies which can be addressed in a farm with such high N number. And even when Farmer A has tweaked these inefficiencies to achieve a 10% reduction, the system still leeches 61 kilograms of nitrogen per hectare per year. It is still a high impact, high risk intensive system with a high N number.

At 12 kg's of N per hectare per year, Farmer B's system is a low impact, low risk and reasonably extensive system with low inputs. While system changes and cycles may occasionally slightly increase the N number, there are few inefficiencies in that system and the farmer will likely already be farming to the natural limitations of the land. Failure to observe those limitations would already have resulted in environmental collapse, usually seen in soils and/or stock would have starved or the business would have failed. This means that there is little that Farmer B can do to further reduce from 12 kg's of N per hectare per year to achieve the 1% reduction. Farmer B – sorry, the 1 kilogram reduction. Farmer B is also less able to respond to market demands, changes in technology, drought or make any changes in the farm system because Farmer B's N number is too low to allow for any flexibility within the system without the risk of increasing nitrogen losses for at least a couple of kilograms of nitrogen per hectare per year. Off that farm, relative land prices are affected because the potential that Farmer B's land had in terms of land value is diminished, because Farmer B can never intensify, even if Farmer B never intended to anyway. This reduces the equity Farmer B holds in the land and reduces the farm's resilience because there is less equity to borrow against to replace infrastructure, buy feed in a drought, upgrade water reticulation in response to stock exclusion regulations or tide the farm over in a year where prices are low. Farmer A's land is not affected in the same way, in the higher the N number the more flexibility the land has, and therefore the more value the land has. This is how grandparenting has affected Canterbury in reality, with the effects most keenly experienced in areas like North Canterbury with a divide between extensive, often (inaudible 14:25:11) and dry land and intensive, often

flat and irrigated is pronounced. The dry stock sector is overwhelmingly Farmer B. As Dr Chrystal has shown us in her evidence, the sheep and beef sector is a lower risk, low impact system and this is the case even with the most intensive or irrigated sheep and beef systems. They are disproportionately adversely affected by the grandparents nutury and allocation system. Grandparenting nutrients is inherently inequitable. It rewards land users who have had the greatest impacts on the environment while penalising land users who have had the smallest impact on the environment and have been farming within the natural limits of their land. A grandparenting framework effectively allows high impact systems to continue having a significant impact on the environment. In RMA terms, the concept of grandparenting is normally about recognising, specifically recognising or providing for activities that already exist to continue producing their existing levels of effects either permanently or for a defined period, but imposing immediate obligations on new entrants. It is understandably favoured by existing operators who rationalise it by reference to their prior investment. For these reasons, Beef and Lamb and DINZ oppose grandparenting frameworks. The submitters support a controlled activities status for permits to replace deemed and water permits due to expire before 2025. Beef and Lamb and DINZ do not support conditions in matters of control which have the effect of grandparenting water use, land use and, therefore, nutrients. In particular, Beef and Lamb and DINZ oppose 10A3.1.1 3” –

1425

THE COURT: JUDGE BORTHWICK

25 Q. Can you just pause there whilst I dial that up?

THE COURT: COMMISSIONER BUNTING

Q. Can we ask which version of the –

A. Yes actually if you look at the joint – I’m going to work from the joint witness statement version just for ease of use.

30

THE COURT: JUDGE BORTHWICK

Q. So that's the 8th of April 2011?

A. Yes, yes.

Q. And so you oppose the controlled activity rule, "Manner of Control", roman numeral iii, which is, "The application demonstrates total area, does not exceed the maximum area irrigated."

A. Yes we actually also oppose 10A2(1)(B) which is the equivalent in the policy. Because it says pretty much the same thing.

Q. Mmm.

10 A. So that provision grandparents land – the area of land under irrigation.

MS PHILLIPS CONTINUES OPENING SUBMISSIONS FOR BEEF AND LAND NEW ZEALAND AND DEER INDUSTRY NZ

"As already submitted, the purpose of this plan change is not to determine land use or nutrition allocation. The purpose as stated on page 5 of the section 32 evaluation report for this plan change is to provide an interim regulatory framework to provide for the assessment of applications to take an use water, specifically water permits that are due to expire before 2025. Rule 3A3.1.1 3 also fails to provide for development which may have been within the bounds of the existing permits since the grandparenting date which might have increased land area and irrigation, for example, from a less efficient irrigation type to a more efficient irrigation method, for example, to pivot irrigation. This robs the permit holder of any development investment post notification. PC7 should allow for water use, land use and development which have been legitimately undertaken within the bounds of a valid permit. The use of a non-complying activity status for those who cannot meet grandparenting provisions in rule 10A3.1.1 is unduly harsh. It will be nearly impossible to obtain a resource consent, especially in light of policy 10.A.2.1 which requires the Council to avoid granting resource consents where there has been an increase in area under irrigation. Ms Marrs' evidence proposed a restricted discretionary rule to address the issue of irrigators who cannot meet the grandparenting provisions of rule 10A.3.1. Beef and Lamb New Zealand and DINZ note that a restricted discretionary activity rule 10A3.1A and (inaudible 14:29:35) 3.1 has been accepted following various negotiations, discussions through the hearing process to date. Rule 10A.3.1A does not address the injustices mentioned in

this statement however. Elsewhere in New Zealand, impending regulation change notably where nutrients are likely to fall under a grandparent's allocation framework as in Canterbury, has resulted in an accelerated intensification of land use in order to pre-empt restrictive regulation or to secure flexibility in the land use and value in the land. Beef and Lamb and DINZ do not support this gold rush approach and do not consider it to be conducive to achieving the environmental benefits that regulation appears to be intended for. As stated previously, however, PC7 should allow for water use, land use and development which have been legitimately undertaken within the bounds of a valid permit. Irrigators who would like to transition to more efficient irrigation systems which as Dr Chrystal's evidence details, result in an increased area of irrigation without necessarily increasing contaminant losses to the environment or increased water use should be encouraged to do so. Otago has a high number of borderdyke or flood irrigation still in use and between the cost of changing to a more efficient system and the prospect of applying for a non-complying activity resource consent, there is no incentive for farmers to change to systems with a lower environmental impact. Furthermore, a pathway should be provided for those land users who had embarked on the journey to change the irrigation system in some way or form, but had not completed it by the date that PC7 was notified. More efficient irrigation systems are expensive and require a great deal of planning, financing and even changes to the farm system. Beyond the primary infrastructure itself, a farm may need to re-fence, re-train staff, adjust fertiliser plans and change stock distribution and grazing rotations. The process of changing, for example, from Borderdyke irrigation to spray irrigation can take several years. Farms which are undergoing succession changes where grown children are buying the properties from their parents to take over the farm, are unable to mobilise funds with any speed or even to start the process to upgrade infrastructure. Ultimately, Beef and Lamb New Zealand and DINZ consider that eliminating those parts of all provisions which have the effect of grandparenting water use, land use and, therefore, nutrients, would resolve the fundamental problems with the Plan Change 7 discussed above. Dry stock farmers are key to the fabric of the Otago region. They are there for the long haul and families' primary reason behind on farm decisions. Dry stock farming systems are predominantly low risk activities and

regulation that applies to these systems should reflect the level of risk. To remain a resilient, vibrant and diverse sector, dry stock farmers require flexible land use and the ability to optimise their farming business within the environmental limits of their property. Beef and Lamb and DINZ seek broadly that PC7 is amended to ensure that land use and ancillary objectives, policies and methods including rules recognise and provide for the dry stock sector farming operations including (1) diversity of systems, soil, geology and climate, (2) Provide flexibility for land and resource users to adopt land use and farming operations. To adapt to and meet markets, technology and the environmental constraints such as climate. (3) Provide for adaptation and changes in farm systems and management approaches to respond to technology, climate change and markets. (4) Remove any reference to requiring or grandparenting farming operations to be held at historic land use, nutrient discharge levels or stocking rates implied by the provisions already discussed and (5) ensure that requirement for specific mitigation is able to be tailored to a farm level and can provide for the future aspirations of the business and is tailored to specifically meeting the environmental risks of concerns specific to the property and sub-catchment.” Thank you so much.

20 1433

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. I have some questions.

A. Yes your Honour.

25 Q. Well firstly did or has your witness Ms Marr proposed relief which give effect to your paragraph 44 of your submission?

A. Paragraph 44, Ms Marr as I understand was asking for a restricted discretionary activity rule to be included insofar as the details of that rule. There was some negotiation which took place with the regional council and they had, they were reaching some sort of agreement when the situation changed and your Honour the council was directed to take a step back and provide supplementary evidence on the plan change itself.

30 Q. So the Court hasn't and cannot direct what regional council –

A. Yes.

- Q. – the direction, the relief sought or any amendments proposed by the regional council in the context of this hearing but the Court asks is it a process orientated or process plus environment orientated plan and reflecting on that, the council has come back in the draft that you seen from Mr de Pelsemaker dated the 14th of March so the Court didn't direct that. That was the council's initiative so my question to you is does Ms Marr deliver on the relief that you are seeking or is she in accordance with her – well is she going a slightly different direction to what you set out at paragraph 44 so that's the first question because sometimes people, witnesses do and that's fine, you know you've got the advocate, you've got the witness and you know then you've got two things in play and it's just part of the complexity.
- 5
- 10
- A. In my opinion she does but not in as much detail as what I have gone into in my statement.
- 15
- Q. Right, that's all I need to know. Second question Ms Phillips, now being from Canterbury or living in Canterbury I do understand what the concern is of drystock farmers in Canterbury under the Environment Canterbury plan and the perception, probably reality that drystock farmers are held to a nutrient budget because of various regional plans so I understand that. I also have, understand a good working knowledge of overseas so I understand what you say there. With that in mind I also appreciate that it's an important part of your relief that, that where there is a change in irrigation system at least which will result in increased area of irrigation that, that be accommodated somehow within plan change 7 so I understand that part of the relief and we've had all sorts of conflicting evidence from the farming sector about that and that's fine. Again it's just something that you know we'll have to deal with. I didn't understand and this is perhaps I don't yet understand the adverse reaction to grandparenting and so grandparenting, by grandparenting the objection here is that sheep and beef while they're drystock but also presumably takers and users of water, be held to historic use and that's the fundamental objection. There's a link there which I'm missing so you need to help me out.
- 20
- 25
- 30

A. It's – yes, yes I understand and I hope that I'm answering your question articulately and intelligently. They are users of water. They tend to not be quite as wholesale users of water. For example if you like at a dairy platform on the plains you'll see that the vast majority of it is irrigated
5 whereas the sheep and beef sector and also the deer sector tends to irrigate much smaller proportions of their properties, usually for a crop or for the highest yielding paddocks. That's not to say all of them do, you will have intensive finishing operations which will. In terms of being held to the historic usage, it's not so much held to the historic usage of water
10 quantity on its own. It's the inability to develop their irrigation at all so if you are in a situation where you have used maybe 70% of your deemed permit, ordinarily you would still, if your consent was being reviewed you'd probably be held to 70% and that's not so much the concern, the concern is where you've seen provisions which change for example your rate of
15 take, not necessarily the volume or which affects your area under irrigation and grandparenting those is where we have the issue because it completely cuts off the farmer's ability to change their assistance or to adapt or to go from for example border dyke irrigation to pivot because your area of irrigation will change. Your rate might also take change
20 because frankly the take for a border dyke is vastly different to what you might need for other things, especially when I'm thinking of farmers who have described to me their systems where they have got wild flood for example so these kinds of things which would hinder change. You know we would like to see farmers moving to more efficient water use, more,
25 practices which allow them to farm within environmental limits.

Q. But that's not the issue though?

A. No.

1440

Q. Well, the issue for you is not that, that the plan change enables farmers
30 to use historically up to their maximum because that's what it's meant to do and I think that we're moving in the right direction in terms of where the schedule has got to, so that's not the issue. It's not even the issue that you could change irrigation systems. The issue is that there is not to be an increase in irrigable area, that's your issue isn't it?

A. That is our main issue, yes.

Q. Yes. Because if there's an increase in irrigable area there may be a change in nutrients, correct? And that, so it's the dual increased area change in nutrients and, therefore, held to whatever your 2020 or 2021 environment is, that's your issue isn't it?

5

A. To some extent, yes. Our issue is, yes, the change not being able to change the area under irrigation -

Q. Mmm.

A. – as Dr Chrystal will discuss for her evidence, a change in irrigation which results in greater area under irrigation –

10

Q. That's right.

A. - doesn't necessarily result in more nutrients lost.

Q. But it might?

A. It might, but, for example –

15

Q. And that's a rejection to the nutrient?

A. Yes.

Q. That's why you bring into play the experience in Canterbury of dry, dry stock farmers there?

A. Not automatically necessary, that was an example where nutrients are a factor, but in Canterbury, generally, we're speaking to – we're speaking to the experiences of dry land farmers and farmers with only a small proportion of their farm in nutrients. So the farm, A Farmer, B examples, those were actually from my own consulting days where I was modelling nutrients and Farmer A was actually 220 kg's of nitrogen per hectare per year on a water irrigated dairy operation and I'm not saying that this is only dairy, you will find sheep and beef farmers who are not farming within their environmental limits and that obviously, this is not something we want to see as the norm, but the Farmer B was actually a 15 kg of nitrogen per hectare and he had a partially irrigated sheep, beef, dairy grazing and cropping operation which is a huge difference and in terms of not allowing to –

20

25

30

Q. Yes, now I need you to – I understand that -

A. Yes.

Q. - okay, because I under, yes, I just do.

A. Yes.

Q. I don't understand and I am going to and I need to get to the bottom of it pretty quickly –

A. Sorry.

5 Q. – what is driving this, so driving the interest? Is it because your submission is there cannot be a change in irrigation systems or is it that no farmer will change and make and move to a more efficient irrigation system unless they can also then apply the same water to an increased area of land?

10 A. It's a mixture of both. They're not going to have any incentive to move to a better irrigation system if it's going to be so hard.

Q. Yes. And so they're not going to move to a more efficient system and what does it mean if it's going to be so hard?

15 A. If it's going to be more hard, it's going to be difficult to get financing and it's a cultural and emotional barrier to actually applying, and then there's the cost of the non-complying activity versus consent which is they will require experts, it may be notified.

Q. Yes, but okay, that's nothing like an influence?

A. Yes, yes.

20 Q. So the thing is some farmers may want to, may want to move to a more efficient system. If they move to a more efficient system, they are within the area of the historical bounds potentially got now surplus water which they can use to irrigate but irrigate what. The same land under the new system or new land, it's actually the new land which is driving your concern isn't it?

25

A. Yes, it is.

Q. What access to new land?

A. Yes.

30 Q. And what access to new land and then with that then nutrient input into new land, that's why you're mentioning nutrients?

A. More nutrient losses from new lands than nutrient inputs.

Q. Yes, and nutrient losses from new land and so your concern with this is that it precludes that flexibility of being able to irrigate under efficient

irrigation systems additional land and I guess increase your nutrient losses?

5 A. No, not necess- no, we don't - we're not automatically saying increase nutrient losses, we're saying irrigate the land only rather than increase your nutrient losses. There might be some differences but that's a separate matter. Unfortunately, water use and nutrient loss is linked, but as Chrystal, Dr Chrystal has explained, they don't necessarily go hand in hand if your system is reasonably efficient.

10 Q. But there's no mechanism under the operative regional plan to manage that is there?

A. No.

Q. In terms of increased area resulting in no additional increased loss?

A. No.

15 Q. And have you proposed that as a mechanism to meet your change here? If there's an increase in area, have you proposed also that there is no increase or no change in nutrient output?

20 A. Ms Marr has made some recommendations which she can likely speak to when she comes up to give her, to speak about her evidence, but it's – we're very weary of proposing that kind of solution because what we've seen in Canterbury is that when people have gone for a water consent, they have been locked into their nutrients at that level which automatically provides for a grandparented nutrient allocation system because once you've already got people locked in through their irrigation consent to 220 kg per in of in per hectare, it's very difficult to get that back from 50 resource consent sprinkled across the district. So we're very reluctant to allow nutrient modelling to factor into this kind of thing while we do appreciate the council's concerns about managing nutrients, we think that this is more appropriate to be dealt with through the plan review especially since we are looking at short term resource consents for these deemed permit replacements.

25

30

Q. So you don't oppose in principle short term six year consents?

A. No, we're not going to be opposing that any further.

Q. Right.

A. Yes.

Q. So then your RDA, what's the purpose of that?

A. The purpose of that is to allow for those farmers who would like to develop their irrigation.

Q. Is the RDA also for a period of six years?

5 A. Yes. Yes.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

10 Q. I did, I was just a little troubled by the fact that Ms Marr in her most recent statement has a very – an extremely confined RD just talks about: “The increase in irrigation was planned in reasonable steps to implement that increase had taken prior to 30 June 2020.” So -

A. Yes.

Q. – that seems to be accepting of the maximum area *idea* with this one exception, that the plan in reasonable steps to implement that increase -

A. Yes.

15 Q. – prior to that date, so I was having trouble aligning that with some of your opening submission and I just wanted to be clear what the beef and lamb position was?

20 A. Yes. So Ms Marr's main concern is with those farmers who have already begun the process which I think I referred to in paragraph 40 and beef and lamb's general concern is for those farmers who would like to move to more efficient irrigation infrastructure as well as those farmers who have already embarked on the journey, but have not completed it.

Q. Okay, so that's going further than what Ms Marr has in her supplementary?

25 A. Yes, what we would –

Q. I just needed to be very clear about that.

A. Yes.

Q. Right. Thank you.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

30 Q. Six years is still okay?

A. Yes, I think that that's – that's probably been well worked through in the hearings to proceeding today.

Q. So I thought there was a concern if your making investment that were liability concerns from (inaudible 14:49:09) and so on?

5 A. We are still concerned about that, but when we asked for a longer duration it was before the Fresh Water package was released and we had serious concerns about the council's ability to complete a plan review within six years, however, the Fresh Water package has very much put a deadline on this and the concern is somewhat alleviated.

Q. Okay, you can follow that up as well.

MR MAW CALLS**JANE MARIE CHRYSTAL (SWORN)**

1450

Q. Do you confirm that your full name is Jane Marie Chrystal?

5 A. Yes.

Q. And you've prepared a brief of evidence-in-chief dated 5 February 2021?

A. Yes.

Q. And you've recorded your qualifications and experience in that brief of evidence?

10 A. I have.

Q. Any corrections that you wish to make to that statement of evidence?

A. No.

Q. Confirm that that statement of evidence is true and correct to the best of your knowledge and belief?

15 A. Yes.

Q. Now, my understanding is that you haven't participated in any of the joint witness conferencing, so you haven't signed any joint witness conferencing statements.

A. That's correct.

20 Q. And you haven't provided any supplementary evidence, but have you prepared a summary of your evidence that you wish to read out, or do you have a summary that you wish to give of your evidence before I then ask you some questions.

A. Yes, I do have a summary.

25 Q. If you can perhaps read that summary now.

A. Thank you. Tēnā koutou katoa, ko Jane Chrystal taku ingoa. Good afternoon, your Honour, commissioners, my name is Jane Chrystal, and I'm an expert in farm systems and the impact of these systems on the environment. I just will begin by reading my executive summary, followed
30 by paras 25 and 26, related to the irrigation types in Otago, the two key points I make in my evidence, and finally, I'll speak to table 4. So I'll now read my executive summary. There is an extricable link between agricultural land uses and freshwater quality. In particular, losses of nitrogen, phosphorus, sediment, and pathogens as indicated by E. coli

from farming systems and practices to surface and groundwater can ultimately impact on the health of freshwater ecosystems. The scale and magnitude of the impacts from agriculture on freshwater depend on a range of factors, including the type of agricultural land use, scale and intensity of use, farming systems and practices, along with environmental conditions such as climate and the catchment and farm geology and topography. Some farming activities pose a higher risk of contaminant losses to water than other. These include irrigation, effluent in terms of storage, land application, and management, some cropping, high stocking rates and densities, fertiliser use, including type, timing and load. However, these risks can be managed. Mitigation approaches that are tailored to the farm, including having a farm environment plan and the utilisation of farmer support tools such as soil moisture monitoring, irrigation scheduling, and nutrient budgeting, are likely to result in improved outcomes and reductions in the risk of losses of contaminants to water. Taking a tailored farm and catchment approach to the management of farming systems and practices is likely to deliver greater environmental outcomes while providing for the ongoing viability of agricultural land uses, more so than the prescriptive one size fits all standard or rule. Due to improved irrigation and management systems, it is entirely possible, for example, when moving from a less efficient irrigation system, such as border dyke, to a more efficient irrigation system, such as centre pivot, that irrigation area can increase without an increase in nutrient losses to water from the entire farm. So I'd like to take you to paras 25 and 26. The most common types of irrigation in Otago are pivot, totalling 27% of the irrigated area, and K-line or long lateral, another 27%. Flood irrigation types contribute a further 23% of the total irrigated area. According to a 2017 report on irrigated land areas in New Zealand, Otago and Canterbury are the only regions in New Zealand that have any border dyke or wild flood irrigation. So I'd like to highlight two key points I make on page 10, following para 31, and on page 11, following para 33. The first key point is that irrigation can increase the risk of contaminant losses to water, but that this risk can be successfully managed. The second key point is that the availability of

contaminants for loss to water can be managed by on-farm assessment and tailored management mitigations. If you would please turn to table 4 on page 13, and I will talk you through this modelling work that Wheeler and Bright undertook. I'd like to reiterate two things to keep in mind when we go through this table. The first is that Otago has a significant area of flood irrigation, so that's border dyke and wild flood, and my key point that contaminant losses from irrigation systems can be managed. So this table shows modelled outputs from the same farming system under the same climate with the same fertiliser, same stock, et cetera, and it's modelled using different irrigation types and managements, and then they modelled that on two contrasting soils. So across the top of the table, we have the modelled outputs for the two contrasting soils, a light soil on the left and a heavy soil on the right. The modelled outputs are irrigation depth in millimetres per year, drainage depth, millimetres per year, and nitrogen leaching from the root zone of kilograms of nitrogen per hectare per year. Down the left column, we have the model inputs of irrigation system and irrigation management options, so these are border dyke, then FF, which is a fixed depth of water applied and a fixed return period, and the scenario is run with a centre pivot or travelling irrigator. FV is the irrigation event is triggered by a soil water deficit reaching a certain trigger point. That then sets off the irrigation event, and then a fixed depth was applied. The scenario run in this situation was centre pivot. VF is when the irrigation event is on a fixed return period, so say every 10 days, but the depth of the water applied is varied to achieve a certain soil moisture target, and they ran this for a centre pivot, and then VV is when the irrigation event is triggered by a selected soil moisture deficit, and then the depth of water applied is set to achieve a certain target soil moisture, and again, that was run for centre pivot. So the results in this table illustrate several key points. The first is that different management options, so an irrigation type or irrigation scheduling management, give a large range in annual irrigation depths, and for this scenario, for example, for light soils, the range in irrigation depth was 350 to 1,465 millimetres per year, resulting in a range of drainage of 197 to 1,288 millimetres per year, and a nitrogen leaching range of 40 to 140 kilograms of nitrogen per

hectare per year. The second point is that high irrigation inputs lead to high drainage and hence high nitrogen leaching. The third is that irrigation systems and management practices can be changed to reduce the effect on drainage and nitrogen leaching. Point four is that the examples in this table indicate that lower irrigation depth, drainage, and nitrogen leaching occur when applications are controlled by soil moisture monitoring, so those were FV VF, and VV options. For similar irrigation depths, the lighter soil has a higher drainage, and therefore, higher nitrogen leaching, and in these scenarios, border dyke irrigation leaches considerably more nitrogen than the other systems modelled. These points support my position that risks and mitigations are farm specific and that the risks of irrigation resulting in high contaminant losses to water can be managed at a farm level. Thank you.

CROSS-EXAMINATION: MR MAW

15 Q. I want to take you back to your executive summary and para 18, but before I do that, I would be assisted if you could explain to me wild flood irrigation.

A. Yeah, so wild flood is where, often it occurs during the contours at the bottom of a hill, and there's a ditch, and the farmer will come along and put a barrier in that ditch, and then that flood just goes down over the paddock. There are no borders, and so you might have areas that are quite wet, areas that are missed completely, it's quite random.

1500

25 Q. Thank you. I had in my mind some interesting images as to what this might be, but that does make sense. Right, paragraph 18 of your executive summary you have outlined the – a set of activities that pose high risk of contaminant losses to water than others and you've stepped through a list. Is it fair to say that in addition to irrigation which you've mentioned in 18.1, each of those other activities that you've mentioned may occur in reliance on irrigation?

30 A. Irrigation, well they can occur separate to irrigation but irrigation, yes, it will increase the opportunity of the farmer to have higher stocking rates,

change systems so therefore you have effluent fertiliser use and yes, and cropping. Yeah.

Q. And so when you're thinking about these types of activities and the common denominator in terms of risk, as you add irrigation to these types of activities the risk profile in terms of additional nutrient leaching increases?

A. It can increase. So again, it comes down to the underlying natural resource, so the soil type that that's on, the climate and then the management of those, of those systems.

Q. And so when you then move through into your paragraph 19, you do start to talk about how you might mitigate some of those risks?

A. Mhm.

Q. Do you accept that you can't eliminate those risks?

A. Can you eliminate the risks? I don't think you ever eliminate a risk unless you take, unless you completely take away that. So you can eliminate the risk of high stocking rates and stocking densities by having no stock.

Q. And you could eliminate the risk of additional nutrient leaching associated with extra irrigation areas by not having extra irrigation areas?

A. If it's associated with extra irrigation areas, then yes, extra irrigation. But you could also have – you could change what you're feeding your animals, so you could bring in supplement and therefore you would have a higher, you could have higher stocking densities or you could change your feed type so that it's not pasture-based so that you've got a higher level of feed and that would increase the risk as well. So it's not purely irrigation that increases that risk.

Q. When you look at your list of activities as set out in your paragraph 18, irrigation would feature in terms of the risk profile for those activities?

A. Irrigation is one that would feature for those, but there are other ways that you could actually – you could increase your stocking rates without having irrigation.

Q. I understand that. The risk associated with irrigation is a risk of (inaudible 15:03:02) contaminants beyond the root zone in the soil profile?

A. If there are extra contaminants on that land, if you irrigate and you're using that land to say grow baleage so that you can feed that out to other

dry areas of your farm and you're not actually grazing stock, then no I don't think irrigation would necessarily cause an increase.

Q. And what if you're applying fertiliser to that land?

5 A. Well, only if you're applying fertiliser that exceeded what the plant requirements were or if you weren't soil moisture testing and so you actually created that drainage effect.

Q. And in your experience in the Otago region – well, do you have experience in the Otago region modelling farms?

10 A. No, not, not individual farms. I've done some modelling for the Strath Taeiri when I worked with AgResearch and that was my appendix 2.

Q. So when you did that modelling, did you look at any actual farm systems or were those all hypotheticals?

A. They were all hypotheticals.

15 Q. Now, I want to move on to the part of your evidence where you address irrigation use on sheep and beef farms, do you have any knowledge of the percentage of sheep and beef farms where there is irrigation taking place?

A. No, I don't.

20 Q. So at your paragraph 22 you've set out typical uses of irrigation on sheep and beef farms in Otago. What do you base that paragraph on?

A. So that is based on my experiences working with the regional team and then discussions with farmers but I don't understand, have a knowledge of the percentages of farms that they relate to.

25 1505

Q. Have you spent any time on the farm in terms of sheep and beef farms and in the Otago region?

A. Yes.

30 Q. And when you think about that experience have you observed the types of irrigation use you've set out in your paragraph 22?

A. Not the – I haven't observed them on lucerne crops.

Q. So looking at that list and starting at 22.1, irrigating winter crop paddocks during the growing season to boost crop growth rates and crop yield, does that occur and as far as you understand for on farm wintering?

A. Yes.

Q. Does it also occur for the wintering off, so taking stock from another farm so a dairy platform?

5 A. I'm trying, sorry, the grazing would occur where they're grown so you're not, you're not talking about cut and carry?

Q. No.

A. Yeah, yes, yep.

Q. And in your experience what sort of sizes of winter grazing paddocks have you experienced?

10 A. An individual paddock?

Q. Well just in terms of your experience on sheep and beef farms, what sort of areas have you observed?

A. I'm confused as to whether you mean the size of an individual paddock or whether you're talking about the proportion of the farm.

15 Q. No the area.

A. Five hectare paddock.

Q. And when you think about those intensively grazed crops and you think about the potential for contaminant losses do you consider that activity high risk activity?

20 A. Winter grazing of crops is a high-risk activity, yes so yes I would consider it a high-risk activity.

Q. And you do oversee a modelling, that's something you are familiar with?

A. Yes, I do, very.

25 Q. Have you modelled the loss rates associated with intensive winter grazing?

A. Yes, but not for Otago that I can bring to mind.

Q. And what sort of numbers might you see elsewhere in the country?

30 A. It can be, it can be anywhere up to 200 kilograms of nitrogen per hectare per year thinking in, but I would say that I haven't done it in the recent version but it can be considerable.

Q. Correct my understanding if have it wrong but the most recent version of Overseer is each preceding version appears to have done, is showing higher and higher rates?

A. As we learn more, yes.

Q. Yes and just for the record what areas of New Zealand, which regions have you undertaken your modelling?

A. Waikato, Canterbury, Southland and then and as discussed these ones in Otago but they were, those weren't actual farms.

5 Q. That's the appendix 2 assessment?

A. Yes, mhm.

Q. For Strath Taieri?

A. Yes.

10 Q. I take you to your paragraph 29 now and in that paragraph you're referring to the potential for nutrient losses to increase nutrients in the system associated with irrigating previously non-irrigated dryland areas?

A. Sorry which paragraph are you on?

Q. 29. And there you step through some of the farming practices that might give rise to increased nutrient losses associated with that irrigated land?

15 A. Yes.

Q. So increased stocking rates?

A. Yes.

Q. And why are increased stocking rates giving rise to a potential risk?

20 A. So when you increase stocking rates you're increasing the amount of feed that's required. Feed converts into urinary N which is excreted and that is available for loss during leaching.

Q. High rates of fertiliser application, why does that increase the risk?

25 A. So that increases the risk (a) via if there's, say depending on so you could lose some direct to waterways depending where it's applied. You could lose, if it's not the rates in terms of pasture growth so it's available for any drainage and if you're and then if you, applying irrigation and that's not successfully monitored then that can take some of that contaminant or that nutrient through drainage as well or in surface runoff in the case of border dyke.

30 Q. Higher crop yields?

A. The same thing. It's the same – it's more food, feed in the, well there's two ways actually so there's more feed so you can have higher rates so you have more urinary nitrogen. The other one is that a higher crop yield if you're grazing it in situ you could have more animals on that crop at one

time. They're there or they're there for longer, more urinary nitrogen being deposited on that bare soil available for any potential nitrogen drainage and leaching.

5 Q. And the final matter you note there is the ability to grow different crop types so what's the connection there?

A. So you can I guess it's the ability to grow crops that may have been, that may require more water and then so because you now have those crops, they may have higher fertiliser rates, whether they may or may not be fed to stock. If they are fed to stock again the yields you know as I said
10 before.

THE COURT: JUDGE BORTHWICK

Q. Sorry can you just run me through that again but just take the pace a little bit slower because I'm writing notes so the ability to grow crops that may require more water?

15 A. Yes.

Q. And then –

A. So your changes, you're changing to a crop that before you couldn't grow.

Q. Yes.

A. So now it's because you were say water limited and then those crops
20 either depending on management might require greater fertiliser inputs or if they, again if they are being fed to stock you've got the same issue with the whole stocking density and stock being on, you know extra stock on that land with urinary nitrogen.

Q. Understood.

25 CROSS-EXAMINATION CONTINUES: MR MAW

Q. So you then go on in your evidence to note in your paragraph 30 that there are some management practices that can reduce the risk of water and thus nutrient loss from farming systems?

A. Yes.

30 Q. And you then go onto explain that the type of irrigation system can also have an impact on those losses?

A. Yes.

Q. So when you think about managing the potential risks associated with increased stocking rates, what's the management practice that you have in mind to manage that risk?

5 A. So management practice for increased stocking rates so there are multiple management mitigation strategies. It comes down to the
contaminant of concern so nitrogen we think of in terms of losses primarily
10 through leaching. Phosphorus sediment, *E. coli* through overland flow pathways. You can, so if it's an overland flow pathway you can do things like have a sediment trap or riparian planting, fencing out of waterways, not grazing or cultivating critical source areas which are the areas in the paddocks, like a gully where a lot of nutrients can congregate and then there's a conduit down to a water body. For nitrogen leaching you might change your stocking type so for example a dairy cow, your own patch from a dairy cow there's up to 1,000 kilograms of nitrogen per hectare in
15 that patch whereas a sheep or deer that might be 500 kilograms of nitrogen per hectare and so when you, you have multiple urine patches and that's like nitrogen is available for leaching, there's actually less in each patch if you've got a lower load so you can reduce the risk of nitrogen leaching by changing the stock type. In terms of sediment again
20 stock type, you can avoid certain areas of the farm for different times of risk so for example you may not graze cattle on slopes that are at risk of erosion so then that's your phosphorous sediment, potentially *E. coli*'s you might not graze the hillsides during winter. We know that urine that's deposited in autumn is quite high risk, so you might say okay my — I've got some light soil, some stony soils, I'm not going to graze, winter graze
25 those soils or I'm not going to graze those soils during autumn because I know that slope of nitrogen sits there and there's less distance for that to travel when we get a rainfall of en — before it hits water. So, therefore I'm not going to put that slug of nitrogen in there. I might put it on a heavier
30 soil where I know it's gonna be trapped in that soil profile until the pasture or the crop comes along after our winter and has the ability to take up the nitrogen so it's used in plant growth rather than leaching, and so all this comes down to understanding the underlying soils and geology and then

the farming system and tailoring that individually to the individual farm situation.

1515

5 Q. So the mitigation steps that you have outlined might reduce the risk, but they won't necessarily eliminate those risks?

A. That's correct.

Q. You then go on to discuss how the type of irrigation system can also assist with, you say, reduction or elimination of surface run off?

A. Yes.

10 Q. And reduction in leaching volumes, referring again to the moisture monitoring type tools.

A. Yes.

Q. In your experience how wide spread is moisture monitoring in the Otago region?

15 A. I cou — I, I don't know.

Q. You go on in your paragraph 33 to provide some further mitigation in terms of these risks including matching fertiliser input to plant and crop demand?

A. Yes.

20 Q. And then you pick up at 33.2 the matching of stocking rates to the natural capital of the land?

A. Mhm

Q. And strategic grazing of winter crops.

A. Yes.

25 Q. So, all quite bespoke and nuanced mitigations required in order to manage the effects of irrigation of land.

A. Yes.

30 Q. Now I want to move on now to the part of your evidence where you discussed potential nutrient leaching implications associated with a change of dry — from dry land to irrigated farm land.

A. Yep.

Q. And there are two components to this. The first is the study that you've attached at Appendix b to your evidence.

A. Yes.

Q. And then there's the Bright and Wheeler information that you referred to in your summary. So let's start with your Appendix B and having considered that document and read your evidence, do you accept the proposition that the increase in, sorry the change from irrigated to. I'll start that again, the change from dry land to irrigated farm systems has resulted in your modelling in an increase in nutrients in relation to a number of the scenarios that you have examined?

5

A. Yes. Changing from dry land to irrigated has resulted in my modelling in an increase.

10 **THE COURT: JUDGE BORTHWICK**

Q. Has resulted in a what increase?

A. In my modelling, in the modelling I undertook, it has resulted in an increase in nutrient losses to water.

CROSS-EXAMINATION CONTINUES: MR MAW

15 Q. And people like me who like pictures, the graphs that are in your Appendix B start to give an indication of what those changes look like so if we turn to your Appendix B in page 10 of that document.

A. Mhm.

Q. And your figure 4 there is the modelled loss rate for different blocks in a future, sorry, possible future sheep and beef irrigated scenario?

20

A. Yes.

Q. Across the range of soil types in the Strath Taeiri and when you analyse that graph there's an increase associated with each of the irrigated options compared to the non-irrigated?

25 **THE COURT: JUDGE BORTHWICK**

Q. Just pause for a second. So this is figure 4, I wasn't actually sure how to read figure 4. It is like oh, did you get that out of figure 4, I did not. So perhaps you could step us through say the Komako clay, gley, glaze.

A. Okay so, within the Overseer modelling.

30

Q. Yes.

- A. We get nutrient losses per block so I had the different systems in there and then what I've done here is given the block losses.
- Q. Yes.
- A. And also in the green the average whole farm loss. What I did when I had that, that, each farm with it's different blocks, I then changed the soil types to those, to those, the predominant soils in that region so that all those blocks are under that at gley, Komako gley and so what this graph is showing us is that, that irrigated sheep kale regardless of soil type has quite high losses.
- 5
- 10 Q. I see, okay so. I can see where my problem might come, I'm not differentiating between your two blues.
- A. Yes, right.
- Q. I think my dryland sheep lucerne —
- A. Got you.
- 15 Q. Looks pretty much like the same colour as the irrigated sheep kale.
- A. Okay.
- Q. So I am going, oh it's all —
- A. It's all the same.
- Q. It's all so spikey.
- 20 A. Okay, so then in each soil type the first blue, is your dryland sheep lucerne.
- Q. I'm with you.
- A. And that second one which is considerably higher in each soil type.
- Q. Yes.
- 25 A. Is irrigated sheep kale.
- Q. That's really helpful. Now I can understand why Mr Maw asked you the question.

CROSS-EXAMINATION CONTINUES: MR MAW

- 30 Q. So, the pattern which becomes apparent when the colours are reconciled in the graph, which is — I must confess I had to look carefully at those two blues, the pattern that becomes apparent is that the irrigated use results in a higher nitrogen leaching estimate than the non-irrigated scenario.

- A. Yes, except that you should actually be comparing dryland sheep lucerne with irrigated sheep lucerne and not a lucerne with a kale.

THE COURT: JUDGE BORTHWICK

- 5 Q. And you can't grow kale without water? You have to irrigate that crop don't you, or not?
- A. Possibly, not necessarily.
- Q. Not necessary.
- A. Well you do, yeah, to get, probably to get the yields and as I say I don't have specific knowledge of it growing in Otago so I'm not sure.
- 10 Q. So you are meant to compare dryland lucerne with irrigated lucerne.
- Q. Yes.
- Q. And dryland pasture with irrigated pasture.
- A. Yes.
- 15 Q. And irrigated sheep kale kind of standing out there as an exception in it's own right. Yes.
- A. Mhm and then I guess the main point, looking at that whole — is to look at the whole farm so well you can say that yes that irrigated, that kale is quite high loss.
- Q. Yes.
- 20 A. But it depends entirely on the proportion of the farm that is under that management system because when you then look at the whole farm losses and quite often in extensive sheep and beef farms where they do have a component of a winter crop, you can apply quite a lot of effort into reducing those emissions from that block but it actually doesn't reduce
- 25 your overall farm losses because it's such a small percentage of the farm.
- Q. And so for each of the colours on the bag graph.
- A. Yes.
- Q. That is a block of dryland lucerne, a block of irrigated lucerne, a block of pasture which is dryland and pasture another block irrigated pasture and
- 30 another block for irrigated kale. Is that how it works?
- A. Yes but —
- Q. So you have got five blocks
- A. Yes.

Q. And then you have got the overall farm.

A. And the total — with the understanding the entire — what is in that whole farm bar.

Q. Yes, also includes those —

5 1525

A. It is included – everything else, nothing else. So this is the entire, this is everything that's in the green bar is broken down into those other ones, there isn't anything missing from this graph.

Q. Yes.

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

Q. What do we compare the green bar to, is there an unirrigated –

A. Yes.

Q. Versus irrigated whole farm on that graph? Or is it?

A. If you go back to page 8, the green bar is the orange bar.

15 **THE COURT: JUDGE BORTHWICK**

Q. Page eight?

A. Sorry page 8, figure 2.

Q. And so now the green bar is?

A. The orange bar, I'm sorry. So that, so this green bar, so this graph here was this future sheep and beef scenario where we had the increased irrigation area and that becomes this orange bar.

20

Q. You mean under –

A. And so when we compare in figure 2.

Q. Figure 2, yes okay. So now that's whole farm.

25

A. And then – so this is whole farm, yes and then so the original dry land, what we call dry land but they did have a small component of irrigation is the blue and then we looked at what would happen when we increased the area of irrigation, and that changes it to the orange. And then I looked at a dairy farm for comparison of you know, taking it the whole way to intensify – you know, a more intensive system and what this shows us is that at that time there was the 30 kilograms of nitrogen limit, and the

30

soil type has a huge impact on whether, on those overall losses. So these are exactly the same systems but different soil types.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. No you've lost me, I'm afraid. So looking at figure 3?

5 A. Figure 2.

Q. Right, that's possibly why. So that's got – I see, it's the blue compared to the?

A. Orange.

Q. Orange.

10 A. So that, so the blue is your original dry land although there was a small component of irrigation in that. And that orange is what we were looking at as green in figure 4.

Q. I see, so this might usefully be seen as a summary graph of –

A. Yes.

15 Q. That's helpful. So I can put – and I was going to look at the dairy graph as well in your figure 5 which shows a similar pattern, but we can cut to the chase in your figure 2.

A. Yes, we can cut to the chase in figure 2, yes.

20 Q. So each of the scenarios modelled shows an increase in nitrogen loss compared to the dryland farming system?

A. Yes.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Whilst we're thinking about it – oh no, you can finish your questions, and I was going to have – I just had one.

25 A. Was it on those in that part of the appendix you had a question, or?

THE COURT: JUDGE BORTHWICK

Q. Well, I was – so this is Overseer modelling?

A. Yes.

30 Q. Applying the standard farm management practices, I've forgotten what they call them, mitigation practices which are part of Overseer?

A. So Overseer assumes good management practice, yes.

Q. Yes, so that's been applied to get these figures?

A. Yes.

Q. But none of the other management techniques that you talk about in your evidence are necessarily brought to bear on this?

5 A. That's correct.

Q. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. Now, let me test that answer. So for example, the fertiliser application, my understanding of the way Overseer works is that it assumes the correct application of fertiliser rate?

A. No.

Q. So actual fertiliser?

A. So the user has to input fertiliser application.

15 Q. So for the purposes of your examples that you have tracked through and put in the summary graph, you are assuming good management practices?

20 A. In – good management practices in terms of the application of the fertiliser? So Overseer automatically assumes that you're, you are applying your fertiliser evenly, it's not being applied over a waterway et cetera.

Q. Right, so the mitigation options that you were discussing in terms of reducing the risks of fertiliser are assumed then in the Overseer modelling?

25 A. The ones for where it's, where it's applied, not the one where you're tailoring the level of Overseer of – sorry, of fertiliser to the plant growth that then you would be inputting the fert – the amount of fertiliser that was applied.

THE COURT: JUDGE BORTHWICK TO MR MAW

30 Q. So on the Wilkins example, remember the Wilkins appeal and we controlled the amount of fertiliser input? And that was because Overseer wasn't doing it. And so we said I think it was 50 kg or whatever it was per annum –

A. Yes.

Q. Based on advice from the relevant fertiliser sector. So those inputs aren't there, I don't think.

THE COURT: JUDGE BORTHWICK

5 Q. There's very – not a terrible amount in terms of what is recommended by way of good management practice and what is inputted or assumed by good management practice in Overseer is there? I mean, your evidence goes well beyond that good management practice -

1530

10 A. Yes.

Q. - it does, doesn't it? Yes.

A. And particularly for losses via over land flow, so overseer isn't spatially explicit, so a lot of the things that we do is, you know, is to protect those critical source areas. An overseer just doesn't do that.

15 Q. No.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. It's modelling that which goes down –

A. Pr-

Q. – not that which goes across as –

20 A. Yes, it gives a bit of a guess as to for phosphorus.

THE COURT: JUDGE BORTHWICK

Q. Which is again and why in Wilkins we didn't go with a P output for overseer, so Wilkins is an appeal, Southland Regional Council and Wilkins, you might - I don't know whether you want to look, at it or not, but
25 a lot of these issues were tested through there.

MR MAW TO THE COURT: JUDGE BORTHWICK

Q. Now was that the –

A. That was it, yes, just exactly what good management practices were in
30 and that's, yes, I understand that.

CROSS-EXAMINATION CONTINUES: MR MAW

- 5 Q. Right, the next proposition that I wish to explore with you, so to wrap up the part of your evidence we've just been discussing, your Otago region specific modelling shows an increase in nitrogen loss associated with a change to either an irrigated sheep and beef or an irrigated dairy compared to dry land?
- A. In this scenario yes.
- 10 Q. And now you have then referred to some work by Wheeler and Bright from 2015 and you took the Court through Table 4 in relation to the Wheeler and Bright 2015 report?
- A. Yes.
- 15 Q. Can you tell me what the farm system that was modelled comprised of in that situation?
- A. I'll have to check. I'm not sure if, I don't recollect if they outlined it in the paper or have the paper here, I'm just having a look. So I have the – it was a block receiving 600 millimetres rainfall, irrigated between October and March and then for the light soil, that's a plant available water of 49 millimetres to 600 millimetres or the heavy soil was a plant available water of 103 millimetres but there is no information as to what the stocking rate or what stocking type or anything like that.
- 20 Q. So having looked at the paper there's no explanation as to the farming system that has been used in that example?
- A. No, so the absolute losses you can't, as with overseer, you can't use an absolute loss for anything anyway, but the relativity because the farming system and the managements were identical, the relativity between the scenarios is relevant.
- 25 Q. What was the purpose of that paper?
- A. The purpose of that paper was to explain the new irrigation component of overseer.
- 30 Q. So it wasn't a paper about looking at the comparative differences between systems, the differences that were produced in that paper were simply for illustrative purposes of the new irrigation module within overseer?
- A. Yes so it was designed to – the paper was purpose was to explain the way the model interprets the losses from those systems.

Q. And the paper itself notes that the situations to be is simply for illustrative purposes?

A. Yes.

5 Q. And so great care needs to be taken in seeking to use that information for a different purpose?

A. Yes.

Q. And the paper goes onto note that the effects of management rules will depend on climate and soil characteristics?

A. Yes.

10 Q. And the annual rainfall number of 600 millimetres that was used in this example, have you compared that to the annual rainfall that occurs in the Otago region?

1535

15 A. No, because I was commenting predominantly on the comparison between the irrigation types because short of modelling all farming systems in the region.

Q. Do you accept that the outcomes from the modelling may change significantly if the rainfall parameter is changed in the modelling?

20 A. If the rainfall parameter is changed then and the soil plant available water remains the same, then yes, there would be – the irrigation would be less because the model says: “Well, what is required to take that soil back up to fuel capacity.” The only one that might not change is actually border dyke.

25 Q. And what happens if it goes the other way, there’s more rainfall say in the shoulder seasons than field capacity?

A. If there’s more rainfall and it’s still, it has irrigated and it hasn’t dropped below fuel capacity, then you’re going to have surface run-off or drainage.

Q. And that’s where the risk of extra nutrient leaching arises?

30 A. Yes, which is why you would do an assessment in why you have moisture monitoring.

Q. In your experience, even without irrigation in the shoulder seasons can field moisture levels be exceeded?

A. I couldn’t comment for Otago.

Q. The paper also notes that soil characteristics are important?

A. Absolutely.

Q. And that only a small subset of possible options is shown in what, this table 3, which you've brought through into your evidence as table 4?

A. Yes. Yes.

5 Q. I wonder whether I might have you produce this document to add to the
–

THE COURT: JUDGE BORTHWICK

As part of the common bundle or is this part of the, would you say, the exhibit?

10 **MR MAW:**

Probably as an exhibit.

THE COURT: JUDGE BORTHWICK

Q. Probably as an exhibit, okay. So we will just have the witness check the document, confirm that she's with the document, like you, but just make
15 sure that this is the document that you had in mind.

A. Yes.

Q. It is. Okay. And is there any objection to the production of this document as an exhibit to all witnesses referring to it? No, okay, so just produce that document as exhibit Beef and Lamb 1 Paper entitled Irrigation in
20 overseer, authors Wheeler and Bright.

EXHIBIT BEEF AND LAMB 1 PAPER PRODUCED – IRRIGATION IN OVERSEER AUTHORS WHEELER AND BRIGHT

EXAMINATION CONTINUES: MR MAW

Q. And just so that the court understands the part of the document that we've
25 been discussing, you would turn to page 5. You will see a heading Example Outputs and at the end of the first paragraph under that heading you will see "It is also important to note that these examples have been set for illustrative purposes only and that the effects of management rules will depend on climate soil characteristics and only a small subset of
30 possible options is shown in table 3"?

THE COURT: JUDGE BORTHWICK

Q. Right and you can see that written there?

A. Yes.

EXAMINATION CONTINUES: MR MAW

5 Q. In your experience, modelling farming systems have you been engaged to prepare comparative overseer analyses to demonstrate the potential effects of increased areas of irrigation?

A. Only in for this document here.

Q. Right, so that was?

10 A. So this is appendix 2 for the Strath Taieri.

Q. So that was your essentially, your modelled hypothetical examples which show the increases?

A. Yes.

15 Q. I just take you to your paragraph 47 which because you're concluding the paragraph and there you say "That irrigation can be conducted without significant negative impacts on nitrogen leaching and it's important that systems are considered on a case by case basis"?

A. Yes.

20 Q. Now is that because of the bespoke mitigations that will need to be applied in relation to each farming system, will need to be very carefully matched to each farm system to ensure that the reductions that might occur, occur?

25 A. Yes, so the mitigations need to be tailored to the farm and an understanding of that farming system, the proportion of the farm that is under irrigation be impacts on farming system and change to farming practises that that irrigation will result in, all these need to be assessed in my belief.

30 Q. When you think about the effects of nutrient run-off and also nitrogen leaching in a whole of farm system, do you accept it's not just as simple as seeking to balance the overseer books in terms of the mass load of nutrients, but rather the location from which nutrients might be discharged is also important?

A. Yes, so I guess I spoke before about looking at your vulnerable soils, but then I guess I'm thinking that you're talking about attenuation and the fact that overseer and we're looking at what comes out the bottom of the roots, and then there is a difference there in terms of what leaves the root zone and then what you see in a water body, and there's different levels of attenuation, and that's an area of understanding or that I don't have in terms of that attenuation factors.

5

Q. An overseer doesn't take into account the sensitivity of receiving water bodies?

10

A. No, it doesn't.

Q. And so the link between location and a sensitive water body is simply not something considered when comparative overseer modelling is undertaken?

15

A. No, and again that comes back with your farm plan, so you need to actually understand the receiving water bodies and what is the contaminant of concern. An overseer, the other thing with overseer is that it's only looking at nitrogen and phosphorus, it's not looking at sediment or E.coli, so those sorts of things need to be done at a farm level.

20 **MS PHILLIPS:**

With your permission, I've two questions. Thank you.

THE COURT: JUDGE BORTHWICK

Q. So you have to follow on from Mr Maw's questions, so that's your compass.

25

A. Yes.

Q. And then the court will ask it's own questions, but now is the time to ask.

A. Thank you so much.

RE-EXAMINATION: MS PHILLIPS

Q. Dr Chrystal, earlier you were taking the court and Mr Maw through some figures in your appendix 2, namely figures 2, 3, 4 and 5 which were

30

comparing dry land sheep pasture, kale, lucerne and so forth with irrigated land uses?

A. Yes.

5 Q. And you were remarking on the differences. So I would just like clarification please. What is the difference between dry land and irrigated?

A. You're talking about a figure in particular or not?

Q. Figures 2, 3, 4 and 5 your HWhat do you mean in terms of what is the difference?

10 Q. What is, if one is talking about dry land or we're talking about irrigated land, just for example, in your figures, what is dry land and what is irrigated?

A. Right, so for this, this what we're calling dry land, this was a farming system that had a proportion of irrigated land in it and then the irrigated, the irrigated situation – let me read through. So I'm going to section 3.2.1, that current system, that was an 860 hectare farm, it had 709 hectares of dry land and 137 hectares of irrigated pasture. Then with that future sheep and beef farm that was the dry land pasture reduced to 483 hectares and irrigated pasture was increased to 349 so I guess most commonly we're not, sheep and beef properties don't, most commonly irrigate 100% of their property sorry and I should say when I'm saying sheep and beef I am also including deer just in all my comments here.

1545

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL

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

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. And so your evidence has made, you in some detail explained the measures which can can be taken to reduce the likelihood of loss of NMP as a consequence of irrigation and there are a large number of mechanisms which you describe in your evidence and also in response to Mr Maw's line of questioning and I don't see any of that being proposed

30

by sheep and beef – beef and lamb and I'm just wondering can you comment on that, whether there should be an increase elsewhere in the country? What's a sensible outcome here if there is to be an increase in, of the area of land under irrigation should there also be a drive to ensure that farmers employ those tools which are available to them to reduce the losses of contaminants which as you say is not just NMP and it's not also just E. coli and sediments. There's a range of losses.

- 5
- A. Yes, so I think farmers really need to understand the, their land and the underlying capital and the risk, the inherent risks and also opportunities of their particular farm and their, and the land that they're on, the climate that they're under and then have a farm, an environmental plan that looks at the, was in the catchment so understanding of the receiving bodies but also looks at the risks of and of that land and then the farming system and looking at those areas that they can, where they can mitigate the risks and I think, I also believe that it needs to be a, not a tick box so it needs to be farm specific and the farmer needs to be involved and has to buy into the whole system and the whole process because my experience I facilitated a group of deer farmers for over three years, an environmentally focussed group and I found that when farmers understand the risks and understand the lost pathways and what causes those risks, they actually come up with mitigations that those of us that might sit behind a desk don't think of and I'm very nervous when it comes to having a checklist of these other mitigations. I think that as a whole the sector benefits when farmers understand those loss pathways and understand what the risk factors are and then innovation occurs and they and farmers often come up with mitigations and we see them a lot so for example there's some farmers in the Pomahaka and they understood the mechanisms of losses of sediment and phosphorus from crop and they had some screens up to capture that sediment before it reached a water body and then they were reapplying it and they were getting benefits, they understood that that sediment is high in nutrient and that's a natural fertiliser. You don't want to lose your top soil so it's actually engaging with farmers making it about their farm and understanding the pathways and then farmers themselves come up with some solutions.
- 10
- 15
- 20
- 25
- 30

- Q. No I tend to agree with you and including also that it should not just be the regional council that says do this, like you know fence three metres off a waterway and so farmers to that at a huge cost and then still wonder why they've got a problem and the problem is they're not actually engaging with the whole of the system so those simple solutions can engender a great deal of community resentment with the results aren't seen within the environment but okay so you're not, anyway you're not advocating or supporting an increase in irrigable area with a potential increase in nutrient or contaminant losses without also having a look at who the range of measures which can be brought to bear to lessen the likelihood of that.
- 5
- 10
- A. Yes.
- Q. Yes okay all right thank you very much for your evidence, it was a very interesting read so thank you very much.

15 **QUESTIONS ARISING – NIL**

WITNESS EXCUSED

COURT ADJOURNS: 3.50 PM

COURT RESUMES: 4.07 PM

MR MAW CALLS

ANDREW NEIL BURTT (SWORN)

5 Q. You confirm that your full name is Andrew Neil Burtt?

A. Yes.

Q. And you're employed by Beef + Lamb New Zealand Limited as chief economist?

A. Yes.

10 Q. You've prepared a brief of evidence dated 5 February 2021?

A. Yes.

Q. And you've set out your qualifications and experience within that document?

A. Yes.

15 Q. Are there any corrections that you would like to make to your brief of evidence?

A. No.

Q. Do you confirm that the contents of your brief of evidence are true and correct to the best of your knowledge and belief?

20 A. Yes.

Q. Have you prepared a – before I do that, you haven't participated in any of the joint witness conferencing?

A. No.

25 Q. Have you prepared a summary of your evidence or do you wish to read from your executive summary or some other passages of your evidence?

A. Yes, I've got a few comments here that are summarising what I've said in evidence.

Q. If you could just proceed to do that now?

30 **MR BURTT:**

Your Honour and Commissioners, I'm just going to make a few brief comments based on the information in my evidence, repeating some of the points I made. Agriculture makes a significant contribution to Ota –

THE COURT: COMMISSIONER BUNTING

Q. Sorry, are you reading from it now?

A. Not, not specific, not solely.

Q. So if you do –

5 **THE COURT:**

Ad-libbing.

THE COURT: COMMISSIONER BUNTING

Q. If you do, can you just refer it?

A. Sure, yeah okay.

10 Q. Okay.

MR BURTT:

So yeah, agriculture makes a significant contribution to Otago's regional economy. GDP per person, gross domestic product which is a key indicator of economic activity per person was \$56,700 in 2019, which was 93% of the average of the whole, the New Zealand country. This reflects what is known intuitively about Otago's economy, it's reliance on agriculture and clearly demonstrates the importance of agriculture per se, but also the businesses that service it and benefit from it. Livestock production and red meat processing are major activities in Otago and the sheep and beef livestock production sector, the farming sector is significant and a major employer in the region. I outline that in paragraphs 29 to 40.

So, in summary saying that sheep and beef livestock production sector, so the farming sector is really colloquially refer to it, supports around 7% of the workforce in Otago/Southland. We had to combine Otago and Southland so that we could get from commercial companies some commercially confidential information which we, Beef + Lamb New Zealand haven't had access to directly either. And that's including the flow-on benefits to other sectors, such as the support services, finance and insurance services and things like healthcare. Livestock production also contributed about 7% of the industry added value in the combined region, Otago/Southland again, and about 5% of the household

income. So that's a bit lower because generally, wages in the sector are lower than they are on average across the rest of the industry. Red meat processing employs about 10% of the workforce in Otago/Southland, and as I said earlier, that's because Otago/Southland, that's because of the commercial confidentiality and providing some information to our analysts. And about 30% of that employment is direct, so in the processing industry and 70% is indirect, servicing the processing industry.

10 Sheep and beef farming in Otago is conducted in diverse and complex ways and in diverse and complex environments. The diversity is not just about the physical environment, but it's as diverse about the individuals who live and work on those farms and that's often overlooked when we talk about "farm", because "farm" really oversimplifies the term and understates the heterogeneity, the variability of farms, farm businesses and overstates how similar they are.

15

One of the things that strikes me about that diversity is that we estimate that around – there are 110 high country farms, 108 hill country farms, 495 finishing breeding farms, 120 specifically finishing farms, making up about 910 commercial sheep and beef farms where their major livelihood is derived from farming. The absolute numbers, those numbers that I just read out and the proportions are shown in figure 11 in the evidence I submitted. And on average, high country farms are significantly larger than the finishing farms. So the high country farms at the top of that list are significantly larger than the finishing farms. And that, the reason is that reflects the natural capital of each one and what they can, what they can produce.

25

The number of commercial sheep and beef farms has declined over the last few years as farms have amalgamated, and particularly as dairy conversions have occurred. This is most noticeable in the finishing breeding farms, farm class 6 which is the most populous in the region, and that's in figure 9. Conventional measure of production intensity is stock unit, stocking rate, stock units per hectare. Those high country farms I was talking about have 1.5 stock units per grazing hectare on average, the hill country farm's a little under six stock units per hectare, finishing breeding farms eight stock units and

30

then the finishing farms as high as 12 stock units per hectare on average, which is about equivalent to one and a half dairy cows per hectare. But that costs, the region, the weighted average of that is 4 stock units per hectare, so it's really a, really emphasising that diversity. And this is shown in figures 14 to 18
5 of the evidence, pages 19 and 20.

1615

Overall, there's been little change in stocking rates in the last 30 years. So
10 there's been some substitution. Otago's commercial sheep and beef farms generate revenue from multiple enterprises, and we talked a bit about that, that was talked about earlier. Sorry, not "we" but that was talked about earlier, including for example deer and the dryland farming. Some of the more widely known and discussed non-traditional revenue streams on commercial sheep
15 and beef farms are rearing male calves for dairy beef, traditionally often called bull beef, grazing young dairy heifers, and crazing dairy cows in winter. However, on average, a sheep and beef farm survey showed that 95% of the gross farm revenue on commercial sheep and beef farms came from sheep and beef cattle, and dairy grazing revenue on those commercial sheep and beef
20 farms was close to zero, so we had 95% from sheep and beef, close to 0 from dairy grazing on average across the region. Sheep and beef farming is complex and heterogenous, and these are commercial connections right through the value chain, from some particular farms that specialise in breeding stock, sell them as store stock to other farms and finish them and then processing. To
25 provide some indication of the use of irrigation, I used irrigation charges as a proxy for the number of farms that use paid irrigation. It is likely, as we've heard from others, that other farms are irrigating through other arrangements, that is, are not part of a paid irrigation scheme. Finally, just wanted to summarise some points I was making, livestock production and meat processing are major
30 economic activities in the region, and the sheep and beef sector is inextricably linked to the overall viability of the region. Farming systems in Otago have responded well over many years to changing circumstances, and farmers have been very responsive while managing many risks, some of which are fully in their control and some of which can be managed but are not fully controlled by

farmers. The sheep and beef livestock production sector, therefore, is adaptable and resilient. It is continually making efficiency gains in response to the signals that it is getting from “the market” and regulation, therefore. Through continued innovation and adoption of technology – and technology should not be understood as just digital technologies – sheep and beef farmers have increased production while decreasing the number of animals they have been managing, and they have also collectively lost their most productive land to other land uses. Thank you.

CROSS-EXAMINATION: MR MAW

10 Q. I was interested when I read your evidence in relation to the proportion of farm revenue associated with the non-traditional revenue streams, and you have discussed those both in your summary today, but they are also referred to in your para 14, and here, the commercial sheep and beef farming supporting the dairy sector by raising male calves for dairy beef and grazing of young dairy heifers as they mature and the grazing of dairy cows in winter, so those types of activities, and you go on to note in your paragraph 16 that in 2018 and 2019, the percentage of total gross farm revenue from those activities was close to zero.

15 A. On average, Mr Maw, I'd just emphasise that.

20 Q. Well, yes. In terms of the variability, so just so I understand this, is there a correlation between the percentage of the non-traditional revenue streams and the dairy farmgate price?

A. Anecdotally, there would seem to be, but I haven't done any specific work that identifies that.

25 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Now, I am pretty ignorant, what does that sentence mean? You guys understand it, but I do not.

A. All right, we'll step through it. So understanding non-traditional revenue streams on a commercial sheep and beef farm, so if we think about the traditional revenue streams on a sheep and beef farm, how would you describe those?

30

- Q. I understood that part, it was the correlation with the price at the farm gate. I did not sort of get that step, what you meant. So you have got the non-traditional revenue schemes, and I understand that part, and so it is the variable, the correlation with the farmgate price, I did not understand that, farmgate price, or what the correlation is.
- 5 A. Right, so the source of the animals in relation to those non-traditional revenue streams are typically from another farm.
- Q. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

- 10 Q. Is that correct?
- A. The source of the animals for?
- Q. For the non-traditional revenue streams that you've identified, so essentially dairy support.
- A. Well, when it comes to dairy support, yes, but there are other revenue streams, such as tourism, beekeeping, a range of other things.
- 15 Q. Well, let's focus on the ones in your para 14. They struck me as relating to the dairy sector, and correct me if my understanding is incorrect, but typically, the sheep and beef farmers might winter over some stock from a dairy farm, and they're paid for that wintering over?
- 20 A. Typically might be doing what I'm at pains here to talk about, not do is talk about, you know, assume that they're all similar. There's a great diversity, and a lot are not doing that sort of activity. Some are.
- Q. Some are and some aren't. What I'm trying to understand is the variability around these revenue streams, and you noted in your evidence that the on-farm dairy price may have been an explanation to why that revenue stream had reduced in that 2018 season, and I'll see if I can find the reference to that. Para 56, so you can just refresh your memory there.
- 25 A. Yes.
- Q. And here, you say that the aggregate dairy grazing revenue received by sheep and beef businesses in Otago increased steadily in response to the increase in farmgate milk price and thus demand from dairy farmers, so it struck me that you had drawn a correlation in your evidence between the farmgate milk price and those other non-traditional revenue sources.
- 30

A. Yes, qualitatively, yeah, yeah.

Q. Well, do we – yes. You note there that the revenue stream peaked at 36 million in 2014/2015. The piece of the puzzle that I couldn't readily put my finger was, as a percentage of the total gross farm revenue, how does that 36 million compare?

5

A. I can't recall off the top of my head, but the total gross revenue for sheep and beef and wool would be orders of magnitude more significant than that.

Q. So I can't find that. I did look in the evidence, and I guess I'm just checking I haven't missed the part where that information would be found.

10

A. I can't see it myself either, but I did have a figure in mind, but I need to do the maths like you, Mr Maw.

Q. Yes, I understand.

THE COURT: JUDGE BORTHWICK TO MR BURTT

15 Q. So I take it it is not the billion in para 55.

A. It is, your Honour.

Q. It is the billion? So that billion, is that inclusive of the – what are we calling it – the non-traditional sheep/beef enterprises, or is exclusive of those enterprises?

20

A. It'd be inclusive.

Q. Inclusive of those, yeah, okay.

A. So in short, the maths would be the number of farms times the gross revenue for those farms, of which, so of that 1 billion, 36 million is from dairy.

25

Q. Dairy support.

A. Dairy support.

Q. And in fact, you say about 36 million is dairy support in the next paragraph.

A. 36 million out of 1000 million.

30

Q. Yeah, yeah.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Just trying to do the maths in my head, 3.6%, not 0.36%, so that gives an understanding in terms of the demand for use of land for those purposes, and you'd accept that it would appear that the demand goes up and down
5 in response to the farm gate price for milk changes?

1625

A. It would seem to be related to it yes and the two things are correlated and I suppose the question becomes one of causation of whether it's causation or just correlation.

10 Q. I put a proposition to you that the more cash in the pocket associated with the farm gate dairy price might make it more attractive to winter off in relation to –

A. Yes agree, yes.

15 Q. Yes. Now if I can take you to page 12 of your evidence-in-chief. I had some trouble with your colours on the map and I'd just like to make sure I've got the black and the blue line correctly identified so you'll see your figure 3 on page 12?

A. The one headed livestock stock units.

20 Q. That's the one. There's a squiggly line that's black or blue in my document. Can you tell me whether it's the black or the blue or the total stock units or the dairy stock units at the top one is?

THE COURT: JUDGE BORTHWICK

Q. You mean the top line?

25 A. The top line is the black line is total stock units and the purple line is dairy stock units.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. And likewise the graph that then follows the top line is that the dairy stock unit?

A. Yes.

30 **THE COURT: COMMISSIONER BUNTING**

So is that the total or?

MR MAW:

Total.

THE COURT: JUDGE BORTHWICK

5 Q. No, top line is the dairy stock unit. It's actually a purple so it could be reads as a black.

A. It depends on the one's printer by the sound of it.

Q. The top line though to be sure in figure 4 is dairy stock units. Is that right?

A. Is the percentage change in dairy stock units just to be even more specific
10 about it.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Thank you that, I just I needed to understand that. I don't know whether it was these were photocopied or how they were printed but they look the same on my document.

15 A. Good point. Perhaps we should make one of them a dotted line or some other.

Q. It doesn't matter what you do, there's always often a challenge with so many of the lines. All right, final matter I just wanted to pick your brain on was the irrigation charges and you may have heard that I put a question
20 to the previous witness about the percentage of beef and sheep farms that have some irrigation on them and she was unable to assist me and the reason I put that question to her was because I read your evidence and had picked up that you had or the information you had to hand was
25 a subset of irrigable properties within the sheep and beef part of the Otago region.

A. Mhm.

Q. Do you have any further knowledge or understanding of the percentage of sheep and beef farms that would be irrigated across the region?

30 A. No, I don't, I don't readily.

RE-EXAMINATION: MS PHILLIPS – NIL

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

- 5 Q. Okay well just it's clarification how to read, well two matters of how to read the graph is the first matter and viable farming is the second matter so looking at page 14, figure 7 which is – figure 7 deals with the change in livestock numbers between 2009 and 2019 and that's per what it is, 100,000 head or something?
- A. Yes.
- 10 Q. Okay and so I just wanted to make sure I was reading this right so the first bullet point you've got listed in paragraph 10 is a percentage decrease in the number of sheep in Otago was the smaller, so that's the percentage decrease of the number of sheep in Otago was the smallest in New Zealand?
- 15 A. And that relates to the chart over the page?
- Q. That relates to the entire chart, the entire country?
- A. Well in figure 8 over the page your Honour.
- Q. Oh no, no. Oh I see.
- 1630
- 20 A. I mean it's a percentage, it's one of the big challenges, it's absolute changes and percentage change.
- Q. Yes and I think that's what I was challenged in, in terms of actually understanding the importance of what you were saying, so okay that, right paragraph 15 relates to –
- 25 A. Figure 8.
- Q. – figure 8 and so the percentage decrease in Otago for sheep was the smallest –
- A. So looking at that first panel in that chart?
- Q. Yes on the left-hand side and that's showing that we've virtually got no, no that's Nelson. Nelson's got a – is that Nelson? Got a huge increase in sheep?
- 30 A. Yes it has.

- Q. Why's that?
- A. Nelson city as a unitary authority has a very small geographic region –
- Q. Yes.
- A. – and has very few sheep.
- 5 Q. Oh.
- A. So any, you know, if it went from one to two sheep it would be 100% increase.
- Q. I see what you mean. So what's the unit here? Is this – yes, is it the, yes, what is the unit? It's per regional council per ...?
- 10 A. Yes, per regional council that –
- Q. It's per regional council, okay, all right.
- A. It's one of those challenging things with some of the numbers for us.
- Q. Yes, because some of our regions are vast and some of them are not.
- A. Mmm.
- 15 Q. Yes. Okay and so that has, is a percentage of the total –
- A. So the percentage change if we looked at that first graph there –
- Q. Yes.
- A. – and the second to last row?
- Q. Yes, yes. I can see it there.
- 20 A. The percentage change, you can see the small –
- Q. It's just a very small change.
- A. – change.
- Q. And then you've got a percentage increase in the number of beef and Otago's similar to other areas?
- 25 A. Mhm.
- Q. With the exception of Nelson also do really well there. So similar. Now, similar to the gains made by others and obviously there's a few losses in other regions that are losing beef?
- A. Mhm.
- 30 Q. Yes so similar to the increases made by others and a percentage increase in the number of dairy, cattle and Otago is high, south of Auckland city where –
- A. And that sort of makes the point about –
- Q. Yes.

- A. – the challenge of the absolute numbers, the increase in the absolute numbers in Auckland is probably not very much.
- Q. It's probably one cow to two cows?
- A. Yes and they're only 2% of the total -
- 5 Q. Yes it's the same as the Nelson example. Yes.
- A. So –
- Q. And so do these percentage changes tell us much at all or should we be looking is more an absolute change a better indication of increasing diversity?
- 10 A. Well I think you should look at both of them.
- Q. Yes, why's that? How would I use it?
- A. Well I think you would go back –
- Q. Yes.
- A. – making the observations we just have about Nelson and Auckland, for
- 15 example, well that's a huge percentage change, but go back and look at the absolute change and find in Figure 7?
- Q. In Figure 7? Yes.
- A. And find, for example, let's look at Auckland the second row or the second –
- 20 Q. For sheep?
- A. Well any of them, right across there, and they're very small changes -
- Q. Very, very small absolute numbers?
- A. – and absolute numbers.
- Q. Yes.
- 25 A. But percentage wise is where I used a –
- Q. Is fast, yes.
- A. – rough example of Nelson making something up, yes.
- Q. And in terms of absolute number, livestock numbers, Figure 7 is –
- A. And at Figure 7 is the change in livestock numbers.
- 30 Q. Yes I was –
- A. 1,000 head.
- Q. Yes, now I was wondering what to make of this. So, for example, in Figure 7 you've got the increase in absolute numbers dairy cattle in Otago is second highest in New Zealand –

A. Mmm.

Q. And I thought really? So what is that – that's only the increase, it's not actually the total number of dairy cow out here?

A. The total number of dairy cows in a particular region do you mean?

5 Q. Yes, so when, so looking at the total dairy chart under Figure 7 which is the chart on the right, we can see that that has indeed the second largest increase in absolute numbers of dairy –

A. Mhm.

10 Q. - cattle in the country, it's only second only to Canterbury that (inaudible 16:34:26) a significantly higher increase but that's not saying anything in terms of the absolute number of dairy cows in either region as a total.

A. Correct.

15 Q. This is just the increase in it, yes. And so to get a sense of, I guess the relative contribution of – in terms of absolute total figures for sheep or beef or dairy or bees, where would you - is that addressed in your evidence or not?

A. Are you wanting –

Q. Like –

A. It's addressed in, as –

20 Q. No I'm not asking you to address you, I just want to make sure if it's there that I'm looking at it specifically?

A. It's identified earlier in that chart we were just looking at –

Q. Yes, okay.

A. – a bit earlier that Mr Maw asked about in relation to Otago –

25 Q. Yes.

A. – but not in relation to Otago relative to other regions.

1635

30 Q. Yes, no I was just trying to get a sense of the significance and it probably is related to what Mr Maw was asking, the significance of the dairy sector to the rural economy in Otago compared to other economies with which I am more familiar which is Southland and Canterbury.

A. Mhm.

Q. And so I was trying to get a sense of that.

A. Mhm.

Q. But you —

A. Well we can readily provide numbers that would...

5 Q. It is all right because you do not want the Court to be left with the impression that dairy is indeed in terms of the amount of land used for dairy support in particular, that it is outside, you know.

A. Relative to other regions do you mean?

10 Q. Relative to other farming sectors or relative to other regions and so that is really what I was wanting you to comment on, because in knowing that then I can correlate that back with the risks to the environment for an increase, an unregulated increase in irrigable area where it is for dairy support together with other activities that are happening in the area, but if you have not addressed it, don't. I think maybe the best I can get is, it contributes very little to the rural economy, despite the increase in its growth. It is still contributing little in terms of the total sheep and beef economy.

15

A. If you, yes, if you are talking about the dairy support, we'll call it initially dairy support, yes. Dairy farming itself is a different question and outside our —

Q. Yes.

20

A. Area of responsibility.

Q. What your evidence points to, as you say is the heterogeneity, it's of farming operations within Otago. Even if you describe yourself as Sheep and Beef it does not mean you are not in fact more diversified than that but with a mixed range of uses across —

25

A. Yeah, and I think the difference is heterogeneity of people.

Q. Yes.

A. Feeds into that too, and what their objectives are as families or absolutely feeds into all of that.

30

Q. I wanted to tax you because you're an economist (**inaudible** 16:37:44) on something that you have not addressed in your evidence but you might be able to assist and just see if I can find what I need. So, not necessarily limited sheep and beef and the planning witness may have a view about this, I do not know but certainly many in the farming sector and also Territorial Authorities and hydro will say that they would be able — would

like to be able to increase the use of water and expand their existing operations and if there is a problem with that under a future land and water plan, we will just review the consent, and the council has the ability to review consents and it would be a huge task because are many
5 thousand of consents to be reviewed and but in reviewing the resource consents, the consent authority is required to have regard to matters in section 104 of the Resource Management Act and that is to do with the matters which are applicable when considering an application resource consent, but also whether the activity allowed by the consent will continue
10 to be viable after the change and that is really what I wanted to ask you about. Activities that will continue to be viable after the change. So what happens, what may happen is that the land and water plan comes in and certain water bodies are determined to be over-allocated. Too much water is being extracted and too many nutrients and being inputted and there may be other stressors on the land and on the water body.
15

A. Mhm.

Q. Which the council needs to bring down over time I suspect, rather than the one go, but that is for the councils that need to bring it down. So, farmers who are committed and carry through with expenditure on an
20 irrigation system, increasing the area of land as well as investing capital in terms of the purchase of the irrigation system itself and also crops and also incurring I guess debt capital in terms of doing all of the earth work associated with the same. I imagine that they only enter into that enterprise if they know they can pay back debt, whether it is from a bank
25 or whether it is to some other entity, pay back debt within a requisite period of time. So, viability is contingent on the level of debt and the debt repayment scheme over a period of time. Does that sound — and if that changes because there is say, less water, or greater restrictions on how land may be irrigated and over the inputs into farming such as nutrients
30 that that could impact on farming viability in terms of the assumptions made about the area of land irrigated and the quantum of water available, just trying to get a feel for what viability means and how, and the leveraging I guess and how sensitive leveraging is to change in the future, from the council.

A. What farmers.

Q. Yes.

5 A. Or any business people would be doing would be thinking about their future. It's their future expectations, and the more uncertainty there is about that the more difficult it is to make a decision as to investing in those sorts of — whatever that sort of enterprise is. Yeah, I am far from an expert and not an expert at all in the RMA. Should – and there's sorts of issues.

10 Q. No, no and for this question I do not think need to be, I think you need to be an economist, and viability.

A. So it would be about their future expectations and certainty and uncertainty that they face and I suppose one of the things that's happened in New Zealand and I've seen overseas is that farmers business people prefer the uncertainty that comes from the market than the uncertainty that comes from political processes.

15 Q. Yes.

A. And that then has an influence on how responsive they are, or how reticent they are to make investment decisions.

20 Q. So Sheep and Beef would have the Court approve an increase in irrigable area and with it, and without any attenuation a potential increase in discharge of contaminants within the next five to six years the decision in terms of the quantum of water available and decisions around whether water bodies, of which there are many, are degraded or degrading will be made and the Council will then make a decision about setting some limits and there are many tools around those limits in terms of minimum flows, but also in terms of bringing down nutrient load and other contaminants, but there will be wide, in fact a whole host of things which might be bought to bear, to ensure first and foremost that we have healthy water systems. That seems to me to be a whole load of uncertainty that this process is not, that this case is not about, that there is a whole load of uncertainty out there.

25

A. Mhm.

30 Q. I wonder about why a farmer would invest in debt capital or expend capital to improve irrigation systems given that uncertainty.

A. I do too.

Q. Oh, okay.

5 A. In general, you know, in general terms that uncertainty. Certainly that's what I've seen elsewhere that, within New Zealand and outside New Zealand that the level of uncertainty that comes from political process we'll call them.

Q. Yes.

10 A. You know election cycles or regulatory cycles are much more difficult to manage for than the cycles that come from commodity cycles or markets which then does have some bearing on the risk that they would accept or face.

1645

Q. And I think that was your point about risk, well, your point about expectation, so risk is correlated to expectation isn't it?

15 A. Mmm, mmm.

20 Q. And so we have seen many – several examples in the evidence of farmers investing within the last two years at least in making decisions around capital about improving irrigation systems within the last two years knowing that permits are about to expire and to myself, I mean I think what is essential to your operation that must be your primary asset rather than the land is actually available out of water for many of these operations, such a risky thing to do, but not if your expectation was that nothing would change an entire go and you'd continue to get water on the same terms and conditions as you previously had if not for the last
25 100 years in the case of deemed permits so that's the risk and expectation correlation.

30 A. I think, yes, and I think the other side of it though is the those who in the new – going into a new environment are significantly constrained by either the risk or the certainty that might come from a piece of, you know, regulation or direction that limits what they can do.

Q. When you say "the new environment" people coming into the new environment, what do you mean by that?

A. Well, the – I was just thinking visually in my mind about those charts of the irrigation charges and they are little, there is in the way of paid

irrigation for a sheep and beef farm, dry stock farming, for example and them being constrained of we society accepting that that's the constraints that we're putting on individuals as well as ourselves as society for other benefits.

5 Q. For other benefits, yes.

A. For other benefits, certainly –

Q. Yes.

A. – but what's the relatively of those and that's the challenge for you folks.

10 Q. Yes, I know and I think the same can be said about our landscapes, who pays for the splendid, you know, vista of glory, there's plenty of landscapes, but who actually pays for all of that? Is it the landowner for the benefit of all New Zealanders or should -

A. Or do we collectively benefit?

15 Q. – or else collectively pay for it? So I think the same issue arises but in different contexts. So when decisions are made about whether to invest or not invest in irrigation in improvement of irrigation, infrastructure and decisions around increasing irrigable land areas, to what – what is meant by this issue of viability then, you know, that the Act speaks to? Alms have to remain, consent holders have to remain viable. You can't change, you can't change things within a – if you go to review the consent, you know, you must consider the viability of the farming operation. So how geared, you know, how sensitive are these decisions to subsequent regulatory or political decisions around access to water and management of farm systems?

25 A. That's down to an individual.

Q. Right.

A. But it's also hard to, yes, it's very hard to generalise about that. Is your viability of the last ex-years, whatever, viability and quotas that which should be extended or is your opportunity advanced or constrained? Now that's the –

30 Q. So you're dealing with opportunity costs?

A. Mmm.

Q. You may be viable, but your ability to be able to pay down that debt is reduced which is fine, you can still pay the debt down, but you're foregoing other opportunities?

5 A. Mmm, which might be, you know, your kids' education or something like that.

Q. Yes, that's right, an overseas holiday or your retirement, yes. So is that where –

1650

A. In very br- broad terms –

10 Q. Broad terms -

A. - that's what viability will be about, and I think it will be, viability is going to be, in that broad definition, sort of unique, as everything else is, to individuals, and therefore, certainly in our sheep and beef farm survey, there's people that a lot of other people in the survey would say are not viable, but, you know, they've survived and been viable on the basis.

15 Q. Yeah, yeah, yeah. So the question of viability is not readily amenable to regulatory or political decision, it is actually person.

A. It ends up being about personal values and circumstances, age and stage of life, all those sorts of things that are about individuals and their objectives.

20 Q. And their objectives, yeah.

A. And certainly, I have had farmers who don't want to be involved in dairy farming because they just don't want to get up or be responsible for getting up and milking cows every day. Others, my colleagues here have probably heard me say, who am I to make a decision that he's not viable by continuing to have that objective for himself or for his family, them for their family?

25 Q. Yes, I understand that. No, that is really helpful.

MS IRVING:

30 Just one minor point, we can provide you were having a discussion with Andrew about the actual numbers of sheep and beef and dairy cows in Otago, and that discussion was leading on to understanding dairy support in Otago, and we can hopefully provide some of that information in terms of what the actual how

numbers are, however, a lot of the dairy cows that are wintered over in Otago actually come from Southland.

THE COURT: JUDGE BORTHWICK

Q. Oh, we know where they come from, don't we, Mr Maw?

5

MS IRVING TO MR BURTT:

Q. Okay, okay, so I'm not sure how easily it will translate and be able to make that relationship.

A. And I think that ties into that sort of integration and inextricable links to other regions and other economies and other businesses.

10

THE COURT: JUDGE BORTHWICK

No, probably, I do not think we need, not unless you want it, Mr Maw, in particular, but I think I have probably got enough to get a good sense of it, I do not want to imagine or overstate its important. It is important, but not to overstate it in terms of relevant importance to sheep and beef, you know, the traditional economies.

15

MS IRVING:

Thank you, let us know if you change your mind.

20 **WITNESS EXCUSED**

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. This may be something or nothing, but thus far, everybody has produced their changes by simply tracking a version of the entire document, and often, most people have actually track-changed a version of
 5 Mr de Pelsemaeker's document, dated the 14th of March, because he has had lots of edits in there which, by and large, people have been happy with, and then they move on to, you know, put in the insertions that they want, and that has been helpful for us, you know, we do not have to sort of go backwards and forwards and say: "Does Ms Marr like this bit and
 10 that bit and that bit?" So it would be good to actually have her relief produced in the context of the plan change setting, and my suggestion is – I know you have got a pretty confined case – did you have an interest in that schedule? You have not, have you?

A. We opposed it, but no, we don't, we haven't.

15 Q. Well, you have got an interest in it, but you did not call any evidence on it.

A. No, we didn't, we opposed it because we opposed so much of the rest of the plan, not because we opposed the details of the schedule itself. Water quantity is not an area where we normally participate, unless it's
 20 stock water.

Q. All right, so in terms of actually tracking through beef and lamb, should that be to a JWS version if the planner is happy with that, or should it be to a notified plan version? Otherwise, we will just simply be going backwards and forwards. You did not cite the controlled activity. Are you
 25 happy with the controlled activity? Which version of the controlled activity are you happy with?

A. We would really like to work from the JWS version, if that is possible, just because that appears to be what the various planners have agreed to, unless Mr Maw has any objection.

30

MR MAW:

No, that's okay on the proviso that counsel's witness doesn't agree with all of the JWS version of the document, and I'll keep saying that so everyone's alive to that, and I appreciate the Court is.

THE COURT: JUDGE BORTHWICK TO MR MAW

- Q. I know, so it would still be good to have it on – if the witness does not agree with, say, the controlled activity rule, then she should set out her relief for the controlled activity rule, unless, of course, it is not being pursued.
- 5 A. Yes, I would have thought – now, Ms Perkins did the same exercise before she gave her evidence, and my recollection is that she tracked in her changes to the joint witness statement version, or I might be wrong about that.

10 THE COURT: COMMISSIONER EDMONDS TO MR MAW

- Q. Mr Hodgson, who's yet to come, has worked off the JWS version.
- A. Oh, he's worked off the JWS?
- Q. But I think he's just agreeing with it, so I don't think there's anything that stands or falls on that.
- 15 A. I'll just see if I can find Ms Perkins' updated supplementary.

THE COURT: JUDGE BORTHWICK TO MR MAW

- Q. Perkins is for Landpro?
- A. Yes. (inaudible 16:58:04). I think what Ms Perkins did was track into the de Pelsemaeker version the joint witness changes and then added her changes into that document, because they were –
- 20 Q. That is fine, because I think she was just adding in, slotting in a discretionary activity policy and rule.
- A. Oh, she tinkered a little with policy from memory.
- Q. Yeah, tinkered a bit, yeah.
- 25 A. But it was all in the single document, which made life a whole lot easier.
- Q. It is a whole lot easier, yeah, and so that is what I am suggesting.
- A. That would be very helpful.
- Q. If Ms Marr, using – if this is appropriate – using the JWS as a template, if she just adds in the parts that she wants to add in, because there is a whole new RDA rule and policy, I think, there, and then if there are other bits she does not agree with, you know, perhaps she can just highlight those yellow, but if she does not say anything about them, we will just
- 30

have a confirm that she is happy with everything on the basis of this new RDA policy, new RDA rule. That would be easiest for us, so that we are trying to constantly bring through, as we go, into two-month hearing, this same sort of baseline document.

5

MS PHILLIPS:

Thank you, your Honour, and when would you like this?

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. Tomorrow.

10 A. Tomorrow, thank you.

Q. Yeah, but, I mean, saying that is quite easy, it is easy inasmuch as there is a word template knocking around that Mr Maw can get to you.

A. Ms Marr might have a copy of the word? She does not have a copy of the word document.

15 THE COURT: JUDGE BORTHWICK TO MR MAW

Q. No, You have got one, though, haven't you?

A. My learned junior can provide that. Yeah, I can email one through, and the sooner that lands back, the better, because I will mark my cross up on that version, so if it can be done tonight and then circulated once it is done tonight and just emailed around, that will be really helpful. I can work with Ms Phillips in relation to that.

20

Q. Okay, okay, all right. So try and get that done tonight so that we can work in cross-examination tomorrow. So that was the first thing, thank you very much, and then second question, question for you, is just something that we are a little unsure of, wanted your clarification, you have got an RPS to come, a proposed regional policy statement to come, I think, in June. Is this just a replacement water chapter, or is this a whole new plan, a whole new policy statement?

25

A. Fortunately, there was a discussion, briefly, about that at lunchtime, and I understand the answer is it's a new RPS.

30

Q. That is what I thought.

THE COURT: COMMISSIONER EDMONDS TO MR MAW

Q. An entire new RPS?

A. Yeah, an entire new RPS.

THE COURT: JUDGE BORTHWICK TO MR DE PELSEMAEKER

5 Q. Is that right, Mr de Pelsemaeker?

A. Yes, I mean, your Honour, it will be a significant change from the partially operative RPS.

Q. So are you going to be drawing down bits of it but rewriting substantially all of it? Is that the sort of idea?

10 A. Especially on the freshwater, it will be a rewrite.

Q. Yeah, yeah, yeah.

THE COURT: COMMISSIONER EDMONDS TO MR MAW

Q. So in terms of process, does that mean the water commissioners deal with the whole of this new document? Because I guess that hadn't been
15 my understanding, I thought the water commissioners were dealing with all the things that came out of the NPS (inaudible 17:01:21), not out of everything. I'm just wanting to be clear about it.

A. We had a discussion about that at lunchtime too, because I'm curious to the answer to that question. My read of the legislation is that it goes to
20 two different places.

Q. Well, that would be my understanding.

A. Which is potentially problematic and a little bit untidy, potentially, and that debate is yet properly to be had because one has not popped up yet, but that will probably be the first.

25 THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Okay, well, anyway, that confirms my understanding, it is actually the whole thing, that we will have a new proposed policy statement before it.

A. Yes.

Q. Okay, good, very good. So can we make it a 9.30 start tomorrow, and
30 that would be good.

COURT ADJOURNS: 5.02 PM

COURT RESUMES ON THURSDAY 15 APRIL 2021 AT 9.36 AM**THE COURT: JUDGE BORTHWICK**

Good morning. Have a seat. I need to clean my workplace, sorry.

5 MS BAKER-GALLOWAY:

My additional colleague today, Ma'am, Ms McGlughlan.

THE COURT: JUDGE BORTHWICK

Good morning. Anything arising overnight?

10 MR MAW:

No, your Honour.

THE COURT: JUDGE BORTHWICK

I am just thinking out loud and I have not had a chance to talk to my colleagues about this and thinking about the relationship between the two NPSs and thinking that you got, you know, complete new proposed RPS to be lodged or notified in sort of in June and just wondering to what extent that RPS responds to the issues raised by the territorial authorities in terms of their capacity plans because if they're thinking is so well advanced, and by that I mean whatever the NPS says is advanced, and I am not sufficiently familiar to be using its terms but then has that, is that echoed or reflected in the RPS, and that would be interesting to know, not that actually I'm entitled to any information about a proposed RPS but yes, I mean one of the issues for us is to what extent are those desire to obtain water permits to reflect growth in urban or rural areas advanced within the short, medium or long-term planning.

25

MR MAW:

Yes. Now, in terms of the content of the new RPS, I'm simply not across the detail of that so I can't actually answer that question but if you look at the NPSUD, it has the mechanism built in with it for the FDS or the future development strategy.

30

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Yes. Yes.

A. And that's still to come. There's quite a lot of planning that occurs in terms of preparation for that instrument and that will be after the RPS is notified.

5 Q. It's notified. And that strategy, that FDS, who prepares that? Is it each territorial authority or is it the region?

A. It's a joint exercise.

Q. It's a joint exercise.

A. Yes.

10 Q. Together.

A. And that seems to be the mechanism by which the integrated approach to the spatial planning is to occur. It may well be that once that exercise is complete, the RPS then needs to be adjusted to reflect the outcome of that exercise.

15 Q. And that's actually also in the NPS Urban Development. That's quite clear.

A. And it does envisage that –

Q. Yeah, a step.

20 A. - being a step, so insofar as the new RPS goes there, I would have thought it probably doesn't just yet, given that a lot of that work is also still to be done.

25 Q. Okay. That's helpful because we have to come back to, I don't know whether we were meant to be giving territorial authorities direction about whatever it is they've sought an adjournment for but if we are, perhaps that's the area that we need to press into in terms of the combined NPS processes.

A. Yes. Yeah, that's all I can say at this stage.

Q. No, I appreciate that. Okay. All right. Very good. So we've got your final witness.

30 0940

MS PHILLIPS:

Yes. Good morning, your Honour, Commissioners, and this morning we will be calling Helen Marr. If Mr Maw would assist with swearing in, I'd be very grateful.

MR MAW:

I wonder perhaps before I do that, there was a further document circulated by this party last night. It was an updated or a supplementary statement of evidence from Dr Chrystal. I wonder whether you might address that before
5 you call the witness.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. I didn't even look at it. I just put it to one side. It's like why has this been filed. So you want me to look at it and say something about that or?

A. Well, it's been –

10 Q. There's no leave to file.

A. No.

Q. Have you got any view on it?

A. I've read it. I'd consent to it being filed. It's a witness taking her obligations seriously in terms of reflecting on an answer she gave but I wouldn't seek to have her re-called to further examine her on the issue.
15

Q. So in other words, what's the term that I need when filed by consent or admitted by consent.

A. By consent.

Q. Yeah. All right. Well, we'll have a bit of a look at that and okay, we'll just think about what the process is around that. No leave to file sought and nevertheless a supplementary brief. Is that to a correct a statement made?
20

A. I wonder whether you might –

Q. I'm not sure actually.
25

MS PHILLIPS:

Yes, your Honour, it is to correct a statement made during cross-examination.

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. Of course, Dr Chrystal is your witness?

30 A. Yes, she is.

Q. So you don't link in a brief.

A. Yes.

Q. You actually have to seek leave of the Court –

A. I see.

Q. – before filing that brief of evidence and then the Court has to consider whether we need the witness back or whether we admit it by consent, which is really what the region is saying. It has no objection to that process and then the Court decides whether that is what will be done with the brief of evidence and it doesn't reflect anything other than other – it doesn't reflect anything. The Court then reads it and puts whatever weight on it as they assess so there's a bit of a process. Anyway, so you're seeking leave?

A. Yes, your Honour. Yes, please.

Q. Okay. It's all right.

A. Thank you.

THE COURT: JUDGE BORTHWICK

15 All right. Well, Commissioner, have you got any – well, we'll have a look at it at morning tea.

THE COURT: COMMISSIONER EDMONDS

I thought it was fine. I've read it.

THE COURT: JUDGE BORTHWICK

20 I haven't. So, yeah, but it's more than likely we'll just admit that by consent and notify other parties. Okay. Yeah. All righty. The only other matter that arises is in relation to the document filed last night, which is the edits now incorporated. Ms Marr's recommendations now incorporated into the 8th of April JWS. There seem to be some comment boxes added. I didn't see anything in them but it's
25 not – it's reflecting the fact that it's not the version in front of the Court. Is there anything arising from that?

MR MAW:

These are the comment boxes on the method.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Yeah, there is a couple.

A. Yes. Yeah, I would have thought those ought to be struck out. Those seem to be communications as between the experts.

5 Q. As between parties, yes. So in that respect, I mean they are communications as between experts. In saying that, that's as I understand the state of play, so I wasn't terribly anxious about it but the only thing I was anxious about was that this is not the JWS copy filed in court. This is some other version of it and so therefore I don't know
10 whether or not the wording is exactly the same or changed.

A. And I can't assist with that either.

Q. Who provided that copy?

MS PHILLIPS:

15 I believe we were provided that by Otago Regional Council yesterday after our hearing concluded, with the understanding that we would be working from a Word document version of the joint witness statement.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Who in the ORC provided the document? Can you just take
20 Mr De Pelsemaeker's, just have an update, take his instructions, if that's the right word, or just seek clarification just to check that this document is indeed the same copy as the document filed in the JWS and the only difference is the comment notes.

A. Sure. Mr De Pelsemaeker's confirmed that the text of the document is
25 the text from the joint witness planning statement but the only additions are the words in the comment boxes which can be put to one side. For the purposes of this exercise, those boxes are just flagging where some additional work needed to be done as between the planners and experts on the method.

30 Q. Yeah. Okay. Very good. Okay. So that's helpful. Thank you very much and we now need to call your witness.

MR MAW CALLS**HELEN MARIE MARR**

Q. Do you confirm that your full name is Helen Marie Marr?

A. Yes.

5 Q. And you're a senior planner at Perception Planning Limited?

A. Yes.

Q. Of which are also a director?

A. Yes.

10 Q. And you've prepared a statement of evidence-in-chief dated
5 February 2021?

A. Yes.

Q. And in that statement of evidence, you've set out your qualifications and
experience?

A. I have.

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

A. No.

Q. You have also prepared a supplementary statement of evidence dated
26 March 2021?

A. Yes.

20 Q. Are there any corrections you wish to make that document?

A. No.

Q. And you have participated in joint witness conferencing?

A. Yes.

25 Q. And you're a signatory to the joint witness statement planners,
Schedule 10A4 dated 7 and 8, the document's dated the 8th, I think. No,
that document dated the 8th of April 2021?

A. Yes.

30 Q. Do you confirm that the evidence you've given in each of those
statements and the position you have recorded in the joint witness
statement is true and correct to the best of your knowledge and belief?

A. Yes.

Q. And have you prepared a summary of your evidence?

A. No, I haven't.

Q. Do you wish to make or to give an executive summary of the evidence that you have given prior to questioning?

A. No, I think my evidence can be taken as read. It's quite short.

5 Q. Okay. Well, we shall proceed on with some questions and those questions will now come from me. If you give me a moment.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Has the witness been sworn in?

A. Yes.

0950

10 **EXAMINATION CONTINUES: MR MAW**

Q. I want to start just to make sure that I've understood where your thinking has now reached. So there seems to have been an evolution between the evidence-in-chief and then some reflection on the process to date, which has culminated in a revised planning position that you've put
15 forward, which was also informed through the joint witness conferencing and when you look at the version of the plan change that you are now recommending, there are, to my eye, two key differences as between your version of the document and the position of the Regional Council's planner, Mr De Pelsemaeker. The first difference relates to the way the
20 restricted discretionary activity works and in the context of that activity, you are recommending that in relation to the expansion of irrigation area there should be an opportunity for an expanded area in particular circumstances.

A. That's right.

25 Q. And the second difference relates to the date range in terms of the data that might be used to calculate historical use. Mr De Pelsemaeker remains of the view that data up until June 2020 should be used but not data beyond, whereas the version of the Plan Change 7 that you recommend has removed that date restriction.

30 A. In Schedule 10A4?

Q. Yes.

A. Yes, that's right.

Q. It's not in the schedule. It's in the controlled activity rule and the restricted discretionary activity rule. So are those the two areas of difference as between you and Mr De Pelsemaeker?

A. As I understand it, yes.

5 Q. So I'd like to start with the first of those topics and that relates to the expansion of irrigation area for which you provide some recommendations in terms of the restricted discretionary activity rule. Now, you've set out in your supplementary statement of evidence your opinion in relation to the reasons why you say that that's inappropriate
10 rule or rule framework to have and in relation to the expanded irrigation area, you've set out the reasons, and this is on that paragraph 17 of your supplementary statement. You'll see there that Mr De Pelsemaeker has recorded four reasons why he does not recommend or why perhaps he initially had recommended the expansion and you then comment on each
15 of those reasons and I want to explore each of those with you.

A. Okay.

Q. So in relation to the potential for increased adverse environmental effects, you've expressed an opinion both earlier in your supplementary evidence and at paragraph 19, that there is both a low risk of increased
20 environmental effects from expanded irrigation and sufficient controls elsewhere in the Plan and in the NESFW for Council to control the effects through other avenues if they, being the Council, wish?

A. Yes.

Q. So in terms of your opinion that there's a low risk of increased
25 environmental effects from expanded irrigation, what evidence are you relying on for that opinion?

A. I'm relying on the evidence of Dr Chrystal and her analysis of the change from lesser efficient irrigation system to a more efficient irrigation system is, can be managed to actually reduce the adverse effects. I'm also
30 relying on evidence, for example from Ms Dicey, that the risk of somebody actually putting a great deal of investment into intensification is actually quite low because of the short duration of the consent.

Q. So those are perhaps two different categories of risk. The first is the technical environmental risk associated with increased with increase

nutrients and I understand you to be saying you rely on Dr Chrystal's evidence in that regard?

A. Yes.

5 Q. And then second, you are relying on an evaluative, so evidence from an evaluative witness, a planner, Ms Dicey, in relation to the risk of it actually occurring.

10 A. Yes, and I've also considered the likely scenarios under which intensification or sorry, increased environmental effects might occur, what kinds of land use changes might lead to that increase in environmental effect and I've considered the regulatory environment around those changes in land use.

Q. We'll come back to those topics.

A. Yeah.

15 Q. I do want to understand those a little further. So in relation to Dr Chrystal's evidence, you were here yesterday when she gave her evidence?

A. Yeah, I was.

20 Q. And you will recall that there were two parts of her evidence where she explored the risks of increased irrigation. In the first part she referred to a study that she had conducted to calculate the potential increases in nutrient or nutrient or contaminant loading associated with a shift to irrigation and this was appendix B in her evidence. And when you consider appendix B, it showed an increase in, in that instance, nitrogen in relation to each of the scenarios that she tested.

25 A. Yes.

Q. So insofar as you are relying on Dr Chrystal's evidence, are you saying to me that it's not that part that you're relying on? You're relying on the second part?

30 A. I'm relying on both her evidence and my understanding of the regulatory framework. So I've carefully considered the kinds of things that might occur on a farm that would lead to an increase in contaminant loss and then looked to see does the wider regulatory framework give an avenue to manage those effects or not. So it's both of those things together.

Q. Right. Well, let's just press pause on the second part of that. We will come back to that. So the part of Dr Chrystal's evidence where she examined the effects of an increase of irrigation in the Otago region, you accept showed an increase in nitrogen leaching associated with a change to irrigation from dry land farming?

5

A. Based on the overseer modelling, assuming that only good management practice is implemented, yes, it is, there is a, that can occur, yeah.

Q. And then there was a second part of Dr Chrystal's evidence where she had referred to a paper, *Wheeler and Bright*, from 2015, and you will have heard the questions that I put to the witness in relation to that paper and the purpose of that paper and the recognition within that paper itself that the example used was only for illustrative purposes?

10

A. Yes.

Q. And so great care, you would accept, needs to be taken with placing any reliance on the paper for a different purpose?

15

A. Yes.

Q. Now, Dr Chrystal also outlined the types of activities for which she foresaw a risk of increased contaminant or nutrient runoff occurring and she provided that list at paragraph 11 of her evidence-in-chief.

20

WITNESS REFERRED TO EVIDENCE-IN-CHIEF OF DR CHRYSTAL – PARAGRAPH 11

Q. Sorry, it was paragraph 18.

WITNESS REFERRED TO PARAGRAPH 18

Q. And she referred to activities that pose a higher risk of contaminant losses to water from others. Now, do you have a copy of that evidence to hand?

25

A. Yes, paragraph 18.

Q. Yes, and you'll see it's in the executive summary, five particular situations where she foresaw a risk of contaminant losses to water.

A. Yes.

30

Q. Now, I want to look at these potential activities and I want to understand from you where you say the protection exists in other documents or other policy documents to appropriately manage or mitigate the risk associated with these activities. So when you look at irrigation itself, so matter

number 1, where do you say that that, the risk of the adverse effects associated with irrigation, where are those effects managed?

A. So irrigation, as I understand the evidence, can lead to an increased risk of nutrient leaching if it is managed in a way that allows more water to drain through the system. So that's the risk is, the risk is poorly-managed irrigation.

5

1000

Q. The risks, would you accept the risk's a little more complicated than that in that the risk also relates to the input of contaminants to the land surface that might then leach through the soil profile? So the activity that's taking place on the land is also relevant?

10

A. The activity that's taking place on the land is relevant. Whether it is irrigated or not irrigated and there are many controls in the NES for fresh water and in the Regional Plan that address both land use risks, for example intensive grazing or changes in dairying area or dairy support area for example, and there are controls in the Regional Plan around, that has set thresholds for nitrogen leaching on different types of land and different risk categories and allows the Council to manage that risk from all activities.

15

Q. Right. We're going to have work through that list a little more carefully. So the first document you referred to was the National Environment Standard, the NESFW.

20

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Can we get that in front of us?

25

A. Might be helpful.

Q. Yeah, thank you. Do we know what volume of the common bundle it's in or?

A. It's apparently not in the common bundle.

Q. It's not? Okay. I can dial that up. I'm really interested in this subject.

30

A. So the full title of the document is *Resource Management*, then in brackets (*National Environmental Standards for Fresh Water*) *Regulations 2020*. Its not in the common bundle.

Q. That's my own personal copy. You take my personal copy and I'll get it. I'm just going to throw that up onto the screen if we can. So just pause a second. Commissioner Bunting, I don't know if you have it do you?

THE COURT: COMMISSIONER EDMONDS

5 Well, I could get it on my –

THE COURT: JUDGE BORTHWICK

You can get it. Okay. Right. So we've got one hard copy and I've got it on the computer. Okay. Right. Good. Now it's everywhere.

EXAMINATION CONTINUES: MR MAW

10 Q. I'll check the witness has got –

A. I do have a copy.

Q. Very good. All right. So the first part of your answer explained that this document somehow controlled the effects of potential increases in nutrient contamination or loading associated with irrigation. I wonder
15 whether you can help me understand precisely how this document achieves that outcome?

A. My answer is a little more nuanced than that, yes.

Q. Yes. You'll have to step through it and I appreciate it will be more nuanced.

20 A. It is, yes. It is quite complicated. So irrigation can have an adverse effect if it is driving more nutrients through the soil because of an increased amount of water. So that is an effect that can be managed by controlling the amount of irrigation and managing that well. The other way that it can drive an increase is it grows more feed for the animals, which, and
25 Dr Chrystal explained this yesterday, producing more feed allows either to feed the same number of animals more food, which puts more throughput which puts more nitrogen in urine patches or it can increase the stocking rate. So the first of those, the driving more drainage, can be managed through the irrigation, management of the irrigation and through
30 irrigation consent. The others are discharges –

THE COURT: JUDGE BORTHWICK

Q. Just take it slowly.

A. More – sorry.

5 Q. Yeah. Yeah, so I'm with you until you got to the first one of those, driving more irrigation and then I didn't catch what you actually said, the last part of your sentence.

10 A. So the irrigation can drive more drainage, which can drive the existing nutrients that would have been there before to move through the, further through the soil profile and result in leaching. The other impact the irrigation has is the growing more feed. More animals, more urine patches, more available urine or nitrogen for leaching. That can occur with or without irrigation. So a stocking rate could be increased by buying in more feed, buying in grain for example, or by growing more feed on the property. So, or a change in land use type. So moving from sheep to
15 dairy, for example, or moving to dairy support, which is moving from sheep to cattle with more outputs or –

Q. Sorry, what was the last category?

A. Moving from sheep to dairy support.

Q. Sheep to dairy support. So a change of stock type?

20 A. Yes.

Q. Sheep to dairy.

A. Yeah.

Q. Is the example?

A. Yeah.

25 Q. But it could be other stock, couldn't it? Sheep to deer would do it?

A. I actually am not sure about the relative impact of sheep to deer.

Q. Yeah, all right. Anyway, so a change of stocking type and then what was the last category, third category?

30 A. So change in land use. So, which is similar to stocking type. So you could go from dry stock to dairy or you could within dry stock go from sheep to cattle or sheep to dairy support.

Q. Yeah.

A. So those changes can occur with irrigation or they can occur without irrigation. You could change your stocking policy on your farm. You could

buy in more feed or you could be growing a crop that's different and has a different impact on leaching profile. So I've carefully considered each of those scenarios and what is the regulatory environment, what is the ability of the Council to control those things when they occur? And that's where I get to first the National Environmental Standard for Fresh Water Regulations. It does contain in Part 2 a number of standards for farming activities and that includes regulations that control agricultural intensification.

EXAMINATION CONTINUES: MR MAW

10 Q. Now, you might, just as we step through this, provide some direct reference to the provisions in the NES.

A. Yes, certainly can. So the first, so this is at page 15 in those regulations. So the first one is conversion of forest to pasture, which is not particularly relevant to what we're discussing but Regulation 18 controls the conversion of land to dairy farming, so from a dry stock to a dairy farming scenario or expansion of an existing dairy farm onto new land and that is permitted up to an area of 10 hectares but beyond that requires a discretionary activity consent. So the risk of increased irrigation area leading to a dairy conversion is, in my opinion, quite small –

20 **THE COURT: JUDGE BORTHWICK**

Q. Just pause there for a second.

A. – because of that.

Q. So we're looking at section 19 are we? Discretionary activity.

A. Yes, 18.

25 Q. Conversion of land to farm, land on a farm to a dairy farm.

A. Yes.

Q. Right. Just let me read it. And dairy farm, I'm assuming is a defined term and if it's defined does includes dairy support or is it –

A. Dairy support is a separate category, which is dealt with in a different regulation.

30

Q. Okay. And you said the risk of conversion in Otago, the whole of Otago, from dry land farming to dairy farming as defined is small because of what?

5 A. It is controlled by the regulations, so if a person had a proposal to convert to a dairy farm, they would require a resource consent, where that land use could be considered and the associated discharges.

1010

Q. Under what plan?

A. Under the regulations.

10 Q. Under this, under the NES Regulations themselves?

A. Yes.

Q. Okay.

15 A. And those, Regulation 24 states under what circumstances that discretionary activity consent could be granted and it specifically requires the water quality effects to remain unchanged.

Q. Well, it doesn't. It says you shouldn't increase your contaminant load in the catchment and concentration of contaminants in fresh water or other receiving environments that shouldn't result in, there should be no increase of that.

20 A. Yes.

Q. Not the nefarious effects, are there, because –

A. Well, you're correct. It is focused on contaminants, both load and concentration, so that goes to cumulative adverse effects in the catchment and in the, any particular streams on the property as well.

25 **EXAMINATION CONTINUES: MR MAW**

Q. So when you think about the conversion of land from farm to dairy farm land, do you foresee the NES essentially precluding a wholesale conversion of a dry land farm to a dairy farm?

30 A. I do. I, well, it requires a discretionary activity resource consent and it gives direction as to what types of water quality effects are acceptable in the regulation. So the Council has control and discretion of whether to grant that consent or not and what kind of conditions it might be granted

under. So that's a large amount of control the Council has using this mechanism.

Q. So the risk that exists in the permitted activity framework within this document is a risk of incremental expansion of 10 hectares per farm for this type of use?

5

A. Yes.

Q. And have you assessed the potential cumulative impact of that scale or level of effect?

A. Of a 10-hectare increase, no?

10

Q. And you were here yesterday when I asked Dr Chrystal what the leaching rates might be associated with intensive winter grazing facilitated by increased irrigation?

A. Yep, I was.

Q. And do you recall her answer?

15

A. Not in detail. Intensive winter grazing is regulated separately within the environmental standards and that essentially grandparents area, so the area of intensive winter grazing cannot increase on the farm.

Q. And have those provisions been suspended recently?

20

A. The environmental, as I understand it, the, if the effect's base, the conditions around pugging, replanting, have been suspended but the requirement around area remains, as I understand it.

Q. And that area, and we'll come to those provisions shortly, but there's a reference period?

25

A. Yes, there is, yes, which is defined in the regulations. The area cannot increase beyond the reference period, which is 2014 to 2019.

Q. But there are no controls in relation to the reference period as to whether the land was irrigated or not?

A. Are you speaking in relation to intensive –

Q. Intensive winter grazing.

30

A. – winter grazing? The control is on the area under intensive winter grazing, not on –

THE COURT: JUDGE BORTHWICK

Q. Can you take me to the relevant provision so I can see what you are both are thinking about.

A. Apologies. It is Regulation 26, 27, 28 and 29.

5 EXAMINATION CONTINUES: MR MAW

Q. So if we look at Clause 26, so this is the permitted activity for intensive winter grazing.

A. Yes.

Q. And that sets out some conditions in relation to the permitted standards?

10 A. Yes.

Q. And what areas are referred to?

A. I'm not sure what you mean by areas.

Q. Okay. So let's look at the condition. So you'll see there condition 3, which refers to the activity being undertaken in accordance with the farm's certified fresh water farm plan.

15

A. Yes, if they have a farm, fresh water farm plan, yes.

Q. And if they don't have one, we move to condition 4.

A. Yes.

Q. And subparagraph (a) provides a restriction in terms of the area?

20

A. Yes, it provides a restriction in terms of the absolute maximum –

Q. And what is –

A. – that's permissible.

Q. – that area?

25

A. So 50 hectares or 10% of the farm and there is a further restriction on area in Regulation 29. It is difficult to read this, these regulations, but Regulation 29 puts a further restriction on area and that it has to be the same area that was used during the reference period. So there is no provision for expansion of intensive winter grazing into new areas or new farms or even larger areas on the same farms. Any of that would require a resource consent.

30

Q. And then in terms of those consents, have you analysed the pathway through? So what would be required to be shown?

- 5 A. So it would – so if it was a greater area, it would be discretionary activity under Regulation 30 and the same restrictions apply as we discussed earlier in relation to converting land, which is a restriction on the granting of a consent unless it is, the Council is satisfied that that activity won't increase contaminant loads or concentrations of contaminants, but again it's a full discretionary activity so the Council has full discretion to consider other factors as well as that.
- 10 Q. So you're satisfied, based on those regulations, that the risk of increased land being used for intensive winter grazing is sufficiently controlled by these regulations?
- A. Yes.
- 15 Q. So the risk that does exist in relation to these regulations is an increase of 10 hectares of land for use on a dairy platform in terms of the permitted activity?
- A. Yes, but that can't be as a result of irrigation. So there is an absolute restriction on dairy farm irrigated area in Regulation 20. Apologies, that does also have the 10 hectares. So yes, the risk is a 10-hectare increase.
- 20 Q. Do you accept that there could be some cumulative effects associated with that level of increase over a catchment across the region?
- A. Yes, there is. I also noted that the Operative Land and Water Plan has got a framework to address. Leaching, absolute leaching from individual farms.
- 25 Q. Now, let's explore that a little. So you're aware that the limit – no, well, explain to me what's the limit you're referring to here?
- 1020
- A. So I'm referring to the rules in chapter 12 which sets out a framework which includes nitrogen leaching limits based on the sensitivity to leaching in the receiving environment, provides permitted activity thresholds that come into force in the future as I understand it, and that beyond those levels a resource consent is required.
- 30 Q. Now, there's been a change to that regional plan by virtue of those thresholds having been suspended. Now I'm not sure whether you are alive to that change that's been made recently?

A. I'm not on top of the provisions and their workings, I would – no, I'm not. I looked at the plan and I saw that there was a framework for managing leaching from farms that had been in place, and that consents are required beyond thresholds and presumably the thresholds are set at a level of acceptable environmental effect, but I have not enquired deeper into that.

Q. So the threshold that you may have had in mind, was that the 30 kilograms of nitrogen per hectare threshold for a permitted activity?

A. As I understand it there are three thresholds, 15, 20 and 30 – 25 and 30.

10 **THE COURT: MS BORTHWICK TO MR MAW**

I mean, this is quite important so it would be good just to put you know, an updated copy of the regional plan for the witness because the witnesses' understanding is that the regional plan does control for contaminants in this particular area, but it's not my understanding.

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

Q. If you would explore the planning document, it's in the common bundle at tab number 1 in volume 1? Have you got the common bundle with you?

WITNESS REFERRED TO BUNDLE OF DOCUMENTS 1

A. Yes.

20 Q. Perhaps I could take you to page CB124 and Policy 7D

A. CB124, what was the policy again sorry?

Q. 7D?

A. Yes.

Q. And I'll have you then turn over the page there to 7D(2) and there's reference to schedule 16 discharge thresholds applied of permitted activities?

A. Yes.

Q. And you'll see there the date from 1 April 2026?

A. Yes.

30 Q. Now, it may well have been when you considered this plan when you were preparing your evidence that Plan Change 6AA had not yet been

made operative, the effect of Plan Change 6AA was to shift that date out to 2026.

A. Right.

5 Q. So when you mention that there are thresholds in the plan that control the - or provide thresholds in terms of discharges from these types of farming activities. Was it these thresholds that you had in mind or something else?

1025

10 A. No, it was those thresholds. If the council has considered the issue of nitrogen leaching from farming activities and put in place a framework to manage those, and they have seen fit to make the time for dealing with those as 2026, then I assume there's a good reason for that.

THE COURT: JUDGE BORTHWICK

Q. We were told it was political.

15 A. Sure.

Q. You know, you have to be careful about your assumptions.

A. Okay, okay. The planning framework kicks in with the thresholds at 2026 for all activities, so if we were to apply a different test to some of those activities, there would have to be – I'm not sure why we would treat one
20 small group of activities differently than all the rest of the activities.

Q. What do you mean by that? Which small group did you have in mind?

A. People who are changing their irrigation systems to a more efficient irrigation system that happens to cover a greater area. Why those would have more controls over them than people who were intensifying their
25 land use through other mechanisms.

Q. Isn't this the perennial problem faced by every council around the country, which is there are measures to be brought down on a regional plan which can control for the volume and concentration of contaminations, but in addition to that, is it not often the case that land use activities may be
30 unregulated, which can also have increased the volume and concentration of contaminants in the environment and also lead to effects, and so you can do what you like in a regional plan, but the chances are, there's unregulated activity happening on land which can take up all of

the benefit that you are having through your farm management measures which have been brought to play in a regional plan.

A. On other places, yes.

Q. So there is a dual issue there. Is that a fair summary of it?

5 A. Yes, it is extremely difficult. Managing the nutrient leaching from farms is an extremely difficult thing to regulate, and it's quite hard for regional plans to keep up with that change, absolutely, and it needs to be regulated if we're to improve water quality. I'm not for a moment suggesting that we do not regulate it. What I'm looking at is what is the regulation we currently have, what are the risks, and what's the regulation we currently have, and does it address those risks?

10

Q. And I think this is where counsel was asking you questions, what is in place to address those risks?

A. Yes, so what is in play is the NES right now.

15 Q. That's one thing, but is there anything relevant in the regional plan is where we're at.

A. Yeah.

Q. Yeah.

CROSS-EXAMINATION CONTINUES: MR MAW

20 Q. Well, I was going to cut right to that question. In the absence of those thresholds, which you were relying on as providing the mechanism in the regional plan to control those effects, is there anything else in the regional plan that you are relying on as controlling those effects?

A. Not that I'm aware of, no, and it may be that there is a gap to address intensification beyond what the national environmental standard controls, which is land use, change, and intensive winter grazing.

25

Q. And coming back to Dr Chrystal's list in her evidence, para 18, for example, cropping, the NES doesn't control cropping.

A. It does not control changes to cropping, no it doesn't.

30 Q. Effluent storage, land application and management?

A. The NES doesn't control those, but the regional plan does.

Q. And are there limits in the regional plan in relation to discharges from those activities.

A. Not familiar enough with the detail of the plan on that, but I did note that there were new rules and policies around managing effluent systems.

Q. How about fertiliser use, including type, timing, and load?

5 A. Nothing in the NES. Sorry, there is something in the NES, there is an absolutely limit on the application of fertiliser, it cannot go beyond 190 kilograms of nitrogen (inaudible 10:30:22), so that controls the load.

THE COURT: JUDGE BORTHWICK

Q. How much is that, 196?

A. 190 kilograms.

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

Q. Of synthetic nitrogen fertiliser.

A. That's right.

Q. From memory.

A. Yes.

15 Q. Yeah, it might be helpful just to pull that out.

THE COURT: JUDGE BORTHWICK

Q. That is an interesting provision. You'd probably kill everything on the land if you put that on in a single day, but anyway.

A. If you put it on in a single day, yes.

20 Q. Yes, so where are we at?

A. But as I understand it, there are quite a few farms that use more nitrogen fertiliser than that. Let's find it, subpart 4, page 22.

Q. So it's part 4, page 22?

A. Yes.

25 Q. No, that's not going to help me.

A. Starting at regulation 32.

Q. Oh, regulation 32.

A. Yes.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So when you look at that control, you accept it's a fairly blunt control in terms of fertiliser, a maximum cap on fertiliser?

A. Yes, it is.

5 Q. It's not related to climate conditions?

A. No.

Q. Or irrigation rates?

A. No, it doesn't address any of the best practices for fertiliser application that Dr Chrystal spoke through, for example.

10 Q. And the regional plan contains no controls in relation to those risks either?

A. Just looking at that, it does have a permitted activity for fertiliser discharge. It's fairly brief. Reasonable measures are taken to minimise any discharge to water.

THE COURT: JUDGE BORTHWICK

15 Q. Sorry, which provision are we now in?

A. Rule 12.B.1.5.

Q. Is it 12 capital B, is it?

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Yes.

20 A. So, no, that rule doesn't include any of the best practice measures that Dr Chrystal explained, and that, to be fair, are common in other plans, so there seems to be, overall, whether the land is irrigated or not, a gap in the plan for dealing with those things.

THE COURT: JUDGE BORTHWICK

25 Q. Okay, so let's tease that out a bit further in terms of what you now know or understand the position to be in terms of this regional plan. What are the gaps?

A. So the gap would be there isn't a framework in the plan to deal with best practice management. Well, there are no rules that require that for
30 fertiliser or for managing grazing, and there is no framework in the plan that controls right now the discharges from farming activities, that

addresses cumulative impacts of those farming activities, so there's a potential future framework, but there is nothing in there right now that's controlling the intensification within farm, whether they're irrigated or not irrigated.

5 1035

Q. Is there even a requirement to have a farm management plan?

A. Not that I'm aware of.

Q. And the matters that Dr Chrystal raised in her evidence as to matters of which go beyond the good management practice assumed in the
10 Overseer.

A. Mmm.

Q. And the matters that you've just mentioned now, these are matters which have been covered in other regional plans to a greater or lesser extent around the country?

15 A. They are, there are a number of plan frameworks that require farm management planning as Dr Chrystal explained, and have regulatory requirements for those. And the Government is, has set up a framework for having a national regulation for farm management planning. That isn't in place yet but I think – I know that they are working on it at the moment,
20 what that national framework might look like, yes.

Q. But they're also measured in addition to farm management plans which are reflected in the rules and regulations of other regional plans, but just not this one?

A. That's correct, yes.

25 Q. Okay.

A. Other regional plans do have nutrient management controls.

Q. Yes.

A. Canterbury which you're very familiar with, I know has a sort of – has grandparenting regimes. Waikato has got a proposed plan at the moment
30 which essentially has a grandparenting regime again. The Tukituki catchment in the Hawke's Bay has a natural capital allocation which is similar to the one in the Manawatu Horizons Plan, Bay of Plenty has a framework such as that. And I think that's – yeah, that's all that I'm aware of. Yeah.

CROSS-EXAMINATION CONTINUES: MR MAW

- 5 Q. And so in light of the gap or gaps that you've just identified, you then go on in your evidence to note that there is also policy support in the RPS and the NPS FM to enable a consideration of effects on irrigation, in that paragraph 20 of your supplementary statement of evidence?
- A. Yes.
- Q. Now, before we perhaps look at those documents you've recommended a restricted discretionary activity rule framework?
- A. Mhm.
- 10 Q. And when it comes to considering matters of policy in the context of a restricted discretionary activity framework, it's only policies that are relevant to the matters to which the discretion has been restricted that can be considered?
- A. That's right.
- 15 Q. So with that in mind, how can the effects of increased irrigation, so environmental effects associated with increased irrigation be considered through the lens of your recommended restricted discretionary activity role and the matters of discretion contained therein?
- A. Yeah. So there is no matter of discretion relating to water quality effects.
- 20 In fact, there's not really any matters of discretion relating to any kind of effects in the restricted discretionary or the controlled activity rule. They are focused on volumes and rates, that being my understanding of the purpose of the plan change. So if we would like to consider environmental effects of irrigation then that would need to be added as a matter of control or discretion.
- 25 Q. And listening – all right, well let's just press pause there. So as matters presently stand and you'd accept you can't go up to the RPS or the NPS FM to consider environmental effects associated with increased irrigation area?
- 30 A. Sorry, I'm not clear about what you're asking?
- Q. So there is – right, well I'm asking you about your paragraph 20 where you refer to the RPS and the NPS to enable a consideration of effects of irrigation?
- A. Yes.

Q. Now, without the matter of control –

A. Right.

Q. You can't go there can you?

A. No, you can't.

5 1040

Q. And you note at the end of that paragraph you say, "PC7 does not stand alone". What is it that you mean or what did you mean by that phrase in terms of the context within which you are recommending a restricted discretionary activity rule?

10 A. What I mean is that PC7 doesn't need to be all things to all people. It needs to do its job very well which is a is understand it to provide for the replacement of consents under similar terms, as they currently exist. If there is a problem that needs addressing in relation to adverse effects of irrigation, then that should be dealt with. PC7 doesn't really provide that
15 framework. Other plan changes do, Plan Change 8 is beginning to address some of those issues and there are, there is, if water quality effects need to be considered, other mechanisms and policies available for that. So PC7 scope doesn't need to be, well it can't really be, it has to stay focussed on the taking of water and the process for doing that. It
20 doesn't have to be the complete answer to every problem.

Q. So, when we're thinking about risk or risks to the environment associated with Plan Change 7, you'd accept that Plan Change 7 shouldn't increase the risk of increased discharges of contaminants to the environment between now and when the new water plan is notified?

25 A. If there is a risk of increased contaminants to the environment before the new land and water plan is notified, then that ought to be addressed by the council. Whether PC7 is the right place to do that or not, I am not 100% sure.

Q. Well, isn't one of those very risks the increase in irrigable land?

30 A. One of those risks is, yes. Yes. It's not the only risk.

Q. Now in your evidence you then go on to consider the question of how many irrigators might be in the position of having commenced irrigation development or expansion.

A. Mmm.

Q. So you have no understanding or knowledge of how many irrigators might look to take up your restricted discretionary activity pathway?

A. No, I don't. It's not something that's possible to really get statistics about.

5 Q. So how do you assess the efficiency and effectiveness of that provision and the potential environmental risks without actually knowing how many irrigators might be in this situation?

10 A. I can, I can't put absolute figures on any of those things. I can think of, or what I have done in my evidence is think about what's the cost to the people who have already invested that won't be able to realise that. And there, so there will be a cost associated with that, it's impossible to qualify.

15 Q. So let's press pause at that moment. So you may have some people who have invested in irrigation infrastructure and they have made that investment in circumstances where they have currently a resource consent, but there is not guarantee you will get a replacement permit, is there?

A. No there's never a guarantee unless it's a controlled activity, yes.

20 Q. So when you think about the risk of that investment having been made, that's a risk that in this context the irrigator is taking, they are taking the risk that they will be able to re-consent the volume of water they need for an expanded area.

A. Yes, and they would have taken that risk based on the permit they currently have which allows them a certain volume of water.

25 Q. So in, so let's press pause there, so insofar as the current term of the permit is in play, then that risk is or the understanding of access to resource is known.

A. Yes.

Q. But the risk arises on replacement consent, doesn't it?

A. Yes.

30 Q. And then when you think about the risk of expansion, the risk is either the irrigator's risk in terms of not getting the water or it's the environment's risk in terms of having further water extracted on replacement?

A. Well, I'm not suggesting that we allow further water to be taken, so my scenario that I am trying to provide for her is where somebody is using the exact same amount of water that has been taken in the past and that

they was within the terms of their permit, so water that they were authorised to take and use, but they want to use it slightly differently than they did prior to June of 2020, their permits have not yet expired, so they could have quite reasonably assumed that they would be able to use that authorised amount of water in a different way.

THE COURT: JUDGE BORTHWICK TO MS MARR

Q. So, say that again, why, why... permits are to expire 2020.

A. Yes.

Q. And they would have quite reasonably assumed they could used the water but in a different way?

A. Their permits have, so prior, prior to June 2020.

Q. Yes.

A. Their permits have not expired, they don't expire for another six months or so from today, they don't want to take any more water than they have in the past or any more water than they are authorised to take, but they may have reasonably made plans to use that water quite, slightly differently, so for example to move from borderdyke irrigation to spray irrigation, using the same amount of water, but using it more efficiently, and made plans to do so, but the cut-off date for having implemented those plans is June 2020 under the most recent version of the plan, so if they had made the invest- they had made the decision to go to a more efficient irrigation system, made some investment in doing so, but now will not be able to get a water permit, or their application for a water permit to use the same amount of water more efficiently is a non-complying activity under the current plan framework.

Q. When you say they have reasonably made plans, I am just wondering, one of the, something that your witness yesterday, Mr Burt, said, is that risk is correlated with expectation.

A. Mhm.

Q. And so when you say reasonably have made plans, is that they are prepared to take on the risk of investing in new and more efficient systems in the expectation that they would get a replacement permit on terms

which enabled the continued operation of those systems, that's effectively what you are saying or something else? Or is that only part of it?

A. No, that's what I'm saying so.

Q. That is what you are saying, the expectation?

5 A. The expectation was that the permits would be essentially rolled over for another five years, that, that was the signal sent in the, in Plan Change 7, this is a process, we're going to roll it over; they are not planning on using any more water than they were in the past.

10 Q. So the expectation, you are saying, that you are saying, and I'd love to know how you know this, but anyway you're saying that the expectation of farmers is that they would have their permit rolled over for five years, or six years really, whatever the terms in the...

A. Yeah.

Q. And on that basis, therefore, invest it?

15 A. They may have done that or they may be – I don't know what their expectation was, I'm not the farmer –

Q. No.

A. - but if they were using the same amount of water there were no restrictions on their permit about how they used that water and they may have made a decision to go to a more efficient irrigation system that under the terms of their current permit they were entitled to do and they may have started on that path, but not finished. They when then plan changed seven was notified that sort of cut them off halfway between their plans.

1050

25 **THE COURT: JUDGE BORTHWICK**

I understand that your scenario is that you're presenting to us, I'm just –

THE COURT: COMMISSIONER EDMONDS

I'm not quite sure -

MS MARR:

30 I do actually.

THE COURT: COMMISSIONER EDMONDS

When you are talking about the volume of water and then you talk about historical use –

MS MARR:

5 Yes.

THE COURT: COMMISSIONER EDMONDS

- and then you talk about historical use. So what are you benchmarking that – well, first of all, are you even referring to historical use when you are making that comment and when would you benchmark that historical use to if you are referring to a historical mess?

10

THE COURT: JUDGE BORTHWICK

Commissioner, I think you should actually pursue that after cross-examination because that is a major and important topic for this witness, but I was only really interested in risk taking behaviour by far.

15 THE COURT: COMMISSIONER EDMONDS

Okay, no, we will go back to you. I am just very unclear what it is, what this witness is telling me.

THE COURT: JUDGE BORTHWICK

It is a major topic, and we will come back to it because it is the thing that needs to go into the directions for conferencing. Anyway, sorry, we cut across you.

20

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Yes, I was – so I am exploring this question of understanding the risk profile and I am interested to understand how, in your example, an expectation on the part of a farmer or irrigator who is expanding that they may get a consent rolled over for another five years how that expectation would have arisen before the 30th of June 2020 when plan change 7 was notified because wasn't the expectation before that point informed by the existing regional plan for water?

25

A. Yes, sorry, I may have added confusion by using the word “expectation” here.

Q. Well –

5 A. People - people have applied for replacement consents and been granted them, and some people have applied but haven’t been granted them, we are sort of in the middle of this transition at the moment. In the middle of that transition people are continuing to run their farming businesses and make decisions, and continue to may be develop their land or they’ve just bought it and they want to develop it, so things are going on, people haven’t pressed *pause* on their farming operations. People who have already had their consent granted have carried on. People who haven’t are in the transition phase. Their permits haven’t expired yet, so they continue to exercise them. If they have already started down that pathway of changing their infrastructure or their farming system, and their consent hasn’t expired yet, it’s all been done lawfully.

10

Q. Do you accept it’s been done lawfully, but that it’s for a finite period, being the period of time covered by the existing permit?

A. Yes.

Q. And so there are perhaps two ways in which you could look at the risks associated with this. There is a risk on the part of the irrigator that they might not be reallocated the same volume of water and then there’s an environmental risk associated with the allocation of water, so if there’s insufficient water, they were in a situation of over allocation which you accept vast parts of the water resource in the Otago region are likely to be over allocated?

20

A. I understand there are many areas that are over allocated and there are many areas that are not, so as I understand it, it is a mixed and complex situation across the region.

Q. And the new land and water the plan will hopefully enlighten us all in relation to these state of affairs that when you think about the risks at play here and I want you to think about these risk through the lens of the paradigm shift established in the new national policy statement to a water centric approach.

25

THE COURT: JUDGE BORTHWICK

Q. Is that a yes, you agree that there's a paradigm shift –

A. Yes, I do agree.

5 Q. – in the MPS Fresh Water Management 2020 to a water centric approach?

A. I do agree.

Q. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. So when you think about that change of approach and then you think about who should bear the risk around allocation of water and whether it should be the irrigator or the environment, isn't it the irrigator that should bear that risk not the environment?

A. Yes.

15 Q. I am going to move on now to the wording that you have recommended for the restrictive discretionary activity. If that would be a convenient place to take a break if you are minded to stop around 11. If not, I'm happy to keep going.

THE COURT: JUDGE BORTHWICK

20 No, stopping sounds for a cup of tea sounds pretty good. What date was that was PC7 notified?

MR MAW:

18 March 2020.

COURT ADJOURNS: 10.56 AM

25

COURT RESUMES: 11.15 AM**CROSS-EXAMINATION CONTINUES: MR MAW**

- 5 Q. I have in front of me now the marked up version of the plan change that you provided last evening, and I want to take you to page – it doesn't have a page – oh, it does, page 2. So I'm looking at the policies, and in particular, policy 10.A.2, and here I can see some grey shading, which I understand indicates the changes that you recommend to be made to the document beyond the changes recommended in the joint witness statement.
- 10 A. That's right.
- Q. And so the first change that we come across is the change, at a policy level, to enable and increase in irrigation area, and my understanding is that this policy is informing your restrictive discretionary activity rule.
- A. It is, yes.
- 15 Q. So when we look at that policy, there are two components, or two requirements, in relation to the expansion of irrigation area, the first of which is that it has to be demonstrated that the increase in irrigation was planned, and reasonable steps to implement that increase were taken prior to 30 June 2020.
- 20 A. Yes.
- Q. So why have you chosen the date 30 June 2020?
- A. To align with the other dates that are in the plan. When it sets a cut-off date, it's generally 30 June 2020, and the reason that 30th of June has been used is because that's the end of what's considered the water year.
- 25 It's also often the end of the financial year, so it's a useful cut-off point.
- Q. But there is a gap between the date of notification of the plan, when the parties would have been on notice as to what was planned, and 30th of June, but that's why you've chosen 30 June?
- A. Yes.
- 30 Q. Now, in terms of understanding how the council might process consent under your RDA, you've also provided a note as to what the council will accept as demonstration of planned and reasonable steps, and you've set out that note at the bottom of the page.

A. Yes.

Q. And you've set out three categories of evidence. My first question to you is are those categories conjunctive or disjunctive? So it is any one of those would tick the box, or is it all three, or what did you have in mind?

5 A. I had in mind it would be one of those, it wouldn't have to be all of them.

Q. So when we look at the first of those, just from a drafting perspective, might that be clarified by adding the word "or" between each of those?

A. It would, yes, I accept that.

Q. So when we look at finance to fund changes in irrigation infrastructure were sought or in place, have you any experience for or any understanding of what that might actually look like?

A. About what the evidence might look like?

Q. Yes.

A. Yes, well, I imagine it would be correspondence with the financier, so the bank, for example, where a conversation had been had or a loan instrument had been put in place for that.

THE COURT: JUDGE BORTHWICK

Q. So a conversation would suffice?

A. Well, no, a conversation, you can't provide evidence of that.

20 Q. No.

A. But, for example, in order to ask the bank for finance, you would have to prepare budgets showing that you were planning, what its cost was, and how that was going to be incorporated into your farm system. You would have had to fill in forms with the bank, seeking that finance and discussing the reasons. There would be a paper trail of your conversations with the bank, not verbal conversations, but your correspondence, would be a better way of phrasing that.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Could be as broad as a note from a would be irrigator to the bank, simply asking about a funding line. There's no specificity as to precisely what would be required.

- A. No. I've left it reasonably broad because I was just trying to give examples of what was in my mind when I was thinking about reasonable steps. I hadn't drafted it with a mind to this is a legal test, it was simply an explanation to try and explain.

5 THE COURT: JUDGE BORTHWICK

- Q. Well, we need legal tests. If this is going to be pursued, we need legal tests, and they have to be concrete and repeatable, with minimal or no discretion by the regional council as to what is acceptable or not acceptable, so conversation wouldn't suffice, correspondence wouldn't suffice. Maybe a loan instrument might suffice, I don't know. You're at the hard end of the hearing now. We're interested, but you need to land it in terms of what would suffice.

- A. Sure.

CROSS-EXAMINATION CONTINUES: MR MAW

- 15 Q. So, as I read these words, they are capable of – I'll put it to you – do you accept that they're very broadly framed? And I'm just focusing on the first of these explanations first, so the finance component, and finance to fund changes in infrastructure was sought, so there's no explanation as to what the evidence of how that was sought would be provided to the council, so you could simply have an applicant writing in an application, as you note, a conversation with the bank manager, "I talked to the bank manager," and that would tick the box based on this wording?

- 20 A. Yes, that wording would need to be tightened up if it wants to meet the tests of being completely certain and repeatable in every instance. I accept that wording would need to be tightened up to meet that test.

- 25 Q. When you're thinking about investment in irrigation infrastructure, not all landowners will require financing for that, they may have saved up their money to invest in the infrastructure.

- A. They may have, yes.

- 30 Q. And so they wouldn't then be able to rely on – well, maybe they would, did you intend that they would be able to rely on this part of the note?

- A. Around finance? No.

Q. So when you say here in your note that finance was in place, you don't mean that the farmer had funds in space to –

A. No, that's not what I meant, no.

5 Q. Right, so you're, in a sense, excluding a farmer that's saved up the money to do the investment?

10 A. From that particular test, yes. What I'm trying to achieve with this wording is to not open the gate to everybody who wants to expand their irrigation area, because that would be going too far. I was attempting to open a gateway for people who had actually started this process and would be financially worse off if they were required to stop it partway through the process. I was trying to deal with that, to address a cost which I didn't think had been anticipated in the original drafting, where people had already made investments in certain things, that they wouldn't lose the value of that investment because of the administrative cut-off date, so I was trying to frame the wording in that very narrow way. I accept that the wording needs work to be clearer, but I was not trying to open a floodgate, merely to deal with that cost to a small group of individuals.

15 Q. So you're trying to provide a pathway to respond to the risk that abstractors have taken on, have chosen to adopt, that they might not get a replacement permit on the same or similar terms to their current permit?

20 A. Same or similar terms, I think, is captured in the controlled activity, in terms of the amount, rate, and volume of water. The irrigated area is what might capture some people that had already committed funds on those terms of same rate, volume, and water, and rate of water take, to allow a pathway for consideration of those circumstances. As the plan was notified, and up to the 14 March version, there was no pathway for consideration of those circumstances. The gateway was effectively shut to them, which I thought may impose a significant financial cost on some individuals, and that if we made some changes to the policy, as I was proposed there, there would be an avenue for that to be considered.

25 30 1125

Q. But you have got no evidence of who might be affected, it's at best a theoretical risk as far as you are concerned?

- A. Yes, I don't have any evidence, only anecdotal. I know that other farmers have presented evidence on their specific circumstances. Hearing that and knowing that there was a potentially an unanticipated or even unintended cost to individuals there, I was trying to provide the pathway where that could be considered.
- 5 Q. Let's move on to your second matter under the known, so infrastructure for irrigation on the increased area under irrigation was purchased or on order with deposits being paid. Do you accept that that's framed in reasonably broad terms?
- 10 A. I am not sure what you mean.
- Q. Well –
- A. If someone has paid a deposit on irrigation infrastructure they might have, they will have a receipt or an invoice that shows that that has occurred.
- Q. How do you know that that's related to the land on which the increase might be taking place? I mean, what's enough? Is it all the infrastructure necessary for the land, is it one piece of infrastructure?
- 15 A. I don't know.
- Q. And then when we look at the third one, crops that are partially or wholly dependent on irrigation for survival have been planned or purchased, wouldn't that cover all crops?
- 20 A. All, not all crops are dependent on irrigation. What I had in mind there was somebody for example having purchased tree crops which require irrigation for their establishment. That would use in reality far less water than irrigating pasture but is over a larger area, and if those trees are in the ground or on their way and been paid for, without the irrigation to support them, that investment will be lost.
- 25 Q. So does pasture fit within this category, grass seed?
- A. I didn't intend for it to.
- Q. But it wouldn't, wouldn't it, based on this wording?
- 30 A. Well, I'm not sure that grass is dependent on irrigation.
- Q. Well, there could be an argument about that, could there not?
- A. Possibly there could, yes.
- Q. Lots of irrigated pasture in Otago.
- A. Yes.

Q. And so again, what you have in mind or perhaps what you had in mind in terms of the reasoning sitting behind these explanations, has not necessarily come through in the drafting here with the level of precision that would provide the level of certainty in a regulatory framework, would it?

5

A. No, and I didn't intend it to. It's a note to the policy, if you like, an explanation, about the kinds of things I intended to do, an explanation so that people would understand what, what demonstrating might look like. But as you have outlined, there are a large number of individual circumstances that might apply that I couldn't possibly hope to anticipate them all, and that's why I think it is important that it is a, that the council has discretion to look at those things, and that's why I proposed it as a restricted discretionary activity rather than a controlled activity, so that there was an opportunity for that enquiry to occur.

10

15 **INAUDIBLE DISCUSSION IN THE COURT – 11:30:00**

THE COURT: JUDGE BORTHWICK TO MS MARR

Q. Just as an FYI, do you a similar provision in any other regional plan in the country, and if so can we have access to its drafting?

A. Around reasonable steps?

20

Q. Well, no, around this just broad issue, because reasonable steps I don't like in terms of how risk-adverse a farmer might be, but a broad outline of whether elsewhere in the country there are controlled activities or RDAs acknowledging commitment in some sense to increased area of irrigation and the matters of control and matters of discretion, are you aware of that being adopted anywhere else in the country. If so, can we have a look at the provisions?

25

A. Sure, I am not aware of any, any rule that limits the amount of area under irrigation as a matter of control.

Q. As a matter of control.

30

A. In the way that this controlled activity does.

Q. But this plan is different insofar as it is a transitional plan from what we are told and I think you have acknowledged also is a plan that does not

have effective control over nutrient and contaminant management, correct. Do you agree with that?

A. Yes.

5 Q. Yes. To, so it's a transitional plan between the current operative plan to a fully compliant land and water plan.

A. Mmm.

Q. Prepared under the MPS for fresh water management, correct?

A. Yes.

Q. Yes, so that's what makes this different.

10 A. Well, yes. It is in regards to water quantity. It doesn't fill that gap for all of the matters that might be considered in a fully MPS-compliant plan.

Q. Mmm. And therein lies the problem doesn't it?

A. Mmm.

15 Q. Because your, yeah, therein lies the problem, the scope of the plan change itself.

A. Yes.

20 Q. Together with the enabling provision under the RDA Rule acknowledging that this regional plan doesn't accommodate or manage in, manage the effects of contaminants and nutrients as may be a consequence of irrigation or land, or land use, regardless of irrigation?

A. No, this plan change –

Q. The plan - the Operative Regional Plan: Water, doesn't either. So.

A. Well no. No. It doesn't deal with cumulative or individual leaching at this time at all.

25 Q. At least not, it's not an end problem only though.

A. Yep.

Q. There's a range of contaminants, correct?

A. Correct. Well.

Q. Which this regional plan wouldn't have addressed?

30 A. No, not that I'm aware of. Only from an inputs control basis. You know, it's got effluent controls and erosion.

Q. So we yeah, we've got that dynamic and then we've got a request to increase the irrigable area. I understand what the issue is, it's an issue for many farmers. I want, I'm just really trying to get some clarity over

where you'd like to take this, I don't understand where you would like to take this from the three bulletpoints that you've given.

A. Right.

Q. Mmm.

5 A. Yes. What, my thinking was to use the similar wording, so the controlled activity has got an entry condition 3, the application demonstrates that the total land area under irrigation does not exceed the maximum, so I was trying to use that same language, you know, the application has to demonstrate that a thing has happened. And in the controlled activity rule
10 that's that land was irrigated, so you, the council will have to make an assessment when that application comes in that they are satisfied that it's been demonstrated that it was irrigated in the past. And that's a discretion that the council when that application comes in the door to decide whether it meets that entry criteria or not. And that's pretty broad, so and I didn't
15 want to just leave it as broad as that when I was saying the applications demonstrated that they had actually begun that journey of increasing their irrigated area before the cut-off date. So I was trying to give some examples of what would demonstration look like, to try and add some clarity. I accept that I haven't achieved what I set out to do there.

20 Q. The demonstration being to, to allow an increase in irrigable area?

1135

A. Well no demonstration is that to demonstrate that, they didn't just dream up this expansion of irrigation area yesterday, it actually started down that pathway and made a commitment to it prior to the plan coming into force
25 to the – which is important because you don't want to open the door to everybody expanding the irrigation area, that would be difficult for the Council to manage and not an acceptable outcome, but, so what I was trying to do was very narrowly focus in on that small group of individuals who might have been disadvantaged or lost a financial investments because of the cut-off date that was included in the plan, so the doors very narrowly opened to that small group of individuals if they can demonstrate that they genuinely had already invested in that change but
30 the door – the intention is not to open the door to anybody who decided that they just wanted to increase their irrigation area. If the purpose of

that control on irrigation area, if the purpose of that is to address water quality effects, I don't think it's very effective at that –

Q. No.

5 A. – because it's not really targeting water quality effects even of irrigated land because there's no control in the plan on irrigation, people who have already maximised their irrigatable area, have no controls on them about adverse effects if they stay within the same land uses. People who have – are under developed for their irrigation area will have that cap placed on them and is that an appropriate – that's essentially grandparenting.
10 People who haven't already done the expansion and not grandparenting people who have already done the expansion, so I don't think that's a very good tool for the job and the – I think unintended consequence of using that very blunt tool is that people who have already made a financial investment into something will lose that investment.

15 Q. You see to land this, don't you have to know something more about the lead in time to implementing a change in or an expansion in the irrigable area and the steps which may be taking by farmers to, their lead in time by farmers and business associates to –

A. Mmm.

20 Q. – for that expansion. You may need to know something about banking response, you've noted finance but banks are not the only source of finance.

A. That's right.

25 Q. You would have to know, we're talking about irrigation systems and I'm not quite sure whether your driver is an improvement in the efficiency of irrigation systems, but I thought that the cost of earthworks can be many, many more times that of the irrigation infrastructure itself, so you'd need to know also what are the components of the investment that is to be made or has been made. You know, how much do you know about all of that to know that these measures are going to be sufficient?
30

A. Which measures, the ...?

Q. Your three bullet points?

A. How much do you need to know? Well –

Q. How much do you need to know?

A. Yes.

5 Q. What inquiry have you undertaken in terms of the lead in and planning framework undertaken by farmers before implementation together with the other stakeholders who are interested in that farm, one of which might be a bank?

A. Mmm, well –

Q. But not necessarily?

10 A. Yes so what I inquired into is what were the steps that a farmer would have to take before their land was being irrigated, so what happens before the land being irrigated is actually irrigated, so that lead in time might be a year or more, irrigation only happens during certain seasons, you have to get the infrastructure in place before that happens and before you get the infrastructure in place, you have to have finance to buy it and you need to have ordered it and those things do take time and the lead in
15 times might be a year or more. If it's a crop, like a tree crop, like someone planting cherries, going from pasture to cherries, they will have had to have order those trees in, so there is a long lead in time before you could meet the test of the land was irrigated prior to June 2020.

20 Q. I don't know and then the cynic in me said, thanks, well okay, so you had a finance facility established by a bank which has been drawn down for, well which is yet to be drawn down, is that sufficient? Will the bank stand behind that facility given now the what is now considerable uncertainty –

A. Mhm.

25 Q. – not because of this plan, but because of the plan to come, the land and water plan. Will the bank honour that facility? Will the bank want to change the debt repayment period from period say, typically as I understand it, 20 years to something which is shorter?

A. Mmm.

30 Q. Will the farmer want to take on that risk, that rather depends on what the farmer's expectations are in terms of other outgoings –

A. Yep.

Q. – and also personal needs and expectations in terms of what else could the money be used for –

A. Yes.

Q. – other than investing in an increase in the irrigation, so there's a – to me there's this question of uncertainty anyway –

A. Yes.

Q. – it's not this plan, it's the plan to come, would you agree with that?

5 A. Yes.

Q. Yes. And then if you go through this process and say, oh yes you could, this is a block of land which has an area that could be irrigated, and is to be determined on that basis, then it's simply as your advocate has said, the benefit to the farmer is the value increase in land, value increase because it's not, it's a greater area of irrigation which has been recognised by the Regional Council and also an increase in contaminant load because we asked about that, what was being offered here in terms of holding the load, the concentration and volume, answer, nothing. So it could also be used for other purposes other than, it could be used for holding increase in contaminant, the potential for farming activity to increase contaminant load and concentration and to also hold the value, relative value of the farm, to maximise that in the short period, is that not so? It's not just to enable farmers to irrigate, it can be used for other purposes?

15 A. Sure and I hadn't considered that, somebody –

Q. Yes, but your advocate did, that's how she's opened.

A. Right.

Q. As I said, we're thinking about it, but it's not for us to land, I mean like we know that one farm is coming up, I think it's McArthur, we've already got infrastructure in the ground?

25 A. Yeah.

Q. Well, that's a bit more clear cut?

A. Yes, yeah. Yes. And –

Q. They've done the earthworks, they've got the infrastructure in the ground?

30 A. Yes that's right and the plan as notified leaves no, no pathway for consideration of that which I think is – makes the planning framework probably a bit less sufficient than it could be.

Q. And which is Mr Maw's question and the thing troubling the Court, is where does this go? Where is your section 32 analysis? You don't even know how many people could be in this group?

A. No I don't know and I can't know that, no.

5 Q. Which troubles us because of other questions that we've got that you might not know or you might not know personally, but I can spec- it could be they are knowable. All right, sorry, I've cut across again.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. This is hard.

10 A. Yes, I don't underestimate –

Q. This question is hard.

A. It's important too.

Q. It's important –

15 **MS MARR:**

Yes.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. – and it's hard, yes.

A. It is hard because it is interwoven with, as you have rightly pointed out,
20 it's interwoven with the effects more broadly of farming and irrigated farming in particular, and within the confines of a relatively narrow plan change, so it is very complicated. It is very difficult to address and I have grappled with it a lot. How do we hold the line to the extent that we can within PC7, but how do we make that a reasonable regulatory framework
25 that can address individual circumstances with the people that have already done the earth works, et cetera, and I accept that there may be better ways to frame it. I haven't had the benefit of being able to caucus with my colleagues on this particular issue.

1145

30 Q. Nothing stops you phoning. Honestly, you don't have to wait from a direction from us.

A. Well, that is true, that is true.

Q. You are well-experienced in this field, so you should know that.

A. Yes, and I thought we did almost get there at one point.

Q. Yeah, and I don't think necessarily, maybe counsel has backed off this completely, but I rather thought that the change in Mr de Pelsemaecker's position was simply that you had to make the case out for Mr de Pelsemaecker to consider it further.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. I shall continue. So this question of risk and the point in time at which the risk crystallises to those who have invested, so let's say you have a situation where you have a permit expiring, and let's say it's a deemed permit, it's expiring 1 October this year. Your situation is seeking to reward those that have taken the risk leading up to that point that they will get a replacement permit that enables them to continue their expanded area. So in a sense, the irrigators' taking that risk based on a current short-term permit, aren't they?

A. If it's a deemed permit, yes. There are other permits in place that expire further out, 2024.

Q. Yeah, let's pick 2024, the furthest date away. So plan change 7 doesn't do anything to preclude or prevent a consent holder exercising that consent to its fullest extent during that period.

A. That's right, yes.

Q. So when a consent-holder is asking himself, herself, itself as a company whether or not or invest in further – let's say cherry trees, for example – what do they know? They know they've got a permit in that context that will expire in 2024, when the date is. So doesn't that inform the investment decision and the level of risk that might be being taken?

A. Yes.

Q. And again, there can be no expectation that, in the current climate, in terms of the paradigm shift you've spoken about, that permits will be renewed on their current terms.

A. No, nobody ever has that certainty, because permits do expire, yes.

Q. We'll move on from the first of your policy considerations in terms of the demonstration. Actually, no, we won't, I had one more question about

that. You noted that the council would have discretion to consider whether the material put forward adequately demonstrated the matters that you've outlined. When I look at the list of matters to which you have restricted the council's discretion, I don't see a matter of discretion responding to that.

5

A. No, because it's an entry condition.

Q. Yes, which potentially makes the task a little more difficult for the council, doesn't it, because there ends up being an argument as to whether the activity is a restricted discretionary activity, or potentially a non-complying activity.

10

A. Yes, and the same happens with the controlled activity, because it has a similar test, that the application needs to demonstrate the area of land that's been irrigated.

Q. Do you accept that demonstrating an area of land that has been irrigated over that – it's now a three year period – is a relevantly straightforward step to undertake compared to demonstrating the matters that we've been discussing over the last hour or so?

15

A. I don't know that it would be any easier, in fact. If the person is irrigating with a movable irrigator system, K-lines or something like that, what would to council have to do? There has to be some kind of the applicant demonstrating a thing, whether that's "here's my irrigation plan" or "here's an aerial photograph" or "here's my farm budget for that year" or there is a lot. All of these farms are different and have different circumstances and all have different methodologies for demonstrating all of those things. I don't think that the one that I've proposed is materially different from the one that's already in the plan.

20

25

Q. Well, I put it to you that they are materially different things that need to be demonstrated. When we're thinking about the area of land irrigated, my understanding in my experience working with the farming community is that farmers are pretty switched-on, and they can tell you precisely where they've irrigated in preceding years. You give them a plan of the property, they'll be able to shade on that map with a very high level of precision areas that have been irrigated, so you would accept that it's not an insurmountable hurdle to demonstrate the area irrigated?

30

A. I do not, no, I do not, but I think it comes down to whether or not the council accepts that demonstration as the entry condition.

5 Q. Well, then we consider, for the reasons we've just been traversing, the real challenges associated with how you demonstrate an existing investment to develop. That is a much more difficult and tricky thing to do, is it not?

A. Well, in my mind, I didn't think that it was more difficult.

Q. Well, in light of the discussion we've had this morning about the three matters recorded in your note, do you change your view? Sorry?

10 A. Do I change my view about whether it's different?

Q. Yes, more difficult to do than showing on a map the area previously irrigated.

15 A. Well, no, because a farmer could show you on a map "this is the area I plan to irrigate." I mean, I see where you're coming from, and I can see that there is an unhappiness with the level of certainty. I can't fix what I've written down, that's what's on the page. I'm trying to address a specific set of circumstances so that there is a pathway for people to have their applications considered rather than there being a closed door. If I have done that in a way that is – I've done the best job that I could do,
20 and if it could be done better, then I accept that, but I don't know that it's very helpful for me to try and do that on the fly right at this minute. I want to be helpful, but I don't know how helpful I can be on that particular issue, any more than I have already tried to be.

25 Q. I was simply testing the explanation you'd given that the council had restricted its discretion and would have discretion to consider these matters and had highlighted that the drafting didn't achieve that.

A. Yes, no, they don't have discretion, but that is an entry condition which the council will assess when the application comes in.

30 Q. Right, we'll move on the second limb of the policy. Now, just so I've understood this, so I'm back at policy 10.A.2.1, and your grey shading, sub-para B, and we've been talking about (i), and in addition to (i) and its conjunctive is the requirement set out at (ii) that the existing irrigation infrastructure is being replaced with more technically efficient irrigation infrastructure.

A. Yes.

Q. Now, when I read that, I read that as all encompassing, so all existing irrigation infrastructure is being replaced.

A. Yes.

5 Q. And more technically efficient irrigation infrastructure is to be used.

A. Yes.

Q. So I want to test that through the lens of some of the examples that we've been talking about today, and I want to start with the cherry tree example. So my understanding is that, in relation to cherry farms and the way in which cherry trees are irrigated – well, in fact, do you know how cherry trees are typically irrigated?

10

A. I understand it to be a kind of a drip irrigation.

Q. Right, so let's stay on the drip irrigation. My understanding, having read the evidence of a number of economists, the drip irrigation is particularly efficient, in fact, one of the most efficient types of irrigation. So let's say our would-be expanding irrigation setup is to add another 10 hectares of cherry trees, and those cherry trees are to be irrigated by a dripper

15

1155

A. Mhm.

20 Q. As I read your policy, I read that as requiring all of the existing drip irrigation to be removed from the existing cherry farm and replaced with something more efficient than the existing drip irrigation, and I'm not sure what that is, as a requirement to then expand the cherry farm.

A. Right. Well what the first condition is that the amount of water being used has to be within the historical use of the water. So, you couldn't go from 10 hectares of cherry trees to 20 hectares of cherry trees with the same amount of water, that's not technically possible, so this, this would only be where you were going from, for example, an area of border dyke pasture irrigation to a larger area of cherry trees, it's only that circumstance that would fit through that gateway.

25

30

Q. And you're not aware of any actual circumstances where you have a current border dyker seeking to plant a cherry orchard where that situation might arise?

A. Not a specific circumstance at all, I don't have a specific circumstance in mind, no.

Q. Well, let's think about the evidence put forward by McArthur Vineyard, are you familiar with that?

5 A. No.

Q. All right, well hold in your mind the thought that you've got an existing vineyard looking to expand.

A. Mhm.

10 Q. Same situation arises in terms of existing drip irrigation on the existing vineyard.

A. Mhm.

Q. Looking to expand, this rule doesn't provide any relief as currently drafted?

A. No.

15 Q. And are you saying it wasn't your intention to cover that situation?

A. My intention was not to cover any circumstances where more water would be taken.

20 Q. So in reality, we're likely to be looking at - well, we don't know how many we're looking at here, but you are thinking wholesale change of irrigation system across an entire farm to a more efficient irrigation infrastructure?

A. Yes.

Q. So -

A. So I'm only trying to pick up the things that are actually of benefit, that are actually improving,

25 Q. In your experience, have you seen any level of - well, do you accept it would be an extreme level of risk to take to convert from border dyke irrigation when the underlying permit expires within a one to five year period?

A. It would be a, sorry what was the question? an underlying risk?

30 Q. An extreme underlying risk.

A. An extremely underlying risk. Well, as Mr Burt pointed out, that's a matter of perception, that risk, that might, weighed up with other factors on that farm that might be an acceptable level of risk for those individuals. It's really, that's an individual decision to take. I was trying to craft a pathway

where that individual decision could be considered in the planning framework on its merits, whereas the original drafting the door was shut completely to those circumstances.

Q. Which has the effect of rewarding those that have taken that risk.

5 A. Well it doesn't necessarily reward them but it does, it does provide a pathway for that to be considered, yes.

Q. Just staying on this (Roman2) "ii" in the policy, more technically efficient irrigation infrastructure.

A. Mjm.

10 Q. Just a little bit more efficient? How do we measure, what's the change required?

A. The change required is an improvement from the current situation in terms of technical efficiency, so the water would be being used more efficiently, there would be less wastage, less of the kinds of circumstances that Dr Chrystal was explaining where there would be more water put on that was required, so it would have to be a better outcome that would be being achieved.

Q. The police as drafted doesn't really provide any further information about those matters though, does it?

20 A. About technical efficiency? No.

Q. I want to move forward to your restricted discretionary activity rule that you have recommended. And we've touched on this before morning tea. There are no matters of discretion relating to environmental effects.

A. No there's no matters of discretion anywhere in Plan Change 7 as it currently is around environmental effects except irrigated area, that's the only, that's the only thing that relates to environmental effects, everything else represents a rolling over of existing conditions.

25 Q. Well, the methodology in schedule 10 might also be seen as having some, providing some restriction in terms of holding people to actual historic as opposed to currently consented?

30 A. Well, yes, that goes to the amount of water abstracted, yes.

Q. Which can have an environmental impact.

A. Yep, it can. Yep. But it doesn't deal with whether that amount of water is appropriate or whether the minimum flow conditions are appropriate. It reflects just a rolling over of the status quo.

5 Q. So when we think about all of the bespoke mitigation options which Dr Chrystal spoke about yesterday.

A. Yes.

Q. There's no platform within this drafting of the restricted discretionary activity rule to pick up those matters?

10 A. No, not fr- there isn't, that is not deal with by Plan Change 7 at all, so, there's no requirement for any irrigator to have a farm management plan.

Q. Right. I flagged to you at the beginning of the examination that there were two topics that I wanted to discuss. And I want to transition now to that second topic, and that relates to the water years in terms of data that is to be used when considering the replacement permits, and I'm looking –

15 A. Yes.

Q. - in the first instance in the controlled activity rule, matter of control 5. And here the previous restrictions on water years there in the notified version and the version recommended to be changed, has been changed again, such that any water data can be used.

20 A. Is this a matter of...

Q. Four.

A. Condition 4.

Q. Of controlled activity.

A. Oh yes, at entry condition, yep. I see now.

25 Q. No it's not an entry condition, it's the matter of control.

A. No. I think it's an entry condition.

30 **THE COURT: COMMISSIONER EDMONDS ADDRESSES MR MAW (12:03:14) – CONDITIONS 4 AND 6, WITH DATES STRUCK OUT. THEY ARE ENTRY CONDITIONS – DISCUSSION**

THE COURT: BORTHWICK TO MR MAW

Q. That's okay. And your own witness supports this or doesn't support, I can't remember how this goes now.

A. Doesn't support the extension being 30 June 2020.

Q. Beyond 30 June. Yep, okay.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. Whereas my understanding is that you do support the extension beyond that date?

A. Yes, I think my position in the joint witness statement, so the advice from the technical witnesses was you should also use the most recent data that's available, and the more data you've got the better. The more data you've got the better understanding of historical use you are going to have. So that's where the, where we landed, in the joint – in the conferencing was to take that advice and include it so that all the data that was available could be considered in here. and I understand Mr de Pelsemaeker's concern that for consents that expire, permits that expire in 2024, in that intervening period people might change their behaviour, they might ramp up their water use so that they get higher recorded meter readings, and that, that would be potentially create some sort of gold rush around that, so as I understand it, the water that goes through a meter is connected to the irrigation system, so the water that gets taken goes through an irrigation system gets used and so the planning witnesses got to the point where the risk of somebody pumping water unnecessarily is actually pretty low but I accept there is a risk there and I did state in the joint witness statement that is that risk was round to be considerable, then you could deal with that by putting them down the restricted discretionary pathway. I haven't reflected that in changes because I'm not sure what the actual factual situation of that might be, but I think there is a pathway where you could sort of draft them down the restricted discretion ends, then if peoples' behaviour, if it did come to pass that people had ramped up in an unjustified way you could consider it through that pathway.

30 1205

Q. Right, so the risk, you accept the risk does accept?

A. I accept at a theoretical level it could, but I'm not, I'm not sure in reality how big that risk is.

Q. So when you think about that risk and who should bear the risk, should the abstractor or the environment bear that risk?

A. The risk of people ramping up, yes, well, I guess the abstractor does, yes.

Q. No, my question is who should bear that risk?

5 A. Not the environment.

Q. So insofar as there is a risk of ramping up –

A. Yes.

Q. – and that risk can be addressed in favour of the environment by capping the date at 30 June 2020 –

10 A. Yes.

Q. – shouldn't the plan change to that?

A. Yes. If there is that risk, yes, then 2020 would be the appropriate cut off on the controlled activity and you could provide for that longer record of data for the consent it don't expire to 2024 through the controlled activity pathway.

15

THE COURT: COMMISSIONER EDMONDS

Q. Say it again, what was your answer?

A. Sorry, the restricted discretionary activity pathway.

Q. So just repeat the whole thing again, your answer again.

20 A. Okay. So if there is a risk of that kind of goldrush behaviour, that risk can be addressed by including only data up to 2020 in the controlled activity rule, so that keeps that nice and tightly controlled and the consideration of data between 2020 and the expiry of the permit if people would like to have that considered, that can be considered through the restricted discretionary activity pathway because there might be legitimate reasons why water use change between May 2020 and May 2024. For example, climate infrastructure, all those things, yes.

25

CROSS-EXAMINATION CONTINUES: MR MAW

30 Q. Mmm. So in the context of a steady state farming system, so no expansion of irrigation area, there might be a legitimate reason for say climate to dry, yes, there's water available, water was available within the terms of the consent as part of the exercising of a permit within its terms?

A. Correct.

Q. And that situation you say, well, the restricted discretionary activity might usefully be available in that situation?

A. Yes.

5 Q. Now, an important part of that proposition was that the farm was in a steady state in terms of irrigation area. I want to test with you the consequences or implications for enabling an expansion of irrigation area and let's stick with the permit expiring 2024, so your RDA is seeking to make or to provide a pathway for expansion. So on consenting of that activity, it will be the water use right up till 2024 that would be used to then reflect the historic use wouldn't it?

10

A. All that data could be considered.

Q. And noting that we're now dealing with maximums, in all likelihood if there's been an expansion of the irrigation area, the maximums are likely to have increased over that period?

15

A. Yes.

Q. And so again, that risk of an increase irrigation area coupled with the extension of the date range gives rise to a risk of further allocation of water being consented beyond 2024 in that context?

20

A. Sorry, it gives rise to a risk of what do you mean by "further water being allocated" like the rules don't allow for more than what was previous consented to be consented.

Q. Yes, so there would need to have been head room within an existing permit?

25

A. Yes.

Q. And my understanding is that there is an often significant head room that hasn't currently been utilised which is why some investment is being made based on head room within existing permits?

30

A. I understand that to be the case with deemed permits there might be significant head room, but I'm not sure that's true of more recently issued permits, but it could be.

Q. So again there could be a risk associated with shifting that data period in circumstances where the irrigation area has been expanded?

A. The risk is that more water would be taken in 2024 than was taken in 2020.

Q. Yes.

A. Yes.

5 Q. And then as your RDA works that would be historical use at that point because the data up to that point can be used.

A. Yes.

Q. And is that what you were intending when you were drafting that rule or when you considered that that data period should be appropriate?

10 A. Yes.

Q. And so the environment bears the risk then of further water abstraction or allocation beyond 2024?

A. No, well – it's not further water, it's water that had already been permitted and already been used.

15 Q. Well, no, it hadn't already been used up to -

A. At 2020.

Q. It hadn't been used at 2020?

A. Yeah.

20 Q. And so if you think about plan change 7 in some of the outcomes of seeking to achieve, Mr de Pelsemaeker says that: "One of the signals that it intends to send is to make it clear that future investment in infrastructure and activities that might require water, those investment decisions need to be made very carefully given the precarious state of over allocation across parts of the region."

25 A. Yes, that is Mr de Pelsemaeker's evidence. I just want to go back to the previous question around the risk to the environment.

Q. Mhm.

30 A. The council in the restricted discretionary activity rule has discretion about the rates of take in the volumes. Their discretion is limited to – it can't be more than the historical use, but there isn't anything that prevents them making it less than the historical use, so it is a matter of discretion.

Q. Well, the policy say "allocate historic use" don't they?

A. They say: "Avoid granting except where these matters occur." There are and that's one of the policies that is taken into consideration, yes.

Q. So the council has no policy hook to say “Well, we’re going to restrict you 2020 volumes of water” that is not what the policy framework’s driving at?

THE COURT: JUDGE BORTHWICK

This is where historical can mean any data and any period right up until the
5 evaluation and dissent –

MS MARR:

- consent expires, yes.

THE COURT: JUDGE BORTHWICK

10 - oh, yes. I kind of thought about that.

MR MAW:

Oh, yes, please.

THE COURT: JUDGE BORTHWICK TO MS MARR

15 Q. Just a thought. So I recall the plan is JW, I think the plan is JWS or
perhaps it was technical bods, JWS said: “ That for a controlled activity
rule, the aqua link guidelines are not appropriate.” And so controlled
activity, your recommendation is keep that really tight and its historical up
till June 2020. If all good, if all data is good data if we accept that, so
20 that’s one of the things we have to think about and you can go beyond
the 2020 date, then the – is that on an RDA which is what you’ve
recommended, is that where the aqua link comes in behind to test the
proposition that this is the factors not reasonable nor efficient. What it is,
is ramping behaviour which is to be discouraged, so is that the way to
25 overcome that?

A. Yes.

Q. Yes. Is that worthy of a second thought?

1215

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Yeah, I just want to tease it out a little. So let's say you apply the reasonable use calculation in the Aqualinc guidelines to an activity where there's been expansion over the 2020 to 2024 period. The additional water used over that period, in accordance with your framework, needs to have shifted to an efficient system, and Aqualinc guidelines would reflect that system, and so, on consenting, if those guidelines are applied, in all likelihood, the higher rate of water or volumes of water used on the expanded area would come through.

5
10 A. Well, they would meet a test of being both historical and efficient, but the council still has discretion within the restricted discretionary activity, it has discretion about how much water within that envelope can be allocated.

Q. Yes. From a planning perspective, though, that discretion needs to be exercised in a principled manner and in accordance with the policies.

15 A. Well, yes, that discretion is within the bounds of what the act prescribes you can consider, yes.

Q. So let's say the council consents officer came along and said: "No, you're going back to your 2020 rate of use because we've got the discretion to do that," I foresee some challenges being brought by would-be applicants and a significant appeal risk when viewed through the lens of the policies as to the appropriateness of winding somebody back like that. Would be a pretty unlikely outcome, wouldn't it?

A. An unlikely outcome?

20
25 Q. An unlikely outcome that the council would restrict abstractors back to their 2020 rates and volumes through this policy framework?

A. Well, I think that the council has the job to do to consider all of the factors, including environmental effects, and if they felt on an environmental effects basis that –

THE COURT: JUDGE BORTHWICK TO MS MARR

30 But we're not into environmental effects.

THE COURT: COMMISSIONER EDMONDS TO MS MARR

Q. No, you said earlier in response to a question that you didn't see any reference in the controlled or the restricted discretionary to the consideration of effects, so I'm just a little confused by your answer.

5 A. Sorry, the consideration is around volume and rate of take.

Q. But on what basis?

THE COURT: JUDGE BORTHWICK TO MS MARR

Q. It would be perverse, completely perverse for a council if a farmer can put up a historical use up to 2020 and then can demonstrate future historical
10 use, and I have suggested would the Aqualinc guideline come into play there to demonstrate no ramping behaviour. It would be completely perverse for a council to then say: "Nah, forget about that, you can go get your 2020." I would find that really odd.

A. It would be. If there was no ramping behaviour, that would be
15 unreasonable.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Really objectionable outcome by a council, I would have thought. Also, I suggested this, not actually, you know, both with and without an increase in irrigation area in mind, actually. Does that give the council some
20 assurance, you know, as to the future historical data can be tested or benched against an Aqualinc guideline on an RDA rule, just putting it out there? You don't actually have to increase your irrigation area anyway.

A. Yeah, in that context, it's worthy of further thought in terms of that one-off ramping behaviour to demonstrate or to get further water over that period,
25 need some technical advice, but I understand where you're coming from there. I was exploring that in this expanded irrigation.

Q. Yeah, and then there's the irrigation area, and so when exploring it in the increase of the irrigation area, so this is a future use of water, a future historical use of water, and again, the same potential for ramping
30 behaviour. Could that also, or not, be tested against Aqualinc to counsel to satisfy itself?

A. Mmm, and there are a few questions in that, including the appropriateness of reconsenting the expanded area and the volume associated with that.

Q. Reconsenting, meaning?

5 A. Well, the six-year rollover under the restricted discretionary would allow that increased area and increased volume, efficiently used, to be rolled over for another six years.

Q. Well, it would allow an increased area, so that's new, that's a new component.

10 A. Yes.

Q. The idea is not necessarily that volume increases, but because there's a whole of farm change, and it's like, wow, do you really think your beef and sheep people are proposing this? But anyway, whole of farm change from one system to another system and applying – I thought the idea was to apply the same amount of water as in the inefficient system, now efficiently over the same area. How do you test that proposition that's not just more water, and together with also ramping behaviour?

15

A. Because on this drafting, it's not the pre-expansion volume of water that is being considered. It would be the future historical volume that rolls over, and that is where there could be an issue with the RDA framework.

20

MS MARR:

Okay, I hadn't considered that scenario. I'd have to give it some more thought.

THE COURT: JUDGE BORTHWICK

25 Q. Do you want to give it some thought over lunch, maybe, because – yes.

A. So the scenario is a consent that expires in 2024, okay.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Yeah, and let's shift from inefficient – keep it simple – border dyke to spray, so that's the efficient system, an expansion of irrigation area based on investment in infrastructure or something, so assuming it can get through your policy and your rule, what happens on reconsenting under the RDA framework? Is it the volume of water that was used in, say,

30

2023, was the year with the maximum water use, or was it the pre-conversion to spray volume, or was it something else?

A. Okay.

THE COURT: JUDGE BORTHWICK TO MR MAW

5 Q. And is your thinking, well, if you're just using the same historical volume as of 1 June 2020, but you're using it differently and more efficiently, why aren't you just grabbing the 1 June 2020 date, because why not?

A. It reduces the risk.

Q. Because it reduces the risk.

10

MS MARR:

The 1 June 2020 volume of water.

MR MAW:

And rate of take.

15 **THE COURT: JUDGE BORTHWICK**

So part of the problem that the Court has, and parties may have also, is that we've got these JWSs, and they're not fully worked out in terms of reasons for anything, and this is one place where we're kind of flying in the blind as to what the different thinking is.

20 **THE COURT: COMMISSIONER EDMONDS**

Q. Sorry, could I just ask one more question of clarification? Are you accepting of the 2015 date at the other end, or in terms of the – I know, but I do think that it has a bit of relationship to the four corners of the proposition. So I just want to understand, if I'm able to understand, in a quick answer, what you gave us has all of the date range crossed out?

25

A. Yes.

Q. And are you – I mean, we're talking about the future stuff, post-2020, but I want to know whether you're accepting of 2015 at the other end or whether you want all the dates out.

- A. I think that the advice from the technical experts was that the longer the record of data, the more accurate it could be, so based on that, I would say you wouldn't want the 2015 date in there, because you would want the longest period of record possible, so you would have an open-ended beginning to the data, possibly, and then, I think, what I'm considered now is do you want the data period to close at 2020 and the last data that you take into account?

1225

THE COURT: COMMISSIONER EDMONDS

- 10 Q. Okay, so you don't think that there's any issue about having all the data going back a long time even though some of that data relates to very inefficient methods like border dyke and wild flooding, given that we're now dealing with maximums?

- A. Yes. That's not a scenario that we actually considered in conferencing. 15 The scenario that we were considering was the more data that you have available, the more variation climatic influences is going to be included within that data record, the most you would have more information about different systems within that, so that the more data would be useful to understanding use, but we didn't –

- 20 Q. Change - the use can change significantly –

A. It can change, yes.

Q. – overall that time can't it?

- A. Yes, and don't – that wasn't actually considered as far as I'm aware in the technical or the planning conferencing as if someone in 2016 changed 25 from border dyke spray and started using a lot less water.

THE COURT: JUDGE BORTHWICK

Q. So we're flagging that as a major issue?

A. Yes, that's another, well, that's a mission.

- Q. A change in irrigation systems regardless of any increase in land use, you 30 know, you're boundless date period in picking up maximum use under a highly and efficient system and saying: "Yes, that's it, for the permit"?

THE COURT: COMMISSIONER EDMONDS

Q. Yes, that's for historical use. So you might need a future focus if you're basing on that.

5 A. And that's where the Aqualinc guidelines would be useful in consideration.

THE COURT: JUDGE BORTHWICK

Q. Yes, for those, for a move to an efficient system, yes, but I think we have been told they don't help for your inefficient system?

A. No.

10 Q. So yes, that again, the Aqualinc might come in there as well in terms of ground turving, what is actually – what actually represents historical use -

A. Mmm.

Q. - for an efficient system?

15 A. Yes. The discussion that we did have was around the historic use and the existing permit conditions create the boundaries of the envelope of water that could be used or applied for, and then the council – that's a matter of control within but it's limited by that boundary.

Q. But it's blind, that is blind to the irrigation system -

A. Of the efficiency question, yes.

20 Q. – which is being employed. So that's your blind spot, that's another blind spot which we're going to be asking questions about, yes.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. No, it's highlighted -

A. Yeah.

25 Q. - the shift to maxima has highlighted that very issue to the systems change.

A. Yes.

THE COURT: JUDGE BORTHWICK

But again it's not insurmountable –

30

MR MAW:

Oh, no, it just needs to have been considered.

THE COURT: JUDGE BORTHWICK

Q. It's just you don't have any blind spots?

A. Yeah, yeah.

5 LEGAL DISCUSSION - BREAK (12:28:07)

COURT ADJOURNS: 12.28 PM

COURT RESUMES: 1.30 PM**CROSS-EXAMINATION CONTINUES: MR MAW**

- 5 Q. Good Afternoon, before the lunch break you were tasked with some over the lunch break homework to test a scenario in terms of how your restricted discretionary activity rule would work, have you had an opportunity to test that scenario?
- A. Mmm, I have, well I have done a lot of thinking, I'm not sure I've landed it, but yes I have considered it.
- 10 Q. Right, so I'd be interested to understand how the scenario plays through the framework that you've put forward and it may well be that as a result of having done that test, you may have some changes or you've had some thoughts as to what might need to change, it would be useful to understand the current provisions through the lens of that scenario first before we jump to that step?
- 15 A. Okay.
- Q. So if we can step through that way, and it will be helpful perhaps if you can just repeat the assumptions or the underlying scenario that you've been using?
- A. Okay. so the scenario, as I understand it, is a water permit that expires 20 in 2024 and sometime between 2020 and 2024 they convert from borderdyke irrigation to spray irrigation which uses less water, that's the scenario you've asking me to consider?
- Q. That uses less water at the time that a transition is made? So at 2020 say or 2021 as we now are?
- 25 A. When they change from borderdyke to spray irrigation.
- Q. Yes?
- A. Yes and as I understand it, the potential problem is that the – using – the use of maximums in the historic use record would provide a maximum that is required for borderdyke irrigation and that is much more water than 30 is required for a spray irrigation system.
- Q. Well that might be the case or might the situation depend a little on, let's go back a step, at the point in time that the change takes place, no permits are required?

A. Mhm.

Q. In terms of the change?

A. Yes.

5 Q. So it's only on re-consenting under the RDA that an analysis would be conducted, so when assessing the rates and volumes of water to be taken on re-consenting in 2024, what analysis under your rule frame would – rule frame it would take place, so you'd be looking at the water record right through to 2024?

A. Yes, ah, are we talking about the restricted discretionary rule?

10 Q. Yes?

A. 2024, yes.

15 Q. So is it that the Council ought to be looking at the volumes of water taken prior to the conversion or the volumes of water after the conversion or how does the Council go about assessing whether the increased irrigation area is resulting in a more efficient use of water? Because that will have already happened?

A. Yes. So are you meaning the entry condition? I'm sorry I am a bit confused about what part of the scenario you would like to test?

20 Q. I guess I'm trying to understand what happens on re-consenting in that situation?

A. Yes.

Q. If the full data record is able to be used up till the date of re-consenting?

A. The data record for water take?

Q. Yes?

25 A. Yes. Well, the version that we've got in front of us after the JWS allows the use of the full record of data which would include the highest amount that was taken in that record which would be the borderdyke irrigation say, and that would form one part of – that would form the envelope of the amount of water that the council can consider to be taken. And that
30 discretion, matter of discretion A, limits the Council's discretion to the amount of water within that envelope.

1335

Q. So –

A. That scenario can occur potentially under a controlled activity as well.

Q. But the expansion of the irrigation area can't occur?

A. Correct.

Q. And I guess –

THE COURT: JUDGE BORTHWICK TO MR MAW

5 Q. Sorry, the expansion of the area, irrigation area, can't do what, sorry?

A. Can't expand under the controlled activity.

Q. Yeah, yeah.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. So I guess what I am trying to get an understanding of is the potential for, or how much expansion could potentially happen reliant on the previous maxima in terms of rate of taking volumes.

A. That would depend on the individual circumstances.

Q. But it could be significant if you are thinking about the volumes used for flood irrigation and the transition to spray.

15 A. The amount of area that, the area of land that could be irrigated potentially.

Q. Yes.

THE COURT: JUDGE BORTHWICK TO MR MAW

20 Q. Sorry, I've lost the thread. What could be significant? We've got under the proposed RDA now we have an increase in the irrigable area, so what could be significant?

A. The area of land which could be –

Q. Oh yes, the area of land could be. Yeah.

A. Yes.

25 Q. That could be.

THE COURT: JUDGE BORTHWICK

Q. And so then what was your response to that?

A. The area of land could be bigger.

30 Q. Okay, so the area of land could be significant, because there is no control in the area of land under your –

A. - as an entry condition, no.

Q. No, okay. All right, got it.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. And then when it – so let's stay at 2024 on reconsenting, the full data record is reviewed and it might well be that the new expanded irrigation operation is now occurring efficiently but that entire area could be then reconsented under the RDA?

A. It could be, yes.

Q. In fact that's the outcome of the RDA as currently framed?

10 A. Well there is, there is no discretion, there is no matter of discretion around the area of land, that's correct. And likewise in the controlled activity, that's an entry condition not a matter of discretion.

Q. Right, so is there, let's stay with the RDA.

A. Okay.

15 Q. Entry condition to the RDA, no restriction on irrigable area in this situation?

A. Correct, as long as that increase was already in play at 2020.

20 Q. Yes. So if we - the applicants step through the criteria, taking into account our discussion on that, essentially the reconsenting in 2024 would be for the expanded irrigable area and the historic water use record would be right up 'til 2024?

A. Yes. And that would form the envelope of discretion.

25 Q. Right. Let's look at an example where you're shifting, say, not from border dyking to spray but from let's say you're shifting from spray irrigation to dripper, so it's slightly more efficient but not much.

A. I'm not sure of the difference in technical efficiency between those two. That would be –

Q. Well, there's a range –

A. They're both quite efficient systems.

30 Q. Yes.

A. They're close.

Q. Well for the purposes of the example, let's say one, the one that's shifted to is slightly more efficient but not much. Water, additional water could

be taken between 2020 and 2024 provided it was within the terms of the consent?

A. Yes.

5 Q. And then on reconsenting, the maximum amount of volumes, rates, et cetera, are used between 20 and 24 would pick up on the maxima over that period?

A. Yes, that maxima would form the envelope of discretion, yes.

10 Q. Yes. So the increase in irrigation area even though the efficiency of the system is improving, on reconsenting it's not held to the volumes and rates used in 2020?

A. It's not held to that, no. But the council has discretion over rates and volumes within that envelope.

Q. But there's no policy guidance in relation to those that discretion should be exercised?

15 A. Not in PC7, no. No.

Q. Now you mentioned you'd done some thinking in addition, so before I sit down I wonder whether you might just explain where your thinking was at, in case I have another question about that.

20 A. I'm a bit nervous to do that now. I was considering the scenario that I understood Commissioner Edmonds to raise, where the envelope of water available is much higher than is actually needed for the new infrastructure and was there sufficient discretion in the rule to allow the council to consider that and size the take to the need, if you will. I understood that to be my homework.

25 Q. Mhm.

30 A. So, I considered that and there is, there is not an explicit matter of discretion in either the controlled activity or the RDA, because that scenario could occur in a controlled activity circumstance as well as it could in an RDA, and if that, if we wanted to have discretion over that, so to think okay, this new, this irrigation of structure that an individual has now requires less water than the one they had in 2019, is there a matter of discretion that would allow the council to size the take to the new infrastructure? There isn't an explicit one and if the, if we wanted the council the explicit ability to do that there would need to be a matter of

discretion and control added around the efficiency of the existing infrastructure sizing it to that.

Q. And would there also need to be an adjustment made to the policy framework?

5 A. Yes, there would because there isn't any discussion of efficiency, and I noted that there did used to be a matter of control around efficiency when the plan was notified, and that's since been taken out to make the rule more streamlined and simpler to navigate, so that would be the regulatory cost of adding in an efficiency consideration is that it would make the rule more complicated and time-consuming to navigate.

10

Q. Yes and in fact that, that was tested during the early weeks of the hearing, in fact during week 1, and it did create some other challenges in terms of the simplicity of the framework.

A. It does yes, yes.

15 Q. So, okay. Thank you. I have no further questions.

THE COURT: JUDGE BORTHWICK

Q. Just before we move off to re-examination, you are not suggesting or are you suggesting that the efficiency, if you wanted to tie current irrigation use to an efficient, a new and efficient system, but the period of record includes inefficient, an inefficient system, this question of efficiency is not tied to driving improvements and systems; it's tied to having what is in fact the, you know, the water, the quantum of water which is needed for the current system, isn't it?

20

A. Yes.

25 Q. And so in that sense it may be easier than the former proposition.

A. Yeah.

Q. Which was tested in the first few weeks?

A. Yeah, could be. It wouldn't - because it wouldn't be driving people to upgrade their infrastructure.

30

Q. No, no. No.

A. But it would still require an assessment of the crop in the ground, the efficiency of the susteym, which is all possibly but slightly more complicated than the controlled activity rule as it stands at the moment.

Q. And that's only needed where there is a shift in, a change in the efficiency of the irrigation system?

A. Mmm, mmm, yes, if the irrigation system has been upgraded at any time in the past the record will potentially, by the use of maximums, outsize the water available to the requirements, yeah.

5

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. You wanted to ask a follow up question?

A. Yes.

Q. I just want to nail this, I'm not quite sure where we –

10 1345

CROSS-EXAMINATION CONTINUES: MR MAW

Q. And that might depend though if the previous water availability under the inefficient system was used as a platform to expand the irrigable area which stays the same volumes and rates might be being used over a larger footprint, but with a more efficient system?

15

A. That wasn't what I was addressing, yes, I was addressing a historic change that had already occurred could lead to a water record analysis leading to the envelope being bigger than what the infrastructure actually needs.

20

Q. Yes, but it will depend on a case by case as to whether the head room created by the shift to a more efficient system is used to expand the irrigable area or not?

A. Yes, well, in that scenario it would not be a controlled activity anymore.

Q. Well, if the expansion that occurred pre-2020 would be?

25

A. Yes, it would, yes, if it had already occurred, yes. Yes. Every single scenario is going to be individual because some people don't have more land to irrigate.

Q. Sure.

A. Yes. Sometimes it's just a sizing the irrigation to the new crop that they have or a change, it's not always an expansion.

30

Q. I think I will leave it there. Thank you.

CROSS-EXAMINATION: MS BAKER-GALLOWAY

Q. I actually just wanted to round off some questions in terms of the national environment standards.

A. Yes.

5 Q. Because I think it is important that we do understand completely the effectiveness of those provisions in Otago.

A. Yes.

Q. So really it was just clauses 24 and 30 have a same set of words in them, so if just look at clause 24 -

10 A. Mhm.

Q. – which is in respect of sub-part 2, the different types of agriculture intensification that are regulated by the NES and 24/1 says that “If you were in the discretionary category consent may only be granted or may be granted only if the consent authority is satisfied that granting the consent will not result in an increase in the two sets of, the two references to contaminants. So looking at the words “That a discretionary consent may be granted only if x or y”. If an applicant or, actually I’m just going to ask it openly, do you look at that as an entry condition to being a discretionary consent or is that actually a default prohibited rule? I mean, 15 you know, how would you apply that particular clause if you came across it in practise?

20

A. I think it is – I wouldn’t treat it as an entry condition.

Q. You would not?

25

A. No, but you would be foolish to apply for the consent if you couldn’t meet those requirements, but you could apply, but the council can only grant that consent if it is satisfied that those two conditions will be met. So it’s a regulation that restricts the council’s discretion to only grant in certain circumstances.

Q. So in that sense would you treat it as a default prohibition?

30

A. Mhm.

Q. Or is it if you fall out of that category you just fall into a anonymit category?

A. Mmm, good question, there’s a few of those in this NES that it’s not entirely clear where they go.

Q. Because what – I mean it’s helpful for us to understand where exactly how effective the NES is controlling intensification?

5 A. Yeah, mmm. I had assumed that the application has been made, the councillors considering it, and if they’re not satisfied those criteria meant they would decline the consent. So in that way it almost operates as a de facto prohibition without saying those - without using that activity classification.

Q. Yes, okay and the same set of words is used in the context of sub-part 3 in respect of intensive winter grazing as well?

10 A. Yes, it is.

Q. Yes, okay. All right, thank you. Right, so now I’ve just got some questions in respect of your evidence and Mr Farrell’s supplementary drafting. So first if I just start with your supplementary. At your paragraph 5 under the subheading “Process or Environmental” your observation is that there’s a general congruence of opinion amongst different planners that PC7 ought to be focused on matters of process and that you consider that to be pragmatic. So I just want to test how much you have that opinion to the exclusion of there being an environmental element to the objective of Plan Change 7. Back in your evidence-in-chief at your paragraph 12, that’s where you talk about “Whilst it doesn’t give full effect to the MPS 2020, it should do so to the extent practicable -

15

20

A. Yes.

Q. And you use the good catchphrase of “It should hold the line on aspects of the MPS 2020, it will be implemented in the future” and then in your 19 in your evidence-in-chief, again you acknowledge Te Mana o te Wai and its relevance and that it should be “top of mind” that’s your phrase?

25

A. Mmm.

Q. And again at 24, again the term “hold the line” and also in the third last line “That it should provide for the right direction of travel for resource management decisions and not frustrate the MPSFM as soon as practicable”?

30

A. Yes.

Q. So taking into account those aspects, isn't it correct that there are important aspects of Plan Change 7 that are not purely about process and they do have an environmental objective?

A. Do you mean in Plan Change 7 as it was notified?

5 Q. No –

A. No.

Q. - as it should be or as we're working towards it being expressed in final form.

A. Mmm.

10 Q. So, for example, particularly when you're talking about "holding the line" and "correcting the direction of travel" –

A. Yes.

Q. – that – both of those phrases are in terms of further environment degradation, so it's holding the line –

15 A. Mmm.

Q. – stopping further degradation associated with water take?

A. Yes.

Q. And correcting the direction of travel in terms of environmental effects associated with water take?

20 A. Yes.

Q. So if we look at Mr Farrell's supplementary evidence and his re-drafting of the objective, have you got – managed to get that?

A. I did and now I can't find it. Is it in one of the evidence?

Q. It is in one of the bundles, thank you.

25 A. Bundles.

Q. Yes.

A. Anne Farrell's Supplements. Thank you.

Q. So if you turn to his appendix and then find Objective 10(a).1.1.

A. Yes.

30 Q. So Mr Farrell's additions in blue refer to or add "The environmental element of protecting the health and wellbeing of waterbodies from further adverse effects from water abstraction activities." What's your view on the appropriateness of that as an expression of the environmental element of the Plan Change 7's objective?

- A. I think some of the idea in here is good to reflect a hold the line approach. Perhaps some of the language I would frame differently, but as a matter of principle, I think that's a sensible thing to reflect.

1355

5 RE-EXAMINATION: MS PHILLIPS

- Q. Thank you, just a few questions for you. So over the past couple of days, we've talked a lot about Dr Chrystal's evidence, particularly paragraph 18, and today, yourself and Mr Maw had a discussion on paragraph 18 of Dr Chrystal's evidence, which is essentially practices which could increase nutrient losses or contaminant losses to the environment within farming systems.

A. Yes.

- Q. And those were A) irrigation, B) effluent, basically, the storage, managements, and application, C) cropping, D) high stocking rates, E) fertiliser use. So there was the comment made, or sort of the acceptance yesterday, that irrigation can actually facilitate B through E or go hand in hand, for example, fertiliser use that goes with irrigation.

A. Yes.

- Q. So Dr Chrystal addressed ways to manage risk to the environment for irrigation in her evidence-in-chief and in her evidence yesterday, and we won't go through various practices today, because, obviously you're not a farming systems expert. So if we go on to the second one, B, which is effluent, I was wondering, from your understanding, where does one normally find effluent systems in a farm system?

- A. Normally associated with a dairy farm, collecting the effluent from the milking shed platform, or of a system that has a feed pad or wintering barn arrangement where the animals are confined and the effluent is collected.

- Q. So can I just direct you to some provisions of the national environmental standards for freshwater, provisions 9 to 14, can you tell me what those provisions are intended to regulate? Sorry to do this to you.

A. 9 to 14, got them. So those regulations cover feed lots in stock holding areas, so areas where cattle are held more than temporarily, so for a period of time.

5 Q. Could that include loading pads, feed pads, standoff pads? You might need to go the definition section.

A. Yes, I think I probably will.

Q. Otherwise, it might be one of those funny ones where they've got the actual definition within the actual provision?

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

10 Q. I thought the evidence of your economist yesterday said that the contribution of dairy support to the total earnings made by the primary sector was some 36 million, that is, 36 out of a billion so the contribution of dairy support is very small. I don't think you're going to have any difficulty with the Court accepting that there are some NES standards
15 which might apply to dairy support.

A. Sorry, your Honour, no, that's not where I'm going with this. We do have systems within the dry stock sector which do use feed pads, for example, standoff pads to save their soils.

Q. You mean you've got sheep and beef, not dairy support that are utilised?

20 A. Correct. It's dry stock.

Q. Did anyone actually ask a question about this, and is this your right witness to be drawing that evidence out?

A. Yes, your Honour, because we are dealing with the questions that Mr Maw asked earlier about the risks.

25 Q. Now, hold on a second, I don't think Mr Maw has examined or tested this witness on her knowledge on use of feed pads and others.

A. Sorry, this is of the NES, and of the various –

Q. No, no, no, no, no, no, no, no.

A. – regulation that is –

30 Q. You are trying to establish a factual basis, that is that sheep and beef farmers use feed pads for sheep and beef, in addition to dairy support. Is this the correct witness to establish that fact? Because otherwise it's a frolic and we can't go anywhere with it.

A. May I rephrase the question?

THE COURT: JUDGE BORTHWICK

Q. I'll ask the question. Ms Marr, do you have any knowledge of the farm management practices in relation to sheep and beef, and I suppose
5 sheep including lambs, and beef in Otago, and the use of farm lots? Do you have any detailed knowledge about that?

A. I don't.

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. So, no, you may not ask the question.

10 A. Forgive me, your Honour, I was trying to establish whether or not there was already restrictions in the NES to manage effluent.

Q. Well, I know there is.

A. Yes, yes, your Honour. The question came up on whether or not the risk factors, the risky practices, were an issue in terms of the restricted
15 discretionary activity, or in terms of increasing of your irrigation areas, so I would like to run through to –

Q. No, you may not.

A. Okay.

Q. You need an evidential foundation that sheep and beef farmers do indeed
20 use feedlots and standoff pads as a standard part of their farm management systems, and you haven't put that in evidence.

A. Thank you.

RE-EXAMINATION CONTINUES: MS PHILLIPS

Q. So I'd like to understand, you were asked earlier what is cropping, could
25 that include pasture, and your response was you believe it could include pasture.

A. I don't remember that statement.

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

I think you're on dangerous ground here. You can't tell the witness what her
30 response – you can ask the question again if there's any doubt as to what her

answer is, but don't give her answer for her, and I don't particularly recall the answer anyway.

RE-EXAMINATION CONTINUES: MS PHILLIPS

My question was, with regards to cropping, I'd like to understand what cropping
5 is to you, especially when you go back to the NES definition of annual forage crop.

MR MAW:

Your Honour, I was exploring with the witness one of the notes to the
10 reasonable demonstration of expansion of irrigable area when I asked the question about pasture. It wasn't in the context of cropping, in terms of that part of the...

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. What's the provision that you want to – don't give me the question, just
15 give me the provision you want to refer this witness to. It's a definition?

A. It's a definition of annual forage cropping.

Q. So is your question whether pasture is an annual forage crop, or is it something different? Because, I mean, it would be a funny question, given the definition.

20 A. My question was whether pasture was actually a crop. An annual forage crop is generally –

Q. No, no, don't give the evidence.

A. Yes.

Q. You shouldn't be doing that. So your question is: "Is pasture a crop?" and
25 the second question is: "Is pasture an annual forage crop?" seems you've mentioned that, correct?

A. Correct.

THE COURT: JUDGE BORTHWICK

Q. Right, so first question, is pasture a crop?

30 A. Yes.

Q. And is pasture an annual forage crop?

A. No.

MS PHILLIPS:

One of the issues that came up, as I've mentioned, was that irrigation and fertiliser use tend to go hand in hand.

5 THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. I don't know that that's true. Why is that necessarily true?

A. One can't just water one's plants, one also has to feed them if one wants the right amount of growth, generally speaking.

10 Q. Again, you've got a vast farming sector. Did you have a part of the industry in mind for making that statement?

A. No, your Honour, that's just general gardening practices.

Q. Well, then you're giving evidence.

A. Okay.

THE COURT: JUDGE BORTHWICK

15 Q. So your question is do you accept as a universal principal that nutrients are applied when a farmer wishes to irrigate? That in order to irrigate, there must also be a prior application of nutrients, as a universal practice across all farming types?

20 A. No, and I wouldn't have the expertise to answer that particular question, sorry.

RE-EXAMINATION CONTINUES: MS PHILLIPS

25 Q. The other item which might increase risk of contaminant loss to the environment, and does sometimes go with irrigation use, as Dr Chrystal said, was high stocking rates. If you increase your feed, you can increase your stocking rates. So where you were speaking with Mr Maw earlier, you were exploring provisions 9 through 14, 22, 26 to 29, and 34 and 35 of the National Environmental Standards. Outside of that, would you like me to list which ones those pertain to?

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

Q. I don't know where you're going with your question.

RE-EXAMINATION CONTINUES: MS PHILLIPS

5 Q. I would like to know whether there were any restrictions, outside of these restrictions, whether she would be aware of how else there might be a way to increase stocking rates.

A. So beyond changing land use?

Q. Changing land use, more dairy support, more fertiliser.

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

10 Q. Beef fattening? I don't know. Again, the witness may not have expertise in farming systems, and so the witness may not be qualified to answer beyond dairy support, what other farming systems might also see an increase in stocking rate? I would have thought that would be something, and of course, here, your economist has given evidence about something
15 to do with the soil and topography and the capability, the natural capability of the land to support a stocking rate.

A. Yeah.

Q. Yeah, so beyond the general statements that we already have, and I had do difficulty with them, from the economists, and particularly how he was
20 addressing them, does this witness have any expert knowledge on stocking rates?

RE-EXAMINATION CONTINUES: MS PHILLIPS

Q. Ms Marr, do you have any expertise or knowledge on sheep and beef farming?

25 A. It's not within my professional area of expertise. I've got a working knowledge, having worked in the space for a while.

Q. Thank you.

A. But I'm not an expert in farm systems.

Q. Thank you. One more question, which will hopefully be less annoying,
30 you don't know how many farmers might or might not be affected by the plan with regards to those farmers who might have already started the

process but not completed it which you've been speaking about today, so there may be many or there may be none. What do you see as the potential risks in having the amendments you sought if there are none?

- 5 A. I addressed that in my supplementary evidence, that if there are no farmers in the situation where they need to access the gateway, then it will never be used and does not create an additional risk or cost if it will never be used. That was my supplementary evidence.

THE COURT: JUDGE BORTHWICK TO MS PHILLIPS

- 10 Q. That is an amazing question, given the evidence before the Court as to the investment and planning for investment, either before this notification of this plan and post the notification of the plan, including the Manuherikia Irrigation Company. Is sheep and beef farmers shareholders to that company? Just a question for you, you might know off the top of your head.

- 15 A. I believe so, your Honour.

Q. Right, okay. They'd all be in that category of planning for irrigation improvement and expansion, wouldn't they?

A. I imagine they might be.

Q. So why did you ask the question if you knew that to be the case?

- 20 A. Your Honour, there's been a lot of discussion today, and actually yesterday, about the prospect of farmers potentially halting their plans for expansion as a result of this plan change because the risk is quite high.

- Q. Yes. Why did you ask the question? Given what you know about the people who you represent and their shareholding in the Manuherikia Irrigation Company and their interests of that company in these proceedings, why did you ask the question, when it's unlikely to be zero?

1410

- A. Yes, your Honour. I asked the question because we do not have these farmers appearing to confirm that they are indeed invested. Obviously you are aware of this?

Q. I'm not.

A. Of the Manuherikia Farmers.

Q. I am not.

A. Oh, you are not.

Q. Because we are going to be having representatives from that entity before the Court.

A. Yes.

5 Q. And many, many other farmers as well.

A. Yes. So, your Honour, I was hoping that it might open an avenue to think about if the, if Farmers are given a pathway but choose not to take it, there is no risk involved for the environment or for the council in putting in the provision. Conversely, there is a risk for the farmers or at least
10 difficulty for the farmers if there is none, if there is no pathway put in for them.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK TO MS MARR

Q. Right. Questions from the Court. So I actually do have an interest in how those, how this RDA rule applies to companies such as the Manuherikia,
15 irrigation company Cardrona and Arrow, and I was looking at, as well as any other, well, there's a whole myriad of permits which are out there about which the Court has no, it's not visible to the Court yes, so you have got your RDA rule and you have provision A(a), so the activity meets the entry conditions which are listed, and it is demonstrated that the increase
20 in irrigation was planned in reasonable steps to implement that increase. I think there might be something wrong with the wording here, the demonstrated that the increase in irrigation, do you mean the increase in irrigation area?

A. I do mean the increase in irrigation area, yes.

25 Q. Yep, thought so. The increase in irrigation area was planned and reasonable steps to implement that increase were taken prior to 30 June 2020. Would that describe the steps taken by Manuherikia in preparing to replace their consents before the deemed permits expire in October this year?

30 A. I wouldn't imagine that it would include preparing consent applications.

Q. But it, no, yes, the amount of work which we are told is substantial, we've no reason to not accept that, substantial work, has gone into preparing an application with technically more efficient irrigation infrastructure.

A. Mmm.

Q. As I understand the basic proposition, and secondly may or may not involve an increase in irrigation area. Do you have any knowledge about that?

5 A. Not of that particular circumstance, no.

Q. Is this provision intended to apply where a whole of catchment proposal is made, and they are indeed substantial work has been undertaken to put into place improved technically efficient irrigation systems, and those steps are able to be demonstrated prior to, as of occurring prior to June
10 2020.

A. Mmm.

Q. Or did you have some other farmer that you were thinking about?

A. Mmm, I wasn't, when I crafted this in my mind was not big irrigation schemes.

15 Q. Okay.

A. So, I didn't, I didn't draft it with those schemes in mind. I drafted it with, although it could apply to some of the schemes.

Q. Yes.

A. Where those people are working together to increase their efficiency and
20 have made an investment in that so they may have undertaken significant investigations into what kind of infrastructure is needed and how the water is going to be used in technical... so in that circumstance where they have done a substantial amount of work, I think it is reasonable the council would see that that is a demonstration that they had planned on doing
25 that.

Q. Yes.

A. Yes.

Q. And so for this RDA rule to work they don't have to have implemented it
30 by the time their permit comes up for replacement, they simply have to demonstrate that the work was done to move now to a more technically efficient irrigation system?

A. Mmm.

Q. And that that also involves an increase in irrigation area, correct?

- 5 A. Correct. Because of the timing of these things I don't think – if people did have that plan prior to the plan being notified they would have put it on hold until they are sure of the outcome of this, so for example, you might have got to a certain point, saw the plan, said no more irrigation, and gone, okay, I'll, I won't proceed down that path until I've got more certainty about whether it will be approved.
- Q. Mmm. And I'm not sure about your answer to that, because many farmers say, well, many partners and also submitters say, well just effect this plan.
- A. Mmm.
- 10 Q. And in that scenario a rational response would be to continue planning for a replacement consent, but under the operative plan would it not be?
- A. Well that wouldn't be my advice to farmers.
- Q. Right, anyway.
- A. But I can see why the uncertainty about the planning framework might cause people to push pause.
- 15 Q. So for some people might push pause.
- A. Mmm.
- Q. For other people they may just because of the enormity and magnitude of the undertaking, particularly where you are looking at large scale replacement consents in those scheme areas.
- 20 A. Mmm.
- Q. Which are described as Arrow, Cardrona and Manuherikia, they may continue to work because of the degree of investment to date.
- A. They may well have, yes.
- 25 Q. May well have.
- A. Yes. Yeah.
- Q. So again, because none of this is visible to the Court, the Court doesn't understand how those catchments are made up and what applications might come forward, what permits exist even out there and how they are structured, I think you've answered yes, if you've got, if I'm a farmer, if I'm just a single farmer with a shareholding interest in an irrigation company, and that irrigation company together with many other shareholders have been, can demonstrate a significant investment in time and resources to improve to replace existing infrastructure with a technically more efficient
- 30

irrigation system, and secondly that will result in an increase in irrigation area, that, that could be caught by your entry RDA condition

A. Yes.

5 Q. Yes. It doesn't require me to have implemented it, so this is work to come, it would come on in the replacement consent, is that right?

A. Yes.

Q. Yes. And under that scenario, with no control over effects, this is just simply a, this would be a restricted discretionary activity with absolutely no consideration of effects.

10 A. No consideration of effects of the land use that follows.

Q. Or even the water, no consideration of effects on the land use and no consideration of associated effects on water quality because the two go hand in hand, correct?

A. Mhm.

15 Q. And no consideration of water quantity other than the, what the entry conditions as you have proposed them, allow?

A. Mmm.

Q. Mmm.

A. Yes, so –

20 Q. - wow, is that what you intended?

A. Well, this plan change deals with water takes, take and use.

Q. Mmm.

A. And none of the conditions deal with the subsequent land use effects of that take and use. This plan doesn't have that framework.

25 Q. No.

A. So that framework is in place in Canterbury for example with irrigation schemes, the take and use of water consents control the land use on the big irrigation schemes. This plan doesn't operate in that way, it has the effects of land use are dealt with as land use and discharge consents rather than water take and use consents, so, so none of the conditions in
30 the controlled activity rule or in the restricted discretionary activity rule put controls on the land use that results.

Q. No, but under what you propose here, could quite substantial entities have a water permit granted - propose a water permit as an RDA, as a standalone activity.

A. As a water permit? Yes.

5 Q. Is that the outcome that you were thinking of, or were you thinking of a different scale of farming?

1420

A. To be fair I was thinking of a different scale of farming –

Q. Yes.

10 A. I was thinking about individuals rather than schemes.

Q. Like (inaudible 14:20:23)?

A. Yes.

Q. Well no it's not because they could be quite substantial indeed?

A. They can also.

15 Q. And they could be shareholders in these irrigation schemes. Yes. So what sort of – were you thinking of a scale of farming where there is – where the farmer also is a shareholder in irrigation scheme or is not a shareholder in the irrigation scheme, in other words the applicant has their own gallery or their own bore, their own point of take off a river and that's
20 the, yes, but – what were you thinking of in terms of scale? I was going to say well that could be quite large too?

A. Potentially.

Q. Yes.

25 A. Although I do note that the number of sheep and beef schemes on sheep and beef farms on irrigation schemes is quite small according to Mr Burt's –

Q. How do you know that? How many sheep and beef we've – the applicant has just confirmed that there are sheep and beef shareholders on the Mankuherikia Scheme?

30 A. Mmm, that –

Q. But how do you know that they're relatively small?

A. Oh that came from Mr Burt's evidence of how many sheep and beef farmers are paying, paying for irrigation to a scheme which he said was quite small, so the rest of them, the rest of the irrigated sheep and beef

farms that have irrigation as part of their system, are not paying fees to an irrigation company, so they are presumably individual takes rather than scheme takes. Sorry, I've actually, in saying that, forgotten the question. What did I have in mind?

5 Q. Mmm?

A. Was those individual farmers that have already taken a step towards improving their irrigation system, made an investment in it, that that would be to the benefit of – there would be an efficiency benefit in terms of the amount of water taken to (inaudible 14:22:46) - finishing that task, putting
10 in the more efficient irrigation system rather than the plan as notified which was a very firm no to consideration of those types of circumstances.

Q. But in, I understand that's what you had in mind –

A. Mmm.

Q. – but as drafted, the provision isn't limited to sheep and beef and the
15 minor proportion of land which might on average be given over to irrigation, it's drafted to encapture – potentially capturing anybody with an interest in irrigation – who, any existing permit holder?

A. Yes.

Q. Yes.

20 A. Yes it could do that.

Q. And it's broad enough to capture any shareholder in the irrigation company?

A. Who was expanding, yes.

Q. Yes who was expending money with a view to improving technical
25 efficiency and increasing land under irrigation. Okay.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. I just wanted to ask you what it was that you intended by two when you talk about the existing irrigation infrastructures being replaced with more technically efficient irrigation and infrastructure and people have talked
30 about drippers and the means of delivery when you actually get the water to the point of delivery to the particular crop, for example, I think a cropping example, vineyards and cherries got mentioned –

A. Vin- trees, yes. They do.

Q. – so my question to you is the – were you thinking of this in terms of a property scale thing where it was the whole shooting match was contained on the property or were you thinking more broadly than that question 1?

5 A. In terms of the irrigation infrastructure being the –

Q. Yes existing irrigation infrastructure –

A. Being -

Q. - I'm going to ask you about situations that I'm fully aware of which mean that the water's conveyed –

10 A. Yes.

Q. – onto the property –

A. Yes it's a different thing.

Q. – and ultimately often in leaky races and that kind of thing?

THE COURT: JUDGE BORTHWICK

15 Q. And what is (inaudible 14:24:57) –

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

20 Q. But I want to just understand what you meant were the existing irrigation infrastructure, was that everything on the property that related to irrigation, not just the drippers, but the delivery of the water? The take and the delivery of water?

A. Sure. What I had in mind there, technical efficiency of the irrigation infrastructure was the part that is doing the irrigating, not the conveyance system, to get it –

25 Q. Not the take and the conveyance?

A. No.

Q. No.

30 A. The reason I put that in there is so that the expanded irrigation area can't just be more borderdyke, it has to be a genuine efficiency gain, so it can – it's using the same amount of water in a more efficient way, than the existing system does, technically efficient way.

Q. So you're not factoring in what may be happening with the take and the conveyance in terms of efficiency? If you've got a lot of evaporation leakage and basically inefficient use of the resource?

A. Yes it would be, I agree. And I hadn't –

5 Q. Whether, I suppose that's whether that's on the property of the individual concerned or whether it's from outside of the property –

A. Yes.

Q. – could be being conveyed over several properties?

A. It could be, yes and I understand there are a lot – a number of water races and canals that are delivering water –

10

Q. (Inaudible 14:26:40) -

A. - in a quite complicated system. Yes. No I was talking about the irrigation infrastructure itself for irrigating, not delivering water to irrigate.

THE COURT: COMMISSIONER EDMONDS TO THE COURT: JUDGE BORTHWICK

15

Q. Sorry, I was just following on from your questions.

A. Yes I know, no, yes, no that's –

Q. Just to try and get a little bit of clarification on that.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

20

Q. So in fact proportionately, who knows? There may be major inefficiencies as a result of having this irrigation in the first place, even if it's being efficiently delivered on the property?

25

A. Yes there might be inefficiencies in the conveyancing system that could absolutely be true, yes.

Q. Yes, yes. So we're only looking at part of the picture really, potentially here?

A. Yes it would be, yes.

THE COURT: JUDGE BORTHWICK

Q. And is this only and in fact limited to where the irrigation systems improvement is a change from borderdyking and wild flooding or is it more than that? That's actually all I can think of, so there goes my imagination.

5 A. Yes. Yes.

Q. (Inaudible 14:28:05). Because it can't be like K-line, it's not changing from K-line to some other – to a lateral because K-line is an irrigation system delivering water, inefficiently, but delivering water.

A. Mmm.

10 Q. Or is that what you had in mind?

A. So any up – so the irrigation systems range in efficiency from flood irrigation, borderdyke all the way through up to very efficient dripper or spray irrigations. So the biggest change is going to be between wild flood and very efficient dripper. There will also - there could also be efficiency gains moving from K-line to spray or dripper irrigation but there's probably not much more that, within that system.

15

Q. Okay.

A. Yes, so I think the evidence was 30% of the irrigation is borderdyke or wild flood, so there is a lot of efficiencies we can gain that could be gained within that, by upgrading that infrastructure.

20

Q. So you are thinking then, you know, if I shift from the K-line through to a lateral that I could be – that's what I've been planning on that that would be qualifying change in the irrigation system?

A. If it's with the same amount of water, assuming you're not using any more water than you were before.

25

Q. And you don't know how much more land – you really don't have any knowledge in terms of how many people stand to take advantage of that if it came through in some shape or form?

A. No.

30

Q. No?

A. Absolutely don't have any knowledge of the scale.

Q. Mmm. Okay.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

1430

5 Q. So I just wanted to explore a little bit but more I guess drawing on your extensive experience. I wonder perhaps if we could just look at the Controlled Activity, the first matter that controls Reserved 2.

A. Yes.

10 Q. And I just wanted to understand what you thought this might allow the council to actually do in terms of decision it might make in terms of any conditions what the basis of that might be?

A. So we're looking at Controlled Activity –

Q. A.

A. Matter of Control A?

Q. A, yes.

15 A. So the council reserves control over the volume and rate of water taken dam discharged or diverted within the limits of historical use and existing permit conditions, yes.

Q. Yes.

A. So it makes more sense to me when I turn it round the other way.

20 Q. Sure, no, well, I understand that. I know Mr Moore did ask you some questions about that in relation to what you might be able to consider in terms of the MPSFM, but if we could just step back from that because I will take you back to that.

A. Sure.

25 Q. But could you just – you might even have a scenario where you could probably experience that might, you think might fall them that or not fall within that?

30 A. Okay, I will try to be helpful there. So there are entry conditions which mean that you can't apply for more water than the maximum rates and volumes that are calculated through the schedule -

Q. Sure.

A. – which uses historic data to calculate what's been used and the way that we – that I've categorised in my thinking that we did in the conferencing was that that historic use calculated through that schedule forms the

envelope of the maximum amount of water that can be applied for and then the council's got control, so they can impose conditions on the consent relating to the volume and rate of take within that envelope, so they can't go more than that. Could they go less than that? Potentially, that matter of control doesn't limit them to a minimum amount that would be granted, but because a person's applied for a consent for that certain amount of water and the council has to grant the consents, they would have to exercise that control in a very narrow way otherwise they would be frustrating the application which they wouldn't be allowed to do.

5

10 Q. So that narrow way, what would that allow consideration of effects and what kind of effects? The effects on abstractors, in-stream value, the other values?

15

A. I know that the intention has been that the council wouldn't consider that wider range of effects, for example, in-stream effects of the abstraction because that would require assessments that take more time in are more complicated in the goal of the controlled activity rule was to be a streamlined pathway to replace consents that were expiring?

Q. Other abstractors?

20

A. That would potentially come in under B. As I understand it there's sometimes conditions are already on the consents about who can exercise a consent based on the effect that it has on somebody else's consent. That's already a condition on the deemed permit, for example, and that could be rolled over under B.

THE COURT: JUDGE BORTHWICK

25 So do you want to get into deemed permits now?

THE COURT: COMMISSIONER EDMONDS

No. I'm just trying to understand the utility of that A and what it actually does in the end and what the council could do with it.

THE COURT: JUDGE BORTHWICK

30 Q. I guess the proposition is it's only utility to the extent that it has any utility is if you don't put any bounds in time around the record that you can look

at for data. So if there's no – so if all data is good data then you'd need that, you'd need that condition to examine if there's been a change in efficiency in your irrigation system, has there been a decrease I guess, in the volume rate of take, such that, an old maxima pertaining to an old system just ceases to be relevant and if you like the farmers will cringe, but there's a lowering in terms of – a further lowering in terms of the capped for a deemed permit especially but also –

5 A. Yes.

Q. - any other replacement consent, is that its utility?

10 **THE COURT: COMMISSIONER EDMONDS**

Or might that be subject to argument?

THE COURT: JUDGE BORTHWICK

Q. Might that be subject to argument, yes.

A. I think possibly it would be because if you've applied for 100 litres a second to what extent can the matter of control change that essentially, change the nature of the application and only provide for 50 litres a second is that getting in the way of the requirement to actually grant the application does that make it a different application if the rate of take is much more than what was applied for and I think that's probably quite a technical legal question actually.

20 Q. It's a planning question, though, how would you normally tackle that? So is there something deficient in either the controlled activity rule or alternatively even the RDA rule, your version or the council's version, it doesn't really matter, is there a deficiency there where people are actually applying for maxima that are unrelated to the current irrigation systems, that has to be actually recognised somewhere and so that the application's tied to the system which is –

25 A. Yes.

Q. - on the ground, yes and then –

30 A. Yes.

Q. – yes, okay. So that means –

THE COURT: COMMISSIONER EDMONDS

A doesn't do that?

THE COURT: JUDGE BORTHWICK

No, A doesn't do talk to that, but no.

5 **QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

Q. No. Does it?

A. It doesn't. If you wanted, I think if you wanted to specifically address that issue –

10 Q. Yes.

A. – you would have to add a matter of controlling there about the efficiency and the need for the water based on that current infrastructure.

Q. Current infrastructure, so that's what's missing?

A. Yes. And that might be a change that arises out of the change from using
15 average maximums to maximums?

THE COURT: JUDGE BORTHWICK

Yes, okay, all right. Okay.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

20 Q. Thank you, that's quite helpful. So just in terms of the similar issues whether a restricted discretionary, but just thinking about try to go up a tree to consider the MPS again.

A. Yes.

Q. Did I understand you to answer Mr Maw, to the effect that you didn't see
25 that as being possible in the way that the restricted discretionary activity matters with structure, is that what I understood you to say?

A. Yes.

Q. We will start with the restricted discretionary?

A. So, if the – so for example, there was an issue with a particular indigenous
30 fish value, for example, being potentially impacted, does that matter of

discretion allow you to consider that when you are deciding on the rates and volumes and to go back to the MPS for that? I think it is deciding on the rates and volumes and to go back to the MPS for that. I think it is potentially easier to consider that in an RDA because the council does have a little bit more – they have the discretion to decline the consent if they need – if it’s considered necessary. So to what extent is there a discretion extend within the limits of historical use? It can’t go beyond that, but can it reduce the rate and volume within the limits of historical use and again if you wanted to make that crystal clear, you would need to add further matters of discretion relating to, again, efficiency of the system. Efficiency of the current system, so you’re not applying for more water than you can actually use and that isn’t explicitly stated in there and if it was an adverse effect that is definitely not explicitly stated within there.

1440

15 Q. Or what type of adverse effect -

A. No. And that –

Q. - you might be considering.

A. Yes.

Q. – whether it’s on instream fish or other extractors or whatever.

20 A. That’s right, and then it goes back to what extent is the plan change and at fixing problems, and to what extent is it aimed at not making more problems within that.

Q. So, the MPSFM has a lot of process things in it, doesn’t it?

A. It does. It does.

25 Q. So even if you were to go back up the tree, how helpful do you think that might be in dealing with some of these issues?

A. In a consent application scenario?

Q. Yes, perhaps in terms of the you could think about the RDA one.

30 A. Yes. In assessing a resource consent, having regard to the MPS, I think is largely about the objectives and policies of the MPS rather than the implementation part, particularly the NOTH and the setting environmental flows; those are directions to the Regional Council to do things and change their plans rather than directions to consent decision-makers. The direction to consent decision-makers is largely the objectives and policies

in the MPS. Most of the other pages are about telling the council what they need to do in their regional plan.

Q. So, how helpful are those other objectives them, the ones that aren't connected into the follow-up actions the council is to take?

5 A. Well, they are very helpful because they set priority, that the in particular the health and wellbeing of the water body needs to be taken care of, and they identify particular matters with directive policy around protecting, for example, wetlands. Some of the policies are proce- are process, for example tangata whenua being actively involved that's more about the
10 process rather than the outcome, but the other policies are pointing towards outcomes that the MPS is trying to achieve and they are relevant considerations in resource consents to the extents that the matters of control and discretion allow that consideration.

Q. Right, so we're coming back to what are these matters of discretion or
15 control saying?

A. Yes.

Q. And so, just thinking about the policy element then in this plan change, so is there anything in there that is going to assist in terms of effects?

A. No.

20 Q. No.

A. Not in PC7, no.

Q. Not in PC7, okay.

A. No. There are some other policies in the rest of the freshwater plan change – ah, freshwater plan, land and water plan, that go to maintaining
25 and taking care of particular values, but in PC7 it's very process oriented.

Q. Okay.

A. Yeah.

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. So let's get into permits. Did you get, did your advocate send you a copy
30 of the minute that I released about deemed permits on the 7th of April?

A. I don't believe so. 7th of April. No, I haven't seen anything from the 7th of April.

Q. Did you send a copy of that, as directed? [Question directed to courtroom, inaudible answer 14:44:30). All right, do we have a copy on file that we can hand over? Thanks. So I just, so again this is another, it's a minute released about deemed permits, it's regrettable that you haven't seen it, it's the Court's looking for other blind spots, if you like.

5

WITNESS REFERRED TO JUDGE'S MINUTE DATED 7TH OF APRIL

RE: DEEMED PERMITS

A. Okay.

Q. Within the PC7 which are not addressed, need to be addressed, and it is in the interest of all farmers that it is addressed. So deemed permits.

10

A. Okay.

DISCUSSION – UNMARKED COPY TO BE READ BY WITNESS OVER AFTERNOON TEA BREAK – QUESTIONS TO FOLLOW

COURT ADJOURNS: 2:45 PM

15

COURT RESUMES: 3.02 PM**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. Firstly, do you have any knowledge through your client or through general practice about deemed permits?

5 A. Very little.

Q. Very little, okay. And so one of the – we've got legal questions and then we've got some planning questions around deemed permits, putting the legal issues aside, you know, there's a question, well subject to the legal issue, or outcome, there's a question of, do we need to be doing something in this space, can we do something in this space, what should we do in this space? And because my broad understanding is come 10 1 October, then deemed permits simply cease to exist, they're a creature of statute?

A. Mmm.

15 Q. And what had been imagined by Government 30 years ago when it enacted the RMA is that there would be a fit for purpose water plan which would replace the deemed permits but there's not and so is there kind of a policy gap in this plan change or is there not, because Council has also had a policy of late of encouraging farmers to enter into more collective 20 arrangements and those collective arrangements particularly through flow sharing agreements but there may be other mechanisms, have already taken or have taken over or, yes, have taken over or had the capacity to take over those deemed permits, so I was trying to get a feel for any of that and do you have a feel for anything to do with that, is there a gap, 25 not a gap?

A. To do with flow sharing arrangements –

Q. Yes.

A. – and whether there's a gap?

30 Q. Well whether there's a policy gap because we've heard evidence and it's not helpful, we've not heard from farmers, that would be helpful, but we've heard evidence, oh it's going to be chaos and it's like, the basis of that we don't know. It may be, it may not be?

A. Mmm. My experience with water user groups and flow sharing arrangements is predicated around those arrangements being farmers working together to achieve a particular outcome, so to keep flows above a minimum level for example and the minimum level is a condition of the – of all of their resource consents and the flow sharing arrangement sits outside of that as a co-operative way of making sure the flow never hits that threshold. I don't have any experience with it where it relates to keeping water available for another user –

Q. Yes.

10 A. – that's much more complicated. It's –

Q. Yes and that's really what we're talking about actually –

A. Yes, yes.

Q. – so the flow sharing arrangements not tied to a minimum flow in a permit, even a existing permit or a place permit, but is tied to the collective interests of a catchment or sub-catchment to ensure that water is available for all users and that restrictions start to come down in a way which is equitable and fair across all users and so that would be what I was thinking of and you've no experience of that?

A. No.

20 Q. No.

A. Not with having implemented something like that, no.

Q. Okay. All right.

A. I can see that you could craft plan versions or resource consent conditions which set out who must cease taking at certain times in order to keep the water available for a dam stream user, that I think would require a consideration of all the consents in the catchment at the same time. It would be a quasi-regional plan and seeing as we don't have one, that might not be very helpful.

Q. And so others have said, "Oh well, you just have to refer to the word 'priorities' and it just kind of all happens and that might be so inasmuch as the priorities which have been in place for over 100 years or so, if they had been exercised and again we have no evidence about whether they are exercised to the extent of their exercise, of the circumstances when they're exercised and that can change I imagine every year?"

A. Mmm.

Q. And every season. We have no evidence about that. But the evidence we had from two parties at least, was just say the word “priorities” and it would all happen?

5 A. Mmm.

Q. In this plan change, if you say the word “priorities” it would all happen. Now that might be, I don’t know whether that is so, we’d all, something might happen if it had some legal benefit to the permit holder or maybe nothing would happen if it had no benefit, no existing right or, I don’t know?

10

A. Mmm.

Q. Have you got any thoughts on that? Say the word and...

A. No.

Q. Well firstly, first opposition is to include priorities as a matter which is a matter of control, does that assume in fact that there is a continuing right in priority which can be recognised after 1 October?

15

A. I think it would.

Q. Yes.

A. Yes, my understanding is that the rights of priority are deemed consent conditions.

20

Q. Yes, yes. On a deemed permit?

A. On a deemed permit and this is a new slate in a way getting a water permit.

Q. Yes.

25

A. Except of the extent that the plan change already says if there are conditions on the permit already, they should be rolled over?

Q. Yes well that’s the technical legal issue, is a deemed condition on a deemed permit –

A. An actual condition –

30

Q. – a creature of statute which ceases to exist after the 1st of October regardless of what anybody else might think, or is that not quite right? It can somehow survive, and so that’s the vexing thing, or vexed legal question, and I thought, well yes there’s that and we’ll get an answer out

of that, but is there some other planning response, that if you like mimics what's going on with priorities and yes?

A. Well that would be defining the flows at which those priorities apply.

Q. Yes. Okay, so the very thing that's not being done?

5 A. Yes needs to be done.

Q. Yes, okay.

A. Yes.

10 Q. Any other mechanisms that can be brought down to encourage collective organisations, sounds like a union now, but collective arrangements other than, well including also the policies which were in the operative plan?

A. I noted in the minute a question about carrying over some matters of discretion.

Q. Yes well they were just my –

A. Yes.

15 Q. – they're the matters of discretion in the operative plan and so that was me brainstorming again and looking for solutions if we have a problem looking for solutions, yes?

20 A. Yes and you could carry those over into the controlled and restricted discretionary rule but in order to utilise those matters of discretion, the consent conditions would have to define flows and times. Again, we're back to the same problem, we don't have that information, so then I think you are left with the non-regulatory approach that seems to be operating at the moment in the region. When people get along, that works quite well, but it doesn't translate to a condition of consent very well, I wouldn't expect.

25 1510

30 Q. No, and those non-regulatory methods, because that is how I describe priorities in particular and flow-sharing agreements too, at least what we've learnt about them, they can be signalled and encouraged through policy in this plan change in the same way or much the same way as the operative plan has, but what it's doing is just signalling?

A. Yes. The only other way I've seen it is a group of irrigators or water-takers applying as a group for a certain amount of water and certain flow regimes or minimum flows, and then exercising that global consent by

agreement amongst them, in which case they manage the achievement of the conditions by managing their takes by agreement, and then the council doesn't need to be involved in what that agreement looks like, and I have seen that work.

5 Q. And I think it's possibly already in the region and in some replaced permits, but again, that comes down through a large permit with minimum flows, (inaudible 15:12:08) and all the rest, and then the flow-sharing itself is as per what irrigators want to do, but sitting outside the oversight of the regional council, but again, it depends on somebody putting up a
10 comprehensive application with minimum flows, and that's not this process, this processing isn't intending to impose.

A. No, this process doesn't impose that, it would have to be by agreements.

Q. Could this process – and I haven't thought this next comment out at all, so don't take anything out of it – if that is what is proposed, if it is, in fact,
15 a gap and there is risk within catchment, sub-catchments, and risk to existing relationships with abstractors, is that something that could be proposed without any other change? So, in other words, a voluntarily minimum show and recession? If it is suggested, that could be, as a way for tidying people over, that could be proposed, and that doesn't have to
20 come with a merits-based assessment for large-scale increase in irrigation area or anything else.

A. Yes, I can't see any barrier to –

Q. Any barriers to a voluntarily proposal.

A. – a voluntarily approach, no.

25 Q. Well, that is one method, and it could be quite an effective method.

A. It could be.

Q. As between relationships. Okay, all right. So do you know – and you may not – anything about schedule 2A? All my questions from about paragraph 12 onwards. Do you know anything about that? Hold on, no,
30 double check, sorry. Yeah, no, my questions from 12, 13 and 14, knowledge about catchments inside and outside schedule 2A. Do you know anything about those catchments and permit consenting?

A. About the consenting? No.

Q. No, okay, so I won't ask you that.

QUESTIONS ARISING: MR MAW

Q. Commissioner Edmonds asked you some questions in relation to the utility of the first matter to which the council reserves its control, so matter of control A.

5 A. Yes.

Q. And I wonder whether, perhaps, the purpose of matter of control A was as simple as providing a platform to the council to impose conditions in relation to those matters, reflecting the entry conditions on the rule, simply so that there was simply a hook for council to put conditions on these things.

10

A. I imagine, originally, that was its intended purpose, yes.

WITNESS EXCUSED**BEEF AND LAMB NZ AND DEER INDUSTRY NZ CASE CONCLUDES**

THE COURT: JUDGE BORTHWICK TO MS FORD

Q. Okay, so who are we moving to next?

A. Good afternoon, your Honour and commits, counsel's name is Ms Ford for Horticulture New Zealand. Just before we get going with my legal submissions, I'd like to introduce the team very briefly. We've got three
5 of our experts with us today, we've got Michelle Sands, who is the manager of natural resources for Horticulture New Zealand, Vance Hodgson, who is our planner, and he attended the expert planning conferencing as well, and Stuart Ford, who's our economist, and you
10 heard from Ian McIndoe as part of the OWRUG presentation back in March, so we had joint evidence with him. We've also got two growers with us today.

A. Two who? Growers.

Q. Growers.

15 A. Oh right, yes.

Q. And we have got Mr Earnscy Weaver who is a director of Leaning Rock Cherries in Cromwell and Simon Webb as well whose Webb's Fruit who you will see on the main highway.

A. Just out of town, yes, okay.

20 Q. With some timing constraints and some circumstances for Mr Weaver, he has a funeral to go to tomorrow, so what and some timing constraints with flights and travel, and stuff, what I propose is to have me present the legal submissions moved to Mr Weaver's evidence in his statement and then Mr Ford for economics, and then move into Ms Sands and Mr Hodgson
25 following up with Mr Webb to round up our case.

Q. Okay, very good . Now you heard me ask a lot of questions from the last witness about my minute and my minute concerning deemed permits, do we have a problem if we do with the nature of the problem, how do we plug that one? It's my expectation and direction was that all of your
30 witness have seen that, have a copy of that minute, have they had it?

A. Apologies, your Honour, it is something that slipped my radar. They haven't now -

Q. Oh, good because -

A. – and we would like to have more of a discussion about it tonight, that our initial view is that it's something that if we were going to address it, it would have to be across all of our experts.

5 Q. Well, I also really interested in the farmers, you see, experts might have something to say, but what –

A. Yes.

10 Q. – we are actually missing in this hearing is good evidence from farmers and on that issue, yes, they don't have to answer all the technical stuff that are put out there, but I just – I want to know something about deemed permits.

A. Both of our growers are –

Q. Yes.

A. – really keen to just have a conversation with you –

Q. Okay, good.

15 A. – so that they can tell you, like answer these questions for you. Mr Earnscy, is part of the Manuherikia Cadet Scheme and so that – he might have some rally good insights threatened, but I would suggest just talk to him.

20 Q. Very good. And thinking about that because it is a conversation that we will probably swear your witnesses just so that they can be no criticism at a later stage that they weren't on their oath, et cetera.

A. Okay.

Q. So it's still no different in terms if the look and feel, it's still a conversation.

A. Yes.

25 Q. Yes, except, you know, obviously, prompting the truth in the conversation.

A. Yes, of course, your Honour.

Q. Okay, all right. Very good, all right. So we are in your hands for your opening.

A. So you should have copies of my opening in front of you?

30 Q. Mhm.

1520

MS FORD MAKES OPENING SUBMISSIONS TO THE COURT:

And I would just like to, as I tabled it today, I would like to run you through it as we go. So Horticulture New Zealand supports the transitional and interim intent

of Plan Change 7, and notes that it is intended to provide an interim regulatory framework for the replacement of other expiring deemed permits and other exporting water permits while the new land and water plan is developed and until that becomes operative. For HortNZ it is vital that the horticultural growers in the region have enough certainty of water supply for their businesses to continue to be viable. We support other primary production and water user groups such as OWRUG and the other primary sector groups here to the extent that the plan change as it was notified, I'd just like to make this clear that with how the plan change has developed through the course of this hearing, there was the general opposition to the plan change initially and how this has developed while - and I've been informed today that OWRUG are taking stock of where they're at now, as an example, but we, we don't oppose the withdrawal of the plan change but it is not something that we're seeking. We are now in the position, as you would have seen with Mr Hodgson's evidence that was provided on Tuesday, we're quite comfortable with where the plan change provisions have landed as a result of the expert conferencing and that's the line that we'll be taking going forward.

So paragraph 4 there just sets out that position how that's developed through the expert conferencing and the hearing and we consider that the changes made to Plan Change 7 in the 8 April version, which I refer to and is appended to Mr Hodgson's evidence resolve the issues raised in our original submission. I'd just like to note that the Court has already heard lengthy submissions traversing all the relevant legal matters and Hort does not wish to repeat what has already been said, and these submissions will focus on an overview of the relevant contextual matters to our submission and our updated position following the various iterations and changes that have been made to Plan Change 7 up to and including the planning conferencing. As an overview of Horticultural New Zealand, HortNZ is an industry good body representing the interests of commercial fruit and vegetable growers. Its mission is to provide a unifying vision for the horticulture sector which increases collaboration between product sector, regional and district groups and enhances the sector's ability to respond to and influence decisions that affect it; and to develop and encourage industry-wide projects which benefit all growers.

HortNZ participates in regulatory and legal proceedings on behalf of growers nation-wide to ensure the best outcome is secured not only for growers but for the continued food security of all New Zealanders. Over the years, HortNZ has refined its submissions in these regulatory proceedings having been guided by what is occurring at the national level. In addition, HortNZ has been assisted by a dedicated expert team who have provided the detailed technical work that underpins the organisation's position.

Our submission on Plan Change 7 and further position, sought an efficient, effective and fair regulatory framework that provides for greater security for the Otago region and for horticulture. We sought a controlled activity status for the renewal of deemed permits and water permits; amendments to the definitions, policies, rules and Schedule 10A.4; and a viable consenting pathway for deemed permits and water permit renewals that do not meet the controlled conditions.

As I have already noted, PC7 has been and continues to be a contentious issue within the Otago Region, and it is the view of HortNZ that a good middle ground between the primary sector parties, environmental groups, and council, seems to have been found through the course of the hearing and the expert conferencing – as shown through the 14 March version in Mr de Pelsemaecker's supplementary evidence, and the 8 April version that came out of the expert planning conferencing.

Horticulture in Otago is quite a unique situation as it has a unique production capability and plays a critical role in the national food production system. The Otago region supports a variety of both fruit and vegetable crops. Vegetables are mainly grown in the Waitaki District and the Central Otago District is the key area for growing summer fruit. It is the combination of the soil and climate which makes Central Otago especially suited for growing high quality crops, and it is well known for its stonefruit, such as cherries, apricots, peaches, nectarines and pip fruits. There is also a wide variety of vegetables grown in the region, which include but is not limited to, yams, carrots, courgettes, leeks, cabbage, pumpkin and potatoes. Due to the variety of fruit and vegetables produced, a range of water requirements are needed in the region. A one size fits all consenting approach is not appropriate. A cascade of consent options needs to be available for growers so that consent applications can be tailored to a

grower's particular activity. For example, vegetable crops can be more versatile in the location they are grown, as the crops are replanted each year and so shorter term consents may be appropriate. In contrast, an orchard requires significant infrastructure, time and planting costs before a return on investment is seen or the first commercial crop can be harvested, and so a longer term consent is required. For these reasons, HortNZ supports a consenting pathway which provides for the variety of circumstances and water requirements which arise in the Otago region.

The next section there, your Honour, is just outlining our experts' and who is presenting as part of Hort's team which I have run through already. So we've got Ian who you have heard from, Michelle, Stuart, Mr Hodgson, Mr Weaver and Mr Webb. As part of Mr Hodgson's evidence, in appendix A he attached the provisions of the plan change as it was written at the expert planning conference. And I would just like to make a note there that the comment boxes that are recorded in that PDF indicate that there is more work to be done to carry through that maxima.

THE COURT: JUDGE BORTHWICK TO MS FORD

Q. Yeah, no, I'm very aware of that. I think you are in the same position as the last party which is that in all other respects that is in fact the JWS which was signed as of 8 April. It is a different document to the one that has come into court insofar as the comment boxes weren't there, but we, yeah, they're not particularly relevant to the court although the court already is aware of their contents and understands what's been signalled as in the comment box.

A. Yes, I just wanted to bring your attention that those are changes that were to be followed through.

Q. Yes, no, I know that.

A. Just to make that clear.

Q. Yes.

SUBMISSION CONTINUES: MS FORD

Fantastic. So we are moving into Plan Change 7 at paragraph 15, your Honour. As you know, it is obviously a Ministerial call-in, and as a call-in the appeals

can only be made on points of law. This makes the outcome of this hearing incredibly important to all parties. The plan change itself was intended to provide an interim planning framework to enable the transition of deemed permits and other expiring water permits to be updated to resource consents

5 prior to the Land and Water Regional Plan being developed and notified. We have talked quite a lot about the National Policy Statement for Freshwater Management 2020 and that came into force in September 2020 which replaced the 2017 National Policy Statement. The Regional Council must give effect to the NPS 2020 as soon as reasonably practical and it has committed to do so

10 by having a new NPSFM 2020 compliant framework in place by 31 December 2023 so that Plan Change 7 can remain process-based and transitional.

This will be achieved, the implementation of the NPS 2020 will be achieved through the New Regional Policy Statement due to be notified in June 2021; and then the new Land and Water Regional Plan to be notified in 31 December

15 2023.

The effect of the NPSFM on HortNZ's position 19 is that the provision of fruit and vegetables plays a crucial role in providing for the health of all New Zealanders, and therefore must be enabled through the planning hierarchy. Inclusion of select environmental outcomes, which are to be set through the

20 National Objectives Framework of the NPSFM 2020, should not be included in PC7 as this selection could lead to a judgement of outcomes that are important, despite Council not having undertaken the consultation or the values setting process. this goes back to our case that this is purely an interim plan change. The NPSFM 2020 must be given effect to in the new Land and Water Regional

25 Plan. The timeframe suggested by Council for that plan to be developed enable values setting consultation to occur, and we note that consistency issues may arise between the yet to be notified RPS and Plan Change 7. However, as suggested in the legal submissions of the Regional Council on the matter, parties should be given the opportunity to submit on the effect of the RPS on

30 this plan change if it is notified prior to the Court making a decision on Plan Change 7, and we would support that process.

HortNZ consider that the interim nature of Plan Change 7 and the development of the new Land and Water Regional Plan in the timeframes it suggests is an appropriate pathway towards giving effect to the NPSFM 2020.

So, as you know, your Honour, at paragraph 22 there have been substantial changes to the provisions of Plan Change 7 through this hearing process, culminating in the 8 April version.

HortNZ considered the changes that were recommended in the 14 March version and decided that supplementary planning evidence was not required at that stage, as the planning conferencing had already been scheduled for 8 and 9 April. However, the Court requested an updated brief of evidence from Mr Hodgson and this was lodged on Tuesday 13 April. In Mr Hodgson's updated evidence, he records his support of the cascade of activity rules as drafted in the 8 April version and while that version also includes changes regarding community water supply and hydro-electricity generation, which he does not comment on, HortNZ's position before the Court today is that the version of PC7, as recorded at the planning conferencing, resolves HortNZ's concerns.

15 THE COURT: JUDGE BORTHWICK TO MS FORD

Q. Now you will have heard us quiz the last planning witness about some of the content of that document and I imagine Mr Maw might also have questions as well. So while you may be happy, there is I suspect some finessing, well the regional council certainly say there is some finessing that needs to be done.

A. Yes.

Q. Yes, and so we will probably take the same approach with your witness.

A. Yes, of course, your Honour. I guess the cascade of the activity rules there is what is important to HortNZ. It is as I have already noted, it is really important for our growers to have a pathway to go through if they do not fit the controlled or the restricted discretionary activity, so that non-complying door does need to be open even if it is a very tight door to get through.

Q. Yes, and you actually might have had the transcript talk about the narrow or wide door, or gate, so actually that non-complying rule is something that is very much in play.

A. Yes.

Q. I don't know. The fact that it is included in this JWS, I don't know, means that every, you know, all the planners signed up to it. In fact, I rather think they had, it was beyond the scope of the conference, they were editing back changes if you like as a consequence of the schedule, so as the
5 schedule meant had to do some edits in some of the policies and rules but I don't think that necessarily follows they all loved the non-complying activity pathway because I don't think that, that would not be the tenor of cross-examination. So, just saying that.

A. No. Yes, yes your Honour.

10 Q. But you might love it, and if you love it you can say it's a narrow door and you're really happy with that narrow door.

A. I wouldn't necessarily say that we were really happy with it.

Q. Yes.

A. I will leave those detail questions to Mr Hodgson.

15 Q. Yes, okay. All right.

A. But as long as that pathway is open, Hort can work within the timeframe because this is purely just that transitional interim planning framework.

Q. Yes. No one's asking any longer that I'm aware, and, you know, we've obviously got quite a few parties to come, but I don't, I'm not aware of
20 anyone still continuing to ask for a prohibited activity status.

A. Which is great.

Q. Good.

A. Okay.

25 **SUBMISSIONS CONTINUE: MS FORD**

I would just like to talk through the pathways that were provided in that 8 April version, and as Mr Hodgson's updated evidence talked through in a bit more detail. So we support the cascade of activity rules of a controlled activity, the RDA and a non-complying activity. The 8 April version retains the stripped
30 back, interim consenting regime that was recommended in the 14 March version, but provides a clear pathway for applicants to demonstrate that the effects of their non-complying activity will be no more than minor, as per the first limb of the 104 gateway test.

Just as a side note there, your Honour, Mr Webb tomorrow will be able to speak to this, as we think that his orchard has, and you will see it in the site visits as well, provides quite a good example of where that non-complying activity might be appropriate.

5 THE COURT: JUDGE BORTHWICK TO MS FORD

Q. Oh that will be great. Yep, okay.

A. So just to flag that with you.

Q. Mmm. Because I think part of the difficulty with a non-complying pathway is that nobody has a, nobody can imagine what you, what that looks like.

10 A. Yes.

Q. Yes, it's trying to conjure up applications out of thin air, so the fact that Mr Webb's got something in mind I think is really helpful.

A. Yes, for Horticulture, is it particularly relevant because of the planning that goes into that expansion, and the Mr Webb, like he will, you will be able to question him and have the conversation with him in a lot more detail, but as I understand it, orchardists need to put a deposit on trees two or three years to them being planted, and so the development that is happening at his orchard at the moment was planned and in place two years ago, prior to the notification of this, and he had trees go in in September last year I think, which is past the cut-off date of March 2020 for that what's in the plan at the moment, but he didn't really have an option because those were paid for two years ago, and so it's that expansion there that we think might fit within that non-complying activity rule and so yeah, something to traverse with Mr Webb and Mr Hodgson as well.

25

Q. Thank you.

SUBMISSIONS CONTINUE: MS FORD

So the controlled activity at paragraph 26, now uses the period 1 September 2017 to 18 March 2020 as the baseline of total land area under irrigation under the controlled activity conditions. This has addressed HortNZ's concerns that the growers who had improved or expanded their irrigation system and/or other infrastructure since 2017 (as per the date in the notified version) would not be

30

faced with the financial cost of re consenting and all that sort of thing, your Honour. The restricted discretionary activity is an extension of the controlled activity and provides a pathway for growers where a calculation in accordance with Schedule 10A.4 might not be possible. The restricted discretionary activity
 5 enables growers to prove historical use of water, and the Council is able to consider that information in terms of its accuracy and validity. In essence, it is only the method of calculation that is varied between the controlled and restricted discretionary activities, the effect of which is that the controlled activity will still likely be encouraged in the preferred consent pathway that growers
 10 apply for. 28.

THE COURT:

Just pause there a second. I just want to reread that. Okay, mhm.

SUBMISSIONS CONTINUE: MS FORD

15 The non-complying activity enables an applicant to advance a case for a longer term consent or irrigation expansion if the effects of the activity are no more than minor, as per the first limb of the s104 gateway test. The ‘avoid’ policy recommended by Mr de Pelsemaecker in the 14 March version closes the door to a policy argument under s104D. This is appropriate in the context of the
 20 interim nature of the Plan Change, as it provides options to growers, where it is appropriate, but does not encourage the use of the Noncomplying activity. This cascade of activities is recommended in the 8 April version, which HortNZ supports.

THE COURT: JUDGE BORTHWICK TO MS FORD

25 Q. So, there may be a merits-based assessment as a non-complying activity, which activity – and again you’d have to get the four corners right, but the example that – I’m not sure whether your four corners are exactly what Mr Webb’s circumstances are, that irrigation is inground or, you know, earthworks together with irrigation systems have already been rolled out,
 30 and in that particular case plants purchased and planted, but there is a merits-based assessment, and that assessment would look to presumably the increase in volume, if there is an increase in volume, of

water based on historical use together with questions over any effect, well maybe questions over any effect on the environment as a consequence of the expansion of the area, the obvious example being nutrients, but you know maybe, I don't know whether that's obvious or not, because I don't know what other chemicals are brought to bear on a you know within horticulture and how, and the regulation of those in any change in scale, intensity, whether, you know, the volume and concentration of those.

5

A. Yes, your Honour –

Q. But that's the gateway that you want, it's got the –

10

A. Yes.

Q. – those two potential effects increase?

A. Yes, I think I understand your question.

Q. So that you through their non-complying gateway you could potentially increase the volume of water –

15

A. Yes.

Q. – so we're no longer using an historical volume, and you could potentially increase or change the concentration or load or contaminants, that they would be the two main changes.

A. Potentially, yes.

20

Q. Potentially, so then how does the Plan Change speak to that would be the, would be what the Court would want to know particularly in the context of the policy and the objective?

A. Mr Hodgson might be able to answer that a little bit more fully.

Q. Okay. Mmm.

25

A. But my understanding is that through that non-complying door pathway, the police door is shut so because it's not, there's the avoid policy in there, but if an applicant can show that the effects of their activity that they have applied for is no more than minor, then they might be able to continue with that activity for potentially an increased area of irrigation or a change in the volume of water that is used, which could potentially go the other way as well as irrigation systems are improved and efficiency is improved as well, so I guess it's being able to have that pathway open to show that merits-based no more than minor effects are there.

30

Q. Okay.

A. Yeah.

Q. So that is going to be the challenge for your...

A. Yes.

Q. Yep, okay. Good.

5 A. We do accept that that is quite a tight door.

Q. Seems to be very narrow indeed, mmm.

A. Yes. And so if it was opened I think it, yeah, there is still a wee bit of work to do there.

Q. Mhm, okay.

10

SUBMISSIONS CONTINUE: MS FORD

So just to conclude your Honour, when HortNZ made a submission and further submission on Plan Change 7 which sought a viable and efficient consenting pathway for horticultural growers in the region, HortNZ considers that the 8 April
15 version of the Plan Change resolves its issues it raised in submissions and this version effectively and efficiently provides an interim plan change which enables a just transition period for water users in the Otago Region, obviously still with that work that is to be canvassed.

THE COURT ADDRESSES OTHER MEMBERS OF THE COURT PANEL –
20 **QUESTIONS? NO QUESTIONS FROM EITHER COMMISSIONERS**
(15:42:05)

MR MAW:

I've probably exhausted my supply of questions. One matter I've been
25 contemplating seeking leave from the Court relates to whether I might question some of the lay farming submitters on the question of whether they can describe the irrigable area that they had in play between 2017 and 2020, given that issue was made live by Ms Dicey.

THE COURT: JUDGE BORTHWICK TO MR MAW

30 Q. Mmm, mhm.

A. And I've been extremely reluctant to not be cross-examining lay witnesses, and if the Court is going to be exploring that question amongst

its questions for those witnesses, I will not need to do so but it does appear to be a live issue.

- 5 Q. I don't in principle because of the importance of the issue and also because actually farmers are the best people placed to talk about this stuff, not anybody else, I don't have any problems in principle with you asking questions about it. Do you? It's good we –

MS FORD:

- 10 I can't speak for the witnesses themselves, but in principle, no we agree that the growers are the best people to talk to this issue, because they know the land, they know what they are doing on it.

THE COURT: JUDGE BORTHWICK TO MS FORD

- Q. They know the farming system.
- A. Yes, and they are experts in their own rights.
- 15 Q. Yeah and you would have, everybody would have sat and listened to the highly theoretical debate happening with experts.
- A. Yes.
- Q. But actually farmers are the people who are expert, and farming systems.
- A. Yes.
- 20 Q. And I think it would be of benefit to the Court and I think of benefit to the regional council that we can, you know, just test is there really a problem here or is there no problem here, and so if you are happy.
- A. Yes, I think that we'd be happy with that.
- Q. I'll grant that leave, yeah.
- 25 A. Yes, your Honour, and just reiterate that our growers just really do just want to have a conversation, so that their message is clear and gets across.
- Q. Okay, all right. Thank you.

30

MS FORD CALLS**EARNSCY WEAVER (SWORN)**

1544

5 Q. Mr Weaver, just so you know this is very much the same similar sort of process as what Ms Marr went through this morning and this afternoon, hopefully a little bit not as long, but this is your opportunity to present your evidence and to tell the court, present to the court what you're here to present for. So I've got a couple of questions just to start off with. Can you confirm that your full name is Earnscy Weaver?

10 A. Correct.

Q. And you're a director of Leaning Rock Cherries Limited.

A. Yes, I am.

Q. And you made a statement of evidence dated 5th of February 2021?

A. Correct.

15 Q. And you've got a – do you have a one-page summary?

A. Yes, I have a one-page summary.

Q. Do you have any corrections to make to your statements?

A. Yes, in paragraph 10, there's a typo where it says "lead" rather than "leaf" and I think it could misconstrue something if we didn't deal to that.

20 **THE COURT: JUDGE BORTHWICK**

Q. This is paragraph 10 to your original submission, is that right?

A. Yes.

Q. Yes, okay.

EXAMINATION CONTINUES: MS FORD

25 Q. So that should read: "This includes tensiometer readings, soil moisture readings, soil and leaf testing and using data from weather stations?"

A. Correct.

THE COURT: COMMISSIONER EDMONDS

I can see why you would want to change that.

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MR WEAVER:

Beg your pardon?

THE COURT: COMMISSIONER EDMONDS

I can see why you would want to change that.

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MR WEAVER:

Yes, it makes a difference.

EXAMINATION CONTINUES: MS FORD

10 Q. And you have got the experience and knowledge of the industry as set out in your original statement in paragraphs 3 to 5?

A. Yes, correct.

Q. Great. This is as I said before, your chance. So if you would like to start with your one-page summary. I will have no further questions and then we will lead it up to the court.

15 A. Okay. "My name is Earncy Weaver. I am a director of Leaning Rock Cherries Limited. We made a submission on proposed plan change 7 and support the submission of Horticulture New Zealand. I'm also speaking on behalf of Peter Morrison who is a neighbouring orchardist. Leaning Rock Cherries Limited grows a variety of stone fruit also know as summer fruit and pip fruit in the Manuherikia Catchment. We produce approximately 18 to 20 tonnes of cherries per hectare, 57 tonnes each of peaches and nectarines, 30 tonnes of apricots and 70 tonne of apples per hectare. The operation is a total of 64 hectares most of which is irrigated. For the past 35 years we've been operating Leaning Rock Cherries supported by a water supply agreement signed originally with the crown then with the Manuherikia Irrigation Co-operative Society Limited. Our association with the irrigation scheme and access to a defined water quota has been the norm for us. For the last 35 years we've operated with a take allocation of 5.8 millimetres per hectare per day. We've improved our operating systems in that time and grow all our fruit in accordance with best practise. We are continually learning and developing our management practise to improve our sustainability as

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much as we can. This includes tensiometre readings, soil moisture readings, soil and leaf testing and using data from weather stations to form our irrigation decisions. We also conduct fruit diameter testing and only irrigate what we have to. And if I could just add under there, it's not just about the triggers for irrigation, it's also about the management of the irrigation system, in that we irrigate within the evening with all our micro-sprinklers and any overhead that we may do, our dripline irrigation or not so much dripline, but some of our micro-sprinkler irrigation, we pulse to make sure that we don't over-irrigate with it and pulsing I mean that we may run for to put two ml on and then three or four hours later another two ml and then another two ml later on after that and it's about getting the best use out of that water. In order for our growing operation to continue, we need certainty that the water supply we rely on will be available to us. We need PC7 to enable us to keep using this water allocation." And in Appendix 1, attached to my statement of evidence describes a negative impact of tree water deprivation, and in there I talk about the consequence if the tree short of water and I must say that some of those consequences have also come about a tree as over-irrigated and in particularly in soft fruit. So the negative impact of under-watering is equally can be an over-watering. So we've got to be on the right on the knocker as much as what we can to make sure our fruit quality is right, and if it's not, there's no real second base particularly if we're doing a expert – cherry export apricot that there is no second base for that fruit, that if it fails, if the fruit doesn't size, if it's too soft, there's just – there's no ability to make a profit at that point, so we need to have it right. We also need PC7 to provide flexibility for different types of growing systems and now allow us to use water for irrigation and frost fighting. If we cannot, then we will not be able to maintain export or New Zealand grade quality crops and this will result in significant loss of profits and ultimately job losses. We would be forced to cease operation and sell up. I am concerned that PC7 will not enable us to take the amount of water that we need when we need it to be able to sustainably operate our horticultural business. This would be hugely detrimental to the trees,

plants, environment and the people that make up the fruit growing business.

1550

5 THE COURT: JUDGE BORTHWICK

Q. Now can I just ask you again, because I didn't quite catch it, the paragraph that you needed to amend from "lead" to "leaf"?

A. Yes.

Q. Which number was that?

10 A. Paragraph 10.

Q. Paragraph 10. And is this in your brief of evidence or is this in the original submission because I couldn't –

A. In the original.

Q. Right. No I can't find it.

15 A. I think it's paragraph 10.

Q. Perhaps – I'll get you to indicate which document and what paragraph because I can't spot it?

A. So that's in the statement of evidence.

Q. Yes, got that.

20 A. And page 3?

Q. Page 3?

A. Ten.

Q. And my paragraph 10 starts, "By way of background"? Oh –

A. Where?

25 Q. – sorry, looking at the wrong witness, no wonder, sorry. I'm with you. Paragraph 10. I've got it right.

A. Yes, soil and leaf.

30 Q. I just have to get that – my record right for the Court's record, so it's important that I locate it. Very good. All right. So Mr Maw has some questions for you, yes and we're all, he's endeavouring to draw out your years of experience as an irrigator, just so that we have a firmer factual basis upon which to make decisions, because we're not there yet, but largely because we actually haven't heard from individual farmers yet I

suspect, so Mr Maw has some questions for you and the Court may do as well.

CROSS-EXAMINATION: MR MAW

5 Q. Thank you and Good Afternoon. I'm very keen to understand the irrigation system that you use on your property and I wonder whether you can help me with my understanding, so do you recall when the irrigation system was first put in?

10 A. I've become a director of the company about 10 years ago, so no. I do know, because I was involved with – I knew the family well that was putting it in, so what initially went in was a under tree micro-sprinkler system and the original plantings.

Q. And roughly when might that have been?

A. That would've been early 90s I think from memory.

Q. And then your more recent involvement has been over the past 10 years?

15 A. I think it's 10 years, maybe a few more, yes.

Q. And over that period of time, there's been some development of the orchard as you've set out in your evidence?

A. Yes.

20 Q. And in terms of that irrigation system, the development of the systems occurred as the orchard has expanded?

A. Yes.

25 Q. And when you've expanded at each stage and as I read your evidence there have been sort of five hectare increments in terms of expansion, when – and I want you to think about the irrigation system itself, does, has the system itself changed in relation to the existing parts of the orchard as you roll out into the new five hectares?

A. Generally not, the existing orchard's been left in the way it was and the new blocks have been introduced with different irrigation systems, yes. Application systems.

30 Q. And as each step by way of development occurs, you'd be looking at finding the most efficient types of irrigation systems to use the water that's available?

- A. Yes correct and sometimes as a sort of a, you've got to balance that with frost protection as well and in cases we may leave in micro-sprinklers rather than dripline or it's a consideration to leave in micro-sprinklers that will be able to help with some frost protection as opposed to drip line where it has no gain for frost.
- 5 Q. So in the context of drip line, if you are looking to add frost protection you'd have to put some overhead sprinkler type system in?
- A. No we've gone for frost fans wind machines.
- Q. Right.
- 10 A. And then the micro-sprinkler supplies a little bit of heat underneath so you get about a one degree lift.
- Q. Right, no that's helpful. So when you think about the development of the orchard and you understand where your orchard is, is it fair to say that you'd have a clear understanding of the parts of your orchard that are under irrigation from time to time?
- 15 A. How – in what way, just, rephrase that for me please?
- Q. You'll know precisely the location of your irrigation system in an orchard?
- A. Yes, yes.
- Q. It's pretty obvious?
- 20 A. Yes.
- Q. In the sense that the irrigation system will follow where the trees are?
- A. Yes, yes, a line directly.
- Q. And if I ask you to cast your mind back to 2017, you can tell me precisely where you had trees and irrigation in place at the time?
- 25 A. Yes pretty much, yes.
- Q. And the same would apply 2018 and 2019?
- A. Yes I guess.
- Q. And if I asked you to draw on a map for me, the maximum area irrigated between 1 September 2017 to 18 March 2020, if I gave you a map of your property, you'd be able to shade for me the areas under irrigation, the maximum area during that period of time?
- 30 A. Yes pretty much, but if I couldn't do it, the orchard manager sure as hell could, yes.

THE COURT: COMMISSIONER BUNTING

Q. Sorry, say again?

THE COURT: JUDGE BORTHWICK

“The orchard manager sure as hell could.”

5 THE COURT: COMMISSIONER BUNTING

Oh, okay, thank you, that’s all right.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Yes, so in the context of an orchard operation, that would not be an onerous task?

10 A. No.

Q. And in your evidence at your paragraph 17, you had explained to me or explained in your evidence for the Court’s benefit, the challenges that your orchard was facing with having had a fixed date in the notified version of Plan Change 7 which was the maximum amount of irrigable area in the 2017, 2018 period of time because you’d done some expansion after that date. The Council plan has recommended that a change be made to extend that period of time through to the 18th of March 2020 and would that extension through to that date capture the increases that you have undertaken?

15
20 A. I would suggest the bulk of it. Yes because the last plantings were only two years old, yes.

Q. Very good. Those are my questions, thank you.

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

25 Q. How do you rate the way you manage your operation?

A. How do I rate it?

Q. Compared with others? Is yours the sort of – a model to follow or...?

A. Well I also, I work as a horticultural consultant out there, so I think the monitoring and the work that goes on there to make sure that the water

is right and the applications are right, is right up there at the top of the class. The – it's a difficult site with some of the soils with the permeability of the soils and the ability to get the water moving into the soil, but one of the key things that the manager's implemented, he has tensiometers sitting at 600 mil below the root zone, making sure that that doesn't get flooded and that's sort of – so that's the catch haul at the finish if you, if we've got some of the calcs wrong on the – so we work off the evapotranspiration rates and the coefficients that go, that change as you go through the season with the growth curve and, but if we were to over irrigate we'd pick that up with the technology that's sitting there. So it's pretty good.

1600

Q. And is that a reasonably common approach with other –

A. There's others doing that, yes. The thing is that with fruit, if we don't get that right and we over-irrigate, we've got a poor piece of fruit, and we over-irrigate, we get excess growth, we get soft fruit, we get problems. Soft fruit leads to more aphids, soft growth, there's aphids, and there's all sorts of downsides if we over-irrigate. Under irrigate's got exactly the same, you know, small fruit, soft fruit, poor stems on cherries, so we're looking for that sweet spot all the time.

Q. So it's imperative for the success of the business to do it right?

A. Yeah, to manage the water well, amongst everything else that's going on, of course, but that's just one of those challenges that we have.

Q. Okay, well, thank you.

25 **THE COURT: JUDGE BORTHWICK**

Q. So I picked up that you're a shareholder with the Manuherikia Irrigation Company, and it's from them that you get your water.

A. Yes.

Q. And so you're not permit holder yourself, a water permit holder?

30 A. No, our water is via the irrigation company?

Q. Okay. In terms of the people that you consult to, are any of them holding deemed permits?

A. Individually?

Q. Individually, yeah.

A. No, don't think so.

Q. Okay.

A. No.

5 Q. Now, forgive my ignorance, but in your orchard, are you using fertilisers or other agrichemicals within the orchard itself.

A. Yes, for sure, yeah.

Q. And with the agrichemicals, is the quantum that you apply fixed by an regulation in this country?

10 A. I think all orchards are working under NZGAP or EuroGAP, so Good Agricultural Practice, which means every input has to be justified and measured, so, you know, if we think about the pest and disease programme, it's about targeting the pest and disease and finding the softest option to do that, so you understand the life cycle, you understand
15 where it is best to intervene in that life cycle to take care of the pest.

Q. And in the justification of the use of agrichemicals and their measurement, is that to a regulator, or is the requirement there that you keep your own record?

A. You keep your own records, but at the same time, with a fruit, your spray
20 programme goes in front of the, in this case, (inaudible 16:03:26) quality to assess if you've met the requirement withholding periods and put up samples for residue testing, so you've got fruit meeting those requirements of those chemicals that have been used. So that gap requirement is audited as well, externally audited.

25 Q. And it may or may not be an issue for the regional council, I don't know. In terms of people that are in your category, so people who have inground irrigation systems, so you've expanded your irrigation area and you've put into place the irrigation system itself, whether the discharge of agrichemicals is of concern to them. Can you comment about any work
30 the regional council's done in this area, or no work in terms of monitoring the effects of use of those sprays on waterways?

A. I'm not aware of any work that's been at that.

Q. Not aware of any, okay.

A. No.

QUESTIONS ARISING – NIL

WITNESS EXCUSED

MS FORD CALLS**STUART JOHN FORD (AFFIRMED)**

Q. Good afternoon, Mr Ford. Can you please confirm that your full name is Stuart John Ford?

5 A. That's correct.

Q. And you prepared a statement of evidence-in-chief dated 5th of February 2021?

A. That's correct.

Q. Do you have any corrections to make to that statement?

10 A. No, I don't.

Q. Can you confirm that your statement is true and correct?

A. Yes, I can.

Q. And do you have the experience and qualifications set out at para 6 of your statement?

15 A. Yes, I do.

Q. And have you prepared a summary of your statement to read?

A. I haven't prepared a summary, but I'd like to speak to a brief summary, if that's okay.

20 Q. Yes, of course. Can you read that now and then we'll move into questions?

A. Okay.

Q. Thank you.

25 A. My evidence-in-chief that was prepared before you was initially as a result of reading the s 32 report on the plan change 7, and it's my opinion that the matters of economic interest in it, which includes choosing the appropriate method, cost, and benefits of the method, the effectiveness and efficiency of valuations, and particularly the two elements of considering its impact on future growth and its impact on employment, were pretty scarce in terms of their justification or explaining their reasons for coming to the conclusions. When you look at my evidence in terms of

30 the vegetable sector, it's pretty static, and it's not expanding at all, and it's got very efficient irrigation systems, so I don't see any problems with the vegetable sector in terms of that, but when you look at my evidence in terms of the fruit sector, both the summer fruit industry is expanding at

a tremendous rate, and the pip fruit industry is also expanding at about 10%. So in terms of considering its impact on future growth or employment, I felt that PC7 was quite inadequate. So then, if you look at rule 10.A.3.1.1.1, as I say in my evidence, it's a very blunt instrument to achieve the aims of what it was trying to do, and that's from the perspective of allowing for future growth and allowing for future employment, and the pathway I would describe is a roadblock. There wasn't a pathway for horticulture to move through that satisfactorily, so I am very pleased that the planning process has achieved a pathway, and admittedly, and I guess my major concerns are in terms of the ability to expand the area, and I've said in my evidence that there may be situations where areas can be expanded with no negative impacts and I think it's a satisfactory resolution of that. Admittedly, the pathway at the top is very narrow, but at least it gives us the opportunity to expand the area or expand the take of water. So from the efficiency perspective, I am very pleased with where this process has got to and that negates a lot of what was in my evidence-in-chief.

1610

20 **THE COURT: JUDGE BORTHWICK**

Understood, mhm. So we will just see if Mr Maw has got any questions.

CROSS-EXAMINATION: MR MAW

Q. Mr Maw does have some questions. Thank you. Now I appreciate things have moved as they do with lengthy hearings like this and it's some time ago that you put pen to paper in terms of your evidence-in-chief. So where your thinking has evolved past that which is recorded here, please feel free to share your refreshed opinion as we work through the opinions expressed in your evidence.

A. Okay.

30 Q. The first topic that I do want to explore with you is the topic around and to give you a reference, paragraph 15 in your evidence-in-chief and this

relates to the reliability of supply of water to justify substantial or significant levels of investment.

A. Yes.

5 Q. Now, when you think about the horticultural sector and you think about the opinion you have expressed in your paragraph 15, what length of time do you have in mind as being the length of time where there needs to be sufficient quantity of water and reliability of supply of water to justify the substantial investments you refer to in that paragraph?

10 A. It's very hard for me to be exact on it, but you know, you learnt from Mr Weaver that, you know, the investments are long term in terms of the development of with fruit, particularly and so the payback is quite a long period. So I would think, you know, at least 15 years would be the minimum in terms of ensuring security of the consent.

Q. So when you think about -

15 A. And sorry, and this maybe not only that term, but it's the ability for it to roll over which is important.

Q. Now you do provide some evidence about the ability to roll over later in your evidence so hold that thought and we will get there in the fullness of time, but you are broadly speaking saying "A 15 year window is the window that you have in mind when you're thinking about this type of a period"?

20

A. A minimum period, yeah.

Q. So when you think about the current state of play in October, you have an understanding that the deemed permits are all due to expire on the 1st of October this year?

25

A. Yes, I am.

Q. So when you cast your mind back and look at investment decisions that are made and have been made say in the last five year period, those decisions will have been made knowing that the duration on the existing permits only had a five year period of time to run?

30

A. That's correct.

Q. And so when you think about the risks associated with that, would you accept that the in that context, the irrigator is taking a risk in terms of whether the permit might be renewed in the future?

A. I'm not sure whether there would be any doubt that it would be renewed, it would just be in terms of what terms it would be renewed on.

Q. Well, in your experience, is there an expectation that permits will be renewed?

5 A. I think you would have to ask the growers that more specifically, but I would expect so.

Q. So from – when you're thinking about things from an economic perspective, how do you price in the risks associated with consent renewal?

10 A. Again, it depends on the risk profile of the individual and I think it depends on the where the investment is coming from. If it's coming from the individual grower, they may be more risk averse, but if a lot of it's been funded by banks and things like that, the risk assessment is usually done by the financier.

15 1615

Q. Now do you have an understanding in relation to Plan Change 7 that short term rollover consents are proposed?

A. Yes.

20 Q. And the time period for those consents you understand is a six year period?

A. Yes, that's correct.

Q. And when you think about that six year period and you contrast that to the 15 year period of investment certainty required in relation to reliability of supply of water, et cetera, you wouldn't get that certainty over the six

25

A. That's correct.

Q. And so if one of the purposes of Plan Change 7 is to discourage investment in irrigation expansion and one of its tools is a six year consent period, it would in fact achieve that outcome wouldn't it?

30 A. It would, but I question why that was the aim of this legislation.

Q. Now when you – now tell me if we're straying beyond your area of expertise, do you have an understanding of the current status of allocation of resources in the October region?

A. No, I do not and that's outside my expertise.

- Q. If you were to assume then for the time being that the water resources in the Otago region may be significantly over-allocated and that the council over the next six year period is preparing a new land and water plan to address the effects of that over-allocation, it may well be that there is insufficient water for existing activities at that point in time?
- 5 A. That's correct.
- Q. And so if that is indeed the case, then isn't it better to send a signal now that investment in further irrigation requiring additional infrastructure and additional water should be held off?
- 10 A. I'm not convinced that it's the council's role to make that signal and that's why I like the non-compliant activity rule in this one because then the applicant can prove that all of those things are less and minor, and can proceed.
- Q. Well, we seem to be straying at that point perhaps in the planning realm, so I want you to stay in the realm of dealing with the risk of investment decisions.
- 15 A. Okay.
- Q. So is it better to know now that there might not be water for new and expensive irrigation infrastructure or is it better to know in six years' time after the investment has been made that there might not be water?
- 20 A. I think an individual farmer's decision would be based on his knowledge of the amount of water available in his catchment or his area.
- Q. Well, if we look at the current state of affairs, there has been, it would appear, investment in irrigation expansion in circumstances where permits had only say one or two years to roll?
- 25 A. That may well be correct.
- Q. And so here the council is trying to send a signal that great care needs to be taken in terms of investment and assets which might require a security of supply of water into the medium term when that water supply might not be available in the short term?
- 30 A. That may be correct.
- Q. I want to move through to your paragraph 36.
- A. Yes.

Q. And in that paragraph, you set out an opinion in relation to what you consider to be “an unfair economic burden on an irrigator associated with six year consent durations”?

A. That's correct.

5 Q. When you're thinking about this from an economic perspective, do you view water as a commodity in this context?

A. Yes, I do.

10 Q. And when you're expressing your economic opinion, you have not addressed the environmental burden that is associated with the allocation of water?

A. Yes, it's part of the resource consideration.

Q. So where in your evidence have you assessed the environmental impact of longer term consents?

15 A. I state in several cases that I think depending on the environmental and economic performance they should be granted. Yes, paragraph 39, in my opinion, a 15 year consent that has rights to a new given the requirement to meet the flow and quality requirements of the water source first would be needed at a minimum to provide a (inaudible 16:21:48) security of this sector.

20 Q. So prior to granting a 15 year consent, it would be important to understand the necessary flow and quality requirements that are necessary to sustain environmental values?

A. That's what I'm saying, yes.

25 Q. So until that's known great care should be taken before issuing longer term consents, say 15 years?

A. Yes, that's correct.

Q. I want to take you to your paragraph 49 now and this paragraph is in that part of your evidence when you are referring to the restriction on “expansion of irrigation area”?

30 A. Yes.

Q. And you will have heard from my questions perhaps this morning that the Plan Change has moved on to increase the window within which the maximum irrigable area is to be calculated, so it's now covering a period of time from September 2017 to March 2020?

A. That's correct.

Q. But notwithstanding that change, do you still express an opinion that there is potential for a quite large negative economic impact associated with restricting irrigation expansion?

5 A. Say that again?

Q. Do you maintain your opinion that there is still in your words "quite large negative economic impacts from restricting irrigation expansion"?

A. Yes, I do.

10 Q. Might there also be significant negative economic impacts associated with stranded irrigation infrastructure if in six years' time there is insufficient water available to reliably operate that infrastructure?

A. Yes, there would be and that's why I'm encouraging of the non-compliant regime to handle applications which wish to increase the area or the amount of water taken.

15 Q. Now I am going to pick up the non-compliant as you say "pathway" with your planner because -

A. Okay.

Q. – unless you are wanting to get into the planning realm?

A. No, I do not.

20 Q. No, I didn't think so.

1625

RE-EXAMINATION: MS FORD – NIL

THE COURT: COMMISSIONER EDMONDS

25 Q. I only had the one question, and it's arisen out of Mr Maw asking you a question, so I realise that I didn't fully understand your evidence, para 44. So you start out by talking about a 15-year consent, and then you say that has rights to renew, so I want to understand what you mean by that. Do you have a time period in mind for rights to renew?

A. So where's this, in paragraph?

30 Q. In your para 44.

A. Yes.

Q. Looking at the first line, you talk about 15-year consent that has rights to renew. Now, I might go on and ask you a bit more about the second sentence, but in relation to the first sentence –

A. So can you read out –

5 Q. – what do you mean by “rights to renew”?

A. Can you read out the beginning of the paragraph?

Q. Sorry, have you got a different version?

A. I hope not.

THE COURT: JUDGE BORTHWICK

10 Q. 44 starts with me at para 37 and 38. Is that the same as you, Mr Ford?

A. Yes.

Q. Yes, then what does your paragraph start?

THE COURT: COMMISSIONER EDMONDS

15 Q. It starts: “In my opinion, a 15-year consent that has rights to renew,” which is what I’ve written down, and Mr Maw has 44, as I do.

A. No, that’s para 39.

Q. Oh, okay. Oh, I see. I don’t quite understand that. Mine certainly, out of my folder, is 44, but it seems like it might say the same thing as 39, so nothing hinges on that, if I can continue with my question.

20 A. As long as we’re all looking at the same paragraph, I’m happy.

Q. Perhaps I could just read out the sentence, and you can tell me if that’s what you’re looking at under some other paragraph number: “In my opinion, a 15-year consent that has rights to renew, given the requirement to meet the flow in quality requirements of the water source first, would
25 be needed at a minimum to provide appropriate security to this sector.”

A. Okay, so what I’m talking about, that is consent having almost automatic rights of renewal when it comes to an end, so that would be a 15-year consent that has almost automatic rights of renewal at the end.

Q. What, another 15 years, and 15 years beyond, and 15 years beyond?

30 A. Yeah, yeah, subject to the planning regime that it was in at the time.

Q. Yes, but the planning regime might have to remain static if you are going to have the same thing approved every 15 years, because the flow and

quality requirements may, in fact, require a lowering, for example, of the take, so when you wrote this, did you mean that the 15-year consent needed to basically have the same ability to take and apply the water in terms of the volumes?

5 A. Yeah, it was more to do with my comment in 36(a): “First of all, the consents should be granted for a much longer term, with the appropriate condition that if anything changes as a result of changes to the (inaudible 16:28:57) regime, the consent is subject to those changes.” So it’s not a constant thing, it’s renewed according to the planning regime at the time.

10 Q. Oh, I see, so I’m going up to what I have as paragraph 41.

A. Oh, okay, sorry.

Q. “A renewal of a consent should be automatic, subject to the applicant proving that they continue to meet all the requirements of the consent.”

A. Yeah, so I think in that concept, what I’m talking about in my 39 is 36(a),
15 which is your 40.

Q. 41, so the first part of that is a longer term with a condition saying it’s as a change to the water-planning regime, meaning a consent should be subject to that.

A. Yes.

20 Q. So it’s not – yeah, okay. So looking at 44, I thought you just meant that you had to keep -

A. No –

Q. No.

A. - no, no.

25 Q. But you’re saying things could change.

A. Most consents now have conditions in them that if the water-planning regime changes, the consent conditions change.

Q. Right, so you’re accepting of a review?

A. Yes, yes, very much so.

30 Q. But in that regard, though, you would still be thinking that there would be water there?

A. Yes.

1630

Q. Yes. Not that you might turn the tap off completely?

A. Yes.

Q. Is that the point?

A. Yes.

5 Q. Okay thank you. Sorry about all that confusion. I don't know why mine's got different numbers.

THE COURT: JUDGE BORTHWICK

That's all right. Freda will give you, what I think is the correct copy.

QUESTIONS FROM THE COURT – COMMISSIONER BUNTING – NIL

QUESTIONS FROM THE COURT – JUDGE BORTHWICK – NIL

10 **QUESTIONS ARISING – NIL**

WITNESS EXCUSED

MS FORD CALLS**MICHELLE KATHLEEN SANDS (SWORN)**

Q. Can you confirm your full name is Michelle Kathleen Sands?

A. Yes that's right.

5 Q. And you've prepared a statement of evidence-in-chief dated 5 February 2021?

A. Yes.

Q. Do you have any corrections to make?

10 A. Yes I have one. In paragraph 29, the number in the first sentence, the number "297 hectares" should read "267".

Q. Other than that correction, can you confirm that your statement is true and correct?

A. Yes.

15 Q. In light of things having moved on since you wrote this in February, I've just got a couple of questions and then we can move into a summary?

A. Okay.

Q. Is that all right?

A. Mmm.

20 Q. Firstly, can you just explain where Hort started in this proceedings and where we've gotten to now as the industry person?

A. Sure. So I think there's probably four main elements that we have been considering, so the first is around the duration of the renewal consent and initially in our submission we were opposed to the short duration, but on reflection and in evidence we accepted that and the reason for that was
25 in light of the MPSFM and in light of the over allocated nature of the some of the catchments in Otago and so what his plan change can't do, is speak to the fresh water values that are to come and also in the context of over allocated catchments, we think, you know, the relative values and benefits of activities on land and so for horticulture, some of the things
30 that we're particularly value, is the value of domestic food supply which Otago is important for and we consider to be a second priority under the Te Mana o te Wai frame work and that can't be provided for in this plan and another matter that can't be provided for in this plan, but in the next, can be, is the climate change commission's budget and so Horticulture

has a lesser greenhouse gas emissions and other activities that would use the same amount of water, so I suppose where I'm heading to is that we're aware that if water was to be locked up by other users and there was to be claw back into the future, it may not be able to provide for values that are important to growers as well as important to the environment, so that's the reason why we've shifted on that point. The next point is really around that date, oh no, so the next point I'm going to talk about, the point that we shifted oh, is the calculation method, so this is probably our primary concern in our evidence was around that if we are going to get a renewal, it's really important that, and it's a short renewal, it's just really important that the amount of water is the right amount of water for them to carry on doing their activity, and so we were concerned about the calculation method in the notified version that it, that it would not or may not provide the right, the necessary amount of water for the existing activity. Now, our expert, Ms McIndoe, was satisfied through that conferencing that that controlled method, calculation method, now is much better and then also we think it's really important that the RDA provides a pathway for those people that can't meet that calculation method, so we are now satisfied that that addresses that issue, although I would say, our, in our submission we spoke about reasonable, you know, reasonable use tests, and we still maintain that that's really important, that ultimately and in the coming plan, that when the amount of water that is to be allocated to people that it passes a test of reasonable use rather than just historic use, but we accept in the context of this plan the approach proposed now is acceptable. The other matter is around the date, so the date for the expanded irrigation area, and so, as has been said by Mr Ford, you know, and others, there is a long lead-in time for purchasing or you know, planning ahead for purchase tree crops and so there definitely are people who have expanded since that 2017 date, there are still some that have expanded past the 2020 date as well that we are aware of, and in fact you can speak to our witness Mr Webb, about that, but we think, you know, if you need, you kind of do need a date I think in the plan, and it's hard to think of a better date than the notified date, I think. And so then that leaves us with that non-complying pathway

5 which we, we sought originally and we still maintain is very important that it is a real pathway for people who can demonstrate that their effects are less than minor, which we think is possible for horticultural expansion in some catchments due to its limited water quality effects, efficient water use, and in some catchments which aren't over-allocated that minor effects could be demonstrated.

1635

MS FORD ADDRESSES THE COURT (16:37:55)

10 EXAMINATION CONTINUES: MS FORD

Q. (Apologies your Honour, I should have confirmed Ms Sands' experience prior to that original question.) So I just want to confirm that you are the manager of natural resources at Horticulture New Zealand.

A. Yes, I am.

15 Q. And you are providing industry experience.

A. Yes.

Q. Evidence.

A. Yes.

20 Q. As part of that evidence, can you just expand a little bit on the auditing process in NZGAP that Mr Weaver touched on as well?

25 A. Yes, so within the horticulture sector, all fruit and vegetables that are exported to sold to a New Zealand supermarket needs to be certified, and it is certified by the GAP programmes, and that, those standards include standards which require growers to record fertiliser use and demonstrate good management practices around its use, and to agrichemicals also meet what's called a sort of growsafe which is a standard around the use of agrichemicals, which enables them to meet the requirements of the Food Act, and also to meet the requirements of the chemicals themselves which are approved by the EPA to be used again- you know, to meet
30 certain standards and so the GAP programme outlines those standards and then growers are independently audited, and if they fail the standard they are not certified and they cannot sell their products. If they pass the

standard then they can be certified and sell their product, so it is a private standard but it is also recognised in many regional plans but not this one, so in many regional plans, for example, the growsafe requirements which are mandated within the GAP programme are also reflected in regional plans to, as a means of managing agrichemicals, so I suppose while we see in other regional plans regulatory requirements for farm planning or agrichemical management, and they may not be as clearly provided for in this region, the GAP standards are national and they are required to be met by all growers regardless of what the regional plan requires.

10 Q. Thank you.

CROSS-EXAMINATION: MR MAW

Q. Thank you. That was your summary, was it?

A. Yes it was, sorry yeah.

15 Q. Yes. Very good. I'd like to take you to your paragraph 15 of your evidence in chief. I just want to make sure I've understood the basis on which you have provided evidence and are giving evidence to this Court. You have recorded in your paragraph 15 that your role in this hearing is as HortNZ's representative and advocate. And when I turn over the page to paragraph 17, I see there that you have recorded that you agree to abide by the expert witness code of conduct, and I am left a little confused as to whether you are appearing as a representative and advocate or as an independent expert witness to assist the Court. Can you assist me with that?

A. Yes, I'm as an advocate, not as an expert.

25 Q. So, that may well be that paragraph 17 had found its way into your evidence.

A. Yes I believe that is the case.

THE COURT: JUDGE BORTHWICK

Q. So, should I, for the record should I just delete paragraph 17?

30 A. Yes. Yes please.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. I want to take you to your paragraph 38. And this is the part of your evidence where you are dealing with six year consent durations for renewals of water permits and you expressed a position in that paragraph as to why a six year expiry date is particularly problematic, and that refers, and the reason given there is in relation to the ability to secure capital.

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A. Mhm.

Q. You'd accept that the current planning framework in the Otago region is in a state of flux at present, and that significant changes are likely to come in the new Land and Water plan which will seek to give effect to the new National Policy Statement for Freshwater Management?

10

A. Yes.

Q. And when you think about the signal that Plan Change 7 is or one of the signals Plan Change 7 is seeking to send, it's one of sending the message of 'Be really careful about investing in capital that might require a longer period of time to pay back given that state of uncertainty'?

15

A. Yes.

Q. And having reflected on all of that, is that perhaps one of the reasons why the position of HortNZ has moved on in terms of the concerns that were initially expressed around the short duration for consents?

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A. Yes, that's right, because we, this plan, we know that the NPSFM is coming and that there will have to be difficult allocation decisions made in some of these catchments and that growers need to be aware of that, and if they are, feel confident, or they can seek technical advice that provides them enough evidence that they can pass the non-complying pathway they can do that in this plan, but I think that it isn't the right time to allow activities which could result in effects that are more than minor to occur in this period of time before those decisions around what the values are and what the limits need to be to achieve those values has been, that has been done.

25

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Q. So in a sense that reason for the six year consent duration and there are a number of reasons but one of the reasons Mr de Pelsemaeker refers to is one of sending a signal not to invest in the interim, that message is coming through now clearly?

A. Yes.

Q. No further questions.

RE-EXAMINATION: MS FORD – NIL

5 1645

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

10 Q. I just have the one question that I'm not clear about having had a look at your planning witnesses' evidence where basically, he's adopted the joint witness statement from the planning people and these two issues arise out of provisions that don't have any bubbles on the side saying "More work to be done on them", but I'm aware that not everybody necessarily agrees with the approach that's in this, and I'm not totally sure where your witness is sitting with it because I'm going to have to question them tomorrow, but you're the representative I note in terms of some discussion you've just had with Mr Maw, so I do need some clarification on this. So I don't know whether you have the – your joint witness statement evidence or the statement or in fact, the better place to go might be the attachment to your planners evidence at the back there, do you have that? Attachment 1 of the planning JW?

15 20 A. Yes.

25 Q. So perhaps if we could just go to the controlled activity and, of course, it was very much interfaces with the calculation methodology that's been worked on in the schedule, but what you have in 1V which is a rate of take and V1 adopts the same approach in terms of the volumes, the daily, monthly and annual volume limits. You originally had these - this reference window, the period 1 July 2015 to 30 June 2020 and that's been struck out and now there's just water years, any water years and the other thing that's happened is we're not talking about averages or whatever, we're just talking about maximums. So potentially, you could have situations where if you go back a long way, there might've been a lot of very inefficient border dyke and pile flooding takes and so that would mean that the historical use would be a very high, at a very high level,

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and I'm just wondering where Hort New Zealand sits on that in relation to the things that you've said about the need to be looking ahead and thinking about what should happen in terms of the new plan, and no, not having a potentially, a very high maximum calculator that people could then operate within in terms of this controlled activity and also the restricted discretionary activity?

5

A. Yes, I think, yes, that's right. So one of the things about a long record from a hydrological perspective is to try and get that climatic variation, but of course, you raise a really good point about the actual change in the system. I think one of the considerations is around the records that are acceptable for undertaking this calculation and whether or not one's are going back very far would meet the data standards in terms of, you know, a reliable record of take, you know, it maybe that only data in more recent years has been collected at a standard that would enable the calculations as a consideration, but I do think that going back – you know, I do think it's relevant, you know, those kind of reasonable use tests are a consideration, but I think that this plan is supposed to be about his ruling over historic rather than, you know, planning for that reasonable use test which is what we originally sought, but now see that it has to come into a new plan, but in that respect I think it wouldn't be unreasonable to have a start date.

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Q. Did find start and finish date, so did you have a view then on the 1st of July 2015 to the 30th of June 2020 because you made quite a clear statement in terms of the irrigation area and the date?

25 1650

A. Yes and to be honest I think it's less- like the 202- when it comes to the expansion of the irrigation area, if that (inaudible 16:50:22) if that is into the non-complying activity then I think that it matters less about that – the end of date. You know I think you could have it not ending at 2020 because you know if there's a drought year in the next couple of years then that would be useful, reliable information to provide a understanding of what is a reasonable use on the other hand if the date was shut out at 2020 and there was a big drought perhaps that could be a reason to go in to the RDA. You know that would be a very clear thing that you could

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demonstrate to a consents officer, that for, you know if the dates were 2015 to 2020 you could clearly say: “Yes except that this weather was not representative of the long-term and now we can demonstrate that because the last couple of years has been quite different”. So I think that it would be possible to put dates on it and the controlled pathway and then have the RDA open to make a case about those dates for whatever reason not being truly representative of your actual use and the tests that you would have to pass within the RDA or that discretion being around what you’re actually doing and your irrigation scheme.

5

10 Q. Now?

A. Yes.

Q. Now?

A. Yes.

Q. Not right back then?

15 A. Not right – yes, that’s right.

Q. Or into the future?

A. Mmm.

THE COURT: JUDGE BORTHWICK TO MS SANDS

20 Q. Thinking about that, if the proposal is to increase the maximum use, that’s not an RDA pathway but your maximum use based on historical records, you know so if you’ve got a future (inaudible 16:52:25) any proposal to take water which is in excess of your hither to historical maximum would automatically put you in a non-complying route wouldn’t it?

25 A. Yes but the thing about droughts is that they’re quite rare. So that’s why usually in hydrology you want the longest record possible because it might be rarely that you have to look back to the 1970s to find the drought that we’re going to get next summer and so...

Q. The supply’s not being leveraged out – to ensure a liability of supply in a drought event though, is it?

30 A. Sorry what was that?

Q. You’re not proposing that there’s a 100% reliability of supply?

A. No but –

Q. No.

A. – when you do – if you go to the way that, quite frequently provisions are written in plans in terms of the amount of water that will be allocated to an individual person it will be around say like a reasonable use with a nine in 10 year reliability, something like that. Now a five-year duration period (inaudible 16:53:32) likely to represent a nine in 10 year reliability, just, I mean I don't know what that – I don't know if the period of 2020 to 2015 was representative of the average climate in the past or in the next five years but usually you need a longer period to get it about right. You know to get the maximum right for your dry year. So, I think that is probably the logic that the hydrologists were adopting when they took the dates out, because that would be the normal way of thinking about you know trying to get that climatic variation.

THE COURT: COMMISSIONER EDMONDS TO MS SANDS

15 Q. So they were thinking about the hydrology not about the system?

A. I – I'm, I mean I wasn't there. But I'm –

Q. You were a hydrologist weren't you?

A. I'm imagining because that's what I thought too but you do raise a point about the system itself changing and I suppose becoming more efficient over time and how to address that, if you were of a mind to put a date on it like 2015, then I think that perhaps you could do that but then the RDA pathway, I think you would need to leave that open for people to say that those five years aren't representative or maybe you'd need to check whether they were particularly wet or dry before you decided.

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THE COURT: JUDGE BORTHWICK

Q. Or if system change was your concern, then it's linking the rate and take and volume to existing systems, not historic system, and they would need some change, presumably in the entry points, perhaps, to the RDA and controlled activity rule, or perhaps even a note and policy, but it's not to say that people ought to go, it's not driving efficient systems, it's just trying

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back historical use to current systems as opposed to systems which have been removed.

5 A. I suppose the issue there, from our perspective, is that, you know, part of accepting this six-year duration is about a controlled activity pathway that is very simple, that is straightforward, and from a horticulture perspective, and Mr Weaver explained this, if you weren't expanding your area, which you're not allowed to do if that's noncomplying, then there is no particular advantage in using more water, in fact, it's a disadvantage. You use the water efficiently in any case. So I'm not saying that's the case in every
10 conceivable scenario, but that is where I think the horticulture sector would be sitting. They may be given a maximum, but if you couldn't expand beyond that...

15 Q. It may well be that the horticulture system's not particularly inefficient in its use, but that can't be said for all farming systems, all farming sectors. Don't know. Okay, all right.

A. Yes, and I suppose the question also becomes, in terms of assessing the effect of the activity, if you were going into the noncomplying pathway, at that point, you're assessing the effect quite independently.

20 Q. My understanding of the noncomplying pathway is that it's a merits-based assessment, but there's a very firm policy still saying no more than six years. Is that your understanding?

25 A. No. So I thought, and Mr Hodgson is probably the person to ask on this, but my expectation was that the noncomplying pathway could be used for those that sought a consent duration longer than six years or consent area larger.

Q. I don't think – that's not the policy signal.

A. My understanding is that that means that you couldn't use that policy part, pillar, but you could use the other one, lesser, minor.

30 Q. My understanding – maybe I don't understand much, who knows, because the thing is changing all the time – there is a very strong policy signal, no more than six years, even in a noncomplying activity pathway, but if we are going noncomplying, maybe it's an extra bit of area, maybe it's an extra bit of water. It's still a six-year single, and that might actually suit Leaning Rock Cherries quite nicely because they've got through most

of their development, it's mostly in the ground up until 1 June 2020, and then a wee bit's gone in afterwards, and so for that wee bit, that actually might be a neat solution for them, but still only six years. The wee bit is a wee bit more land, perhaps a wee bit more water, but still only six years.

5 That's the pathway.

A. Yeah, so that's not –

Q. Your understanding?

A. Yeah, that's not, and so I suppose my evidence and opinion is based on my understanding of that not being the case.

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

Q. Well, let's just double-check my humble understanding. Mr Maw, have I understood it right or wrong?

A. Right, and that's had a significant bearing on my cross-examination.

THE COURT: JUDGE BORTHWICK

15 Q. I was wondering why everybody was so happy with this, but it could be because what it is doing is catering for the Leaning Rock Cherries of the world, of which, not the only example, there are other people who have made the expenditure, incurred the debt, and the irrigation systems, everything else, are in place, and so that's a potential pathway for them,
20 but only six years, that's how the policy reads. Unless, of course, there's another interpretation, which Mr Hodgson will get to tomorrow, and I'll go "oh."

A. Yes, that's right, because I suppose if that was the case, that is different to what we had understood. I had understood that a longer consent
25 duration could be sought in this period of time if you could show the effects were less than minor.

Q. No, that's not my understanding.

MR MAW:

No, it's six years. I mean, the door's not slammed entirely because it's not
30 prohibited beyond six, but dip back in and it's pretty hard within a void policy.

THE COURT: JUDGE BORTHWICK

Q. Yeah, so then you're not then just contending with the no more than minor effect standard or test, you're also contending with the word of void granting, and that's a pretty strong direction. So the door has been left open, but it is a very narrow door, it's not a door, necessarily, to a long consent, it doesn't prohibit it, you could give it a go, but what do you think a decision-maker is going to say when faced with an application for a 15-year consent when you've got a void granting?

A. Well, I mean, I think Mr Hodgson probably needs to answer this, but my understanding was that that was the point of the noncomplying pathway, was that the six years was for the controlled activity in the RDA, and that if you could not meet that, if you sought, in fact, my understanding is if you were seeking new water, you wouldn't be so much in the noncomplying as in the old plan, but if you were seeking the renewal that didn't meet the controlled or RDA, you would be in the noncomplying pathway.

Q. Do you know, if the policy applied the way you said, then we would have everybody maintaining their noncomplying track, I think. Well, I don't know.

A. Well, they'd have to demonstrate –

Q. They are not more than minor.

A. – no more than minor.

Q. Okay, so maybe it's not a matter for you, but it's a matter for your planner, but I think there's an interpretation issue, and maybe all that can be said is that the policy's not clear, although it seems to me to be clear enough to me, but maybe that's just not so. In that case, we might have to look at the wording of the policy, either to go in your direction or to go in Mr de Pelsemaeker's direction.

A. Yes, I think perhaps, if that was the case –

30 THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Which then brings us to the question, do you have any questions? Because you've cross-examined on a different basis.

A. Possibly. I mean, to be fair, when I read the evidence last night, it was on the basis of having seen the planning evidence come through with the noncomplying activity pathway as recommended by the planner. I do know this witness had put through various statements in relation to the previous regime, but when I think about that, given that this witness is really appearing as a representative, as an advocate, I wonder if I can cover the territory with the planner tomorrow?

Q. Probably, yeah. Anyway, I understand where you'd like to go or where you thought you could go, and we're going to cover it off with your witness tomorrow, but yeah, okay, I've probably said enough. Anyway, it's very important that we accept understand what you thought was happening.

THE COURT: COMMISSIONER BUNTING

Q. (Inaudible 17:03:29) question on the same topic really, 34(a) you said we strongly support the controlled activity status. Did you understand that was a six-year term?

A. Yes, so that's right, so we accept the controlled and six-year term for those that meet the controlled activity standard to get a six-year term, and that was on the understanding that if you couldn't meet that, say, for example, you had a small area that you wanted to be larger, or, for example, you were investing in something more significant, and you had could have done an effects assessment and showed that the effects were minor, you could use the noncomplying pathway. So definitely, the six-year duration, I saw as a rollover for most people, who would need to wait for the value-setting and the allocation in the next plan in order to use the policies in that to justify a longer duration consent, but yeah, so it was on the understanding that the noncomplying pathway was open.

THE COURT: COMMISSIONER EDMONDS

Q. And the discretionary?

A. Oh and the restricted discretionary for people who – is six years as well, but for people who can't meet the calculation method.

Q. Yes, the non-comply.

A. Mhm.

THE COURT: JUDGE BORTHWICK TO MS FORD

Q. And so reading Ms Ford's opening submissions I see Ms Ford you thought that an applicant could advance a case for a longer term consent.

5 Yes, I don't think that's the case or if it is, it's not automatically, it's going to be interpreted that way, yes.

A. Yes your Honour I suggest that we talk amongst ourselves as a team to –

Q. Yes.

A. – confirm our understanding, going back to that section 104D –

10 Q. Yes.

A. – wording because my understanding is that there's the two limbs to that gateway test (inaudible 17:05:38) either going back to that policy perspective –

Q. Yes.

15 A. – or going under a no more than minor effects –

Q. Yes and, yes.

A. – assessment and that's where again Mr Hodgson will be able to expand on this a bit more -

Q. Yes.

20 A. - where we thought we could get a longer term consent through there.

Q. Yes. As matters stand I think it's going to be difficult, would that be fair? Avoid –

THE COURT: COMMISSIONER EDMONDS TO THE COURT: JUDGE BORTHWICK

25 Yes we should get through the gate but you still have to consider the policy.

THE COURT: JUDGE BORTHWICK TO THE COURT: COMMISSIONER EDMONDS AND MS FORD

Q. Yes you've got one gate and that's the effects.

A. And that takes you to the like a discretionary activity where you have to consider the planning documents and what they say -

1705

Q. Yes.

A. So I think that it

Q. One gate and one gate only; you don't actually – the two gates aren't open.

5 A. Just because you get through the gate doesn't mean that in the terms of the matters that have to be considered over 104(1) the weight that you would give to the policy and the way that it's worded.

Q. Mmm.

THE COURT: JUDGE BORTHWICK TO MS FORD

10 Q. So you need to talk about that as a team, in saying that, you know the Court is grappling with the difficult issue of people who have made an investment where they're able to show, like Leaning Rocks might be one, McArthur Vineyard might be another, the infrastructure is actually in the ground, and so what's required is a bit more water, maybe, or a bit more land, I'm yeah, or a bit more water anyway, or it's in the ground but it went
15 in the ground after 2020 so a bit more land, so the Court is you know that's one scenario where we can see potential prejudice, although the cynic might say, well jeepers you took that risk on knowing jolly well that the permit would expire, you know, for deemed permits, permanent – you know would expire October 2021, and for other permits 2025, and it could
20 be, you know you could take an approach that that was a cynical step to take given those risks. Yeah.

A. Yes, I think one of the issues that has been canvassed is that lack of information round the allocation and where those limits are, and overallocation of catchments because that's different, so there might be
25 a catchment that is overallocated where that risk would be quite high, that they knew that their permit was going to expire, and they went ahead and did it anyway or not, and, but then -

Q. But that in itself could be seen as future proofing activity, you know, so there's -

30 A. Yeah but then you've got the other side of the coin where it could be quite reasonable even if with water being, overallocation not being an issue in that catchment, that it could be quite reasonable to expect prior to the notification of this plan and when our growers were putting in orders for

trees and planning for the future that in an underallocated, or not overallocated catchment, that it could be reasonable at that point to expect that they would have a consent to be able, application to be able to go through for a longer term than six years, and so I think that's where there could be inequalities in this plan.

5

Q. Well, I think as one expert said yesterday, for Lamb and Beef, Beef and Lamb, risk might be tied to expectation, and an expectation, whether that expectation in terms of replacement consent is reasonably held is the open question at the moment; there is uncertainty throughout the country.

10

A. Yes.

Q. And the question for the regional council is trying to grapple with is how do you manage that uncertainty without opening up pathways for large, you know, large scale increasing the land area or irrigation infrastructure which can become stranded when the plan to come comes into being, and it's that plan not this plan which is the most uncertain element. So that's what we're, you know, what we're dealing with is the, is there anybody that we can pull forward and I thought you had actually provided a solution on the basis of still only a six year, but maybe not. You know, we've got all sorts of options being presented to us: wholesale increases, 35 year permits, permitted activities, rejection of the plans, but in amongst that there are people who have made that investment.

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A. Yes, and that's where the HortNZ seems to sit is that comfortable, well as far as possible, okay with that six year consent for the controlled and restricted discretionary bit on the expectation that it was longer.

25

Q. If it is the advice that you should not be investing in anything less than a 15 year consent then there is considerable risk.

A. Yes.

Q. For considerable risk, I would have thought, in terms of what the Land and Water Plan might say.

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MS SANDS

I mean I just I feel that if you could demonstrate that effects were less than minor, it seems to me that that would be a test that could stand the test of time.

THE COURT: JUDGE BORTHWICK TO MS SANDS

Q. Except, how do you test that?

A. Well that is the – no, I don't think it's an easy test in a non-complying activity.

5 Q. No.

A. I think you would have to do the cumulative effects assessment.

Q. I know but you see people have been arguing less than minor effects since oh I think about 30 years, and we've got to the water environment that we have on the back, that we have through that assessment.

10 A. But I –

Q. And that's where the MPS is changing your thinking; it's no longer about that predictive exercise but actually about what does this water body need?

A. Right, but I think you would have to turn your mind to that in the non-complying consent application.

15

Q. Yeah, I know but I'm saying gee that's fraught. Non-comp- how can you, I mean, and I have said this in my decisions, so look it up, but I've said, I said how in an effects-based assessment can you say with your hand over your heart, yes I am confident to make a prediction as to effects which effects on water quality might vary in time and space, which on a consent by consent, applicant by applicant basis, is exceptionally hard to establish, which is why farmers are rightly aggrieved because they have been able, they are being told they are having minor effects but it's not, that's not necessarily how it's panned out in the environment, so that is the framework that you are looking at this in, and I thought you'd made it a relatively easy way forward with the types of applications like learning what, just finishing off or its development, a cut-off of finishing off what it's got, but still on the basis of six years, so maybe you're not making it that easy.

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30 A. I mean that is certainly part of it, but I suppose we also thought of a case, perhaps, a collection, a collective of growers who were able to undertake the sort of science at the scale that the regional council would be having to do, you know, catchment scale.

Q. We've heard that, we have heard that for the last four weeks, "But we'll show you the science".

A. Well, I mean they'd have to do it in a non-complying activity.

Q. Yeah, yeah.

5 A. That's, that's – and yeah.

Q. Well actually, every applicant that is looking for a 35 year consent which I understood is most of them under this plan change are all saying the same thing, we can show you the science, and it's not about, it has been about science-led outcomes. The thinking's changed. What are the
10 needs of water as a body in its right, before we start treating it as a commodity and chopping it up. it's actually quite a different, it's a mental shift. Yeah.

A. No, I mean look, I totally understand that and that's why I think that that test has to be very tough, and that's why I don't think there should be
15 cumulative effects allowed without that non-complying test.

Q. Well, you know, in theory they should never have been allowed anyway, so quite why we thought we could ignore them, who knows, but don't make it, don't, you know, do not create a rod for people's back by opening up the duration, it's – given the risk, that is what I'm suggesting, but um
20 yeah. I'm sure your, but I think your sector could be different unless we've not heard enough from your sector to think about whether it's just the same as any other farming sector.

1715

A. Well I suppose our perception was that horticulture would have a chance
25 of getting through that because of its lesser environmental impacts than some other activities. And so, but I totally, I think they would have to do a cumulative, a catchment scale cumulative assessment, not, not the sort of effects assessment that we all did in the past. You know, where you just look at -

30 Q. Yeah, but did that effects assessment –

A. – your little bit on top of and say it's no different.

Q. Yeah, I know.

A. I'm not saying that would be –

- Q. - but everybody did that effects assessment, notwithstanding the definition of effects included the cumulative effects, like wow, you didn't look at that? But anyway, that's not for me, I've just got a transitional plan, think about it what you can or cannot reasonably secure out of this process and we can come back to that tomorrow.

QUESTIONS ARISING: MS FORD – NIL

THE COURT: JUDGE BORTHWICK

All of this is hard.

QUESTIONS ARISING: MR MAW – NIL

10

MR MAW:

(Inaudible 17:16:05) questions arising, but I'm not going to pursue any of them.

THE COURT: JUDGE BORTHWICK TO MR MAW

- Q. That is not to indicate anything, because you know anything it's a bit like throwing ideas out there, ooh I wonder if you can make a voluntary, are there voluntary mechanisms that you can suggest in terms of bridging the gap and priorities? Well I'm sure there's ten things you can say that would prove that to be a not very worthwhile idea, but yeah.

- A. Oh, the thinking is certainly evolving and the factual understanding is certainly increasing, which helps with that.

- Q. It's still a bit slow, that factual understanding, I think.

- A. Yeah. Well, I'm hopeful perhaps like the bench that we might get it when we hear from the actual abstractors in the next couple of weeks, but this uncertainty in relation to what the non-complying activity pathway might or might not provide for is the key issue and rather than taking that up with this witness, I think I'll leave that for tomorrow.

- Q. And as I said, the fact that this is in your planning witness' brief, I didn't think people had particularly tucked into that policy in the JWS because they weren't mean to be looking at those policies, and I understand they've gone and as I said, done some editing to reflect the schedule but

I didn't think it was on a wider look at the policies at all, so that's something to think about as well.

MS FORD:

5 Just on that note with Mr Hodgson being tomorrow and the extensive questions that Ms Marr faced this morning, would there be any desire from the Court to maybe start a little bit early just being aware of the early cut-off?

THE COURT: JUDGE BORTHWICK

No I was going to start late, I've got so much other work I have to get to on his
10 hearing, I, well that's really over to you and your accurate as to (inaudible 17:18:12) of an uninterrupted go on your cross-examination.

MR MAW:

I've got no credibility left when it comes to estimating time frames I'm told by
15 Mr Cooper and Ms Jackson. When I was thinking about, it's a fair point because we've got a hard cut-off at 2 o'clock tomorrow, when I'm thinking about the cross for Mr Hodgson, my cross prep it was limited to two fairly narrow points, the date range and the breadth of the restricted discretionary activity rule, that was where I was focused and bear in mind, that there's a slight difference as
20 between Mr de Pelsemaker and the other planners in relation to the restricted discretionary activity rule and the joint witness statement, this – HortNZ was not pursuing the type of restricted discretionary activity rule that Beef and Lamb were pursuing and the vast majority of the questions this morning for Ms Marr were in relation to that pathway, I didn't have any questions about the non-
25 complying pathway because the Council's content with that and Mr Hodgson said he agrees with it or has said he agrees with it -

UNIDENTIFIED FEMALE SPEAKER:

Need to (inaudible 17:19:22) -

30

MR MAW:

Now if that situation changes, then I may require a little longer than my half an hour estimate.

THE COURT: JUDGE BORTHWICK

Q. Very good, yes.

MR MAW:

5 So one hour oh no that's reassuring.

THE COURT: JUDGE BORTHWICK

Q. You've got an hour. Yes, okay.

MR MAW:

10 Forty-five.

THE COURT: JUDGE BORTHWICK

We'll be in and out before morning tea, yes, no, yes.

THE COURT: COMMISSIONER EDMONDS TO THE COURT: JUDGE BORTHWICK

15 Q. So how many more witnesses does he have?

A. There's only two.

Q. Just the two?

A. Yes.

20 **UNIDENTIFIED FEMALE SPEAKER:**

Mr Hodgson and then Mr Webb as our second grower.

UNIDENTIFIED SPEAKER:

I'm sure – we should be okay.

25 **MS BAKER-GALLOWAY:**

I confirm my questions is as short as they were today for Mr Hodgson. Yes.

And I just want to make a point about the joint witness statement of planners.

Mr Farrell was specifically not there because it was about the schedule and that will be why they quite responsibly didn't stray into the non-schedule related

30 consequential changes that they might've really wanted to do.

THE COURT: JUDGE BORTHWICK

Q. Yes, yes, so I was a little bit surprised that you did some editing but I do understand why they did the editing, it makes perfect sense and probably you can't stop him, when you get (inaudible 17:20:29) in the room and they're wanting to do that anyway. I did understand that, but as long as you understand that you know those policies do not by any means... not all planners signed up to them. In fact, some had very strong opinions against some of them, but they were back-editing some necessary changes, that was all.

5
10**MS FORD:**

We will discuss amongst ourselves tonight and come back tomorrow morning.

THE COURT: JUDGE BORTHWICK

Q. Good, all right, so what 9.30 or a 10 o'clock start?

15

MR MAW:

10 would be great (inaudible 17:21:01).

THE COURT: JUDGE BORTHWICK

No, I mean I'm really happy to go at 10 because I don't think any of us, we haven't got many que- it depends on how you go in your cross-examination but I don't, I haven't got many questions at all.

20

THE COURT: COMMISSIONER EDMONDS

I think you've got a fair idea of where we're coming from in terms of the questioning and your witness has been sitting down the back presumably.

THE COURT: JUDGE BORTHWICK

He's prepped for (inaudible 17:21:20).

25

THE COURT: COMMISSIONER EDMONDS

You'll be prepared.

THE COURT: JUDGE BORTHWICK

So just make sure Mr Hodgson has our minute, he's got considerable experience and a bit like Ms Marr, doesn't know a lot about deemed permits but knows a lot about planning, is able to assist the Court on these other wider
5 issues, what are the tools in the tool box, should be fine as a gap and need to do something about it.

UNIDENTIFIED FEMALE SPEAKER:

(Inaudible 17:21:43).

10 THE COURT: JUDGE BORTHWICK

Very good, so that will be my particular interest. All right, good. We're adjourned through to 10 with reasonable confidence that we will finish. Right, thank you.

COURT ADJOURNS: 5:20 PM

15

COURT RESUMES ON FRIDAY 16 APRIL 2021 AT 10.01 AM**THE COURT: JUDGE BORTHWICK TO MS FORD**

5 Q. So we are with you and you were doing some thinking overnight, do you want to address us on your thinking before we move on into your hearing, your case?

A. Yes your Honour. Just quickly in terms of deemed permits, Court would like to be helpful –

Q. Yes.

10 A. – in terms of that and we think that your best option would be to talk to Mr Webb this afternoon about it, he has some experience in it.

Q. Yes he has one, yes.

A. And he'll be able to provide some assistance there.

Q. Yes, yes, okay that's good.

15 A. And then in terms of the non-complying, we have done some thinking and we've talked it over as a team and Mr Hodgson is in a position that he is able to assist the Court in that. Ms Sands and Mr Ford's evidence yesterday was on the basis that they understood the door would be slightly ajar for those longer term consents -

Q. Okay.

20 A. – and irrigation expansion. The view of Horticulture New Zealand is that it is still slightly ajar for both of those scenarios and that a non-complying pathway should be a viable option for the true exceptions to the rules and that's only for those true exceptions, we don't want that door to be open to any – for the, for people to just apply for it but it does need to be a true
25 exception.

Q. So then you're going to have to land what it is that you mean by true exceptions, because I don't really know what that phrase means, it's not usually a phrase that I have used when writing decisions, yes. It doesn't make – I know it's actually in currency in Otago because I've come across
30 it in other Otago cases but it's not something that I'm familiar with but I am very familiar with very directive wording in an objective, so that's what you're going to s-

A. It is an option.

Q. Mmm?

A. That is an option, one of the –

Q. Oh no it's not just an option, that's actually what Mr Hodgson's endorsed but now he needs to –

5 A. Yes.

Q. – may need to walk it back.

A. Yes. Yes.

Q. Okay.

A. And Mr Hodgson is in a position to be hopefully as helpful as possible.

10 Q. Okay, well we'll see how we go?

A. Yes.

Q. Okay, thank you.

MS FORD CALLS**VANCE ANDREW HODGSON (AFFIRMED)**

Q. Can you please confirm that your full name is Vance Andrew Hodgson?

A. Yes.

5 Q. And you prepared a statement of evidence on the 5th of February 2021?

A. Yes.

Q. And an updated statement on the 13th of April 2021?

A. I did.

10 Q. And you have – and you attended the planning conferencing on the 7th and 8th of April?

A. I did.

Q. And you have the experience and qualifications set out at paragraph 6 of your evidence?

A. I do.

15 Q. And your statements are true and correct?

A. Yes.

Q. Do you have a summary of your evidence?

A. I do yes.

20 Q. Can you please read that summary to the Court and then remain for any questions of my learned friends or the Court?

A. I can yes, absolutely. I'm wondering if it would be helpful to read my summary, my updated evidence is very short and I'm more than happy to go straight to questions knowing that we need to get into the issue of the non-complying activity status nice and early for clarity.

25 **THE COURT: JUDGE BORTHWICK**

Q. Well, with that in mind, did you just want to read paragraph 5 –

A. Yes, sure.

Q. – I mean we have actually read this, so it's over to you whether you want to emphasise any point but –

30 A. Right.

Q. – but it seems HortNZ's position has changed –

A. Mhm.

Q. – and I think everybody understands what the position is relative to controlled or restricted discretionary, although Mr Maw no doubt will have questions anyway –

A. Yes.

5 Q. – about those provisions, what we don't understand is your interpretation of the non-complying activity policy and its application?

A. Sure. I can be – hopefully I can be clear on that, I – my interpretation is that it is a closed policy, the avoid wording has been introduced into the 14 March/April version, a version that I support closes the policy in that case. As per my evidence, as I understand the framework, there is the option to navigate through 104(d) via the no more than minor affect spaced merits arguments, but you end up in section 104 and a loop back to the objectives and policies in the plan and as those policies are written, it would seem to me to be extremely difficult to mount a case for an activity to pass through that.

10

15

Q. And by that do you mean, assuming that you're through – as you quite rightly say, if you're through one of the gateways which in this gate, the particular gateway I understand Hort will be pursuing is the no more than minor gateway, if you're through that your intersection 104 then it becomes a full, the full assessment under s 104 including the objective and policies of this plan change. Relative to what are you saying, relative to the six year duration policy which is policy – I've got the number in front of me, it's policy 10A2.3. Can Hort mount how would that policy be applied were Hort to be seeking longer than six years?

20

25 A. As I see it that would be, there's a real tension there and I'm obviously here as a planning witness.

Q. And independent planning witness exactly.

A. An independent planning witness.

Q. Yes.

30 A. Exactly and in my opinion the plan is absolutely predicated on the short term duration, the six year consents and that policy loop closes that door effectively on applying for longer term consents.

Q. So does that mean that you can't imagine what counsel for Hort can imagine that is that a longer than six year consent could be granted under a non-complying pathway?

5 A. I would be speculating on the types of activities that might be able to navigate through them, I'm not experienced enough in those types of consents, in those types of applications that might be put together –

Q. Yes, yes.

A. – but it would seem pretty difficult, yes.

10 Q. Yes and is it anything to do with a type of application or is it more to do with the strong wording of the policy which closes it out it seems to me?

A. Yes I think it's the strong wording of the policy.

Q. Yes, okay. All right and you support that?

A. I support that, yes, yes as I've done in my evidence, yes.

Q. And why do you support that?

15 A. I think that cuts to the point or the purpose, sorry of Plan Change 7.

Q. Okay, all right. Very good, I understand where you stand, so we're just going to throw you over to Mr Maw who's –

THE COURT: JUDGE BORTHWICK TO MR MAW

20 Q. So you thought that was going to go somewhere else didn't you overnight?

A. Yes I did. I did.

Q. Okay, do you need a moment?

A. My junior's told me off for pacing or doing circles here so I'm going to stay still.

25 Q. No, you do what you like. Do you want a moment because I – yes, I can see that you might have...

A. Yes I need, I think I do to be fair. Can you just give us five minutes?

Q. Okay good we will have – how about we take five?

A. Yes.

30 **THE COURT: JUDGE BORTHWICK**

We're going to take five, but yeah, okay, but I appreciate your evidence as an expert and the basis that you've come, all right, thank you.

MR MAW:

Thank you.

COURT ADJOURNS: 10.10 AM

COURT RESUMES: 10.15 AM

5 CROSS-EXAMINATION: MR MAW

Q. Good morning Mr Hodgson.

A. Morning.

Q. I want to understand the areas of difference that remain between you and Mr de Pelsemaeker in relation to the provisions are now recommended.

10 A. Mhm.

Q. On my analysis there are two outstanding areas where you perhaps take a different view. The first relates to the date range for which water take metering data can be used and the second matter relates to the wording of the matter to which discretion is reserved in the RDA rule in terms of using other methods to calculate an alternative rate and / or volume of water. Now have I understood correctly that those are the two remaining issues where you perhaps take a different position?

15

A. That's correct. Yes.

Q. I'd like to explore each of those with you, if I may and we'll start with the dates. So, when I'm talking about the dates perhaps, if I can take you to the controlled activity matters of control?

20

A. Yes.

Q. And I'm working off your updated statement of evidence dated 13 April 2021.

25

A. Yes.

WITNESS REFERRED TO RULE 10A 3.1 - UPDATED STATEMENT OF EVIDENCE

Q. And I'm on page – I'm on rule 10A 3.1. And there if we look at Roman IV, you'll see the date range had previously been recommended as the period 1 July 2015 to 30 June 2020?

30

A. Mhm.

Q. And you've recommended that that be changed to any water years 1 July to 30 June for which water metre data is available. Now when you think about the June 2020 date, do you recall that Mr de Pelsemaeker is concerned that if that date is removed, such that any water metering data can be used as we transition into the future, there is a potential risk that takes could be ramped up and that ramping up might not be reflective of historical use and that concern of Mr de Pelsemaeker is heightened by the transition to using maxima rather than average maxima in the schedule? So when you think about the use of future data, do you accept that there is a potential risk that water takes could be ramped up over that period of time to increase the historical rate prior to consent renewal?

A. Yes. Yes that risk would exist.

Q. And when you think about that risk, that risk could be seen as a risk to the environment if that risk is allowed to continue? Alternatively if that risk is not allowed to continue, a risk to the abstractor? And when you think about risk through that lens and you think about the paradigm shift in relation to the management of fresh water in New Zealand do you accept that the environment should not bear that risk?

A. I agree.

Q. So in light of that and in light of that risk, do you accept that the date range should stay at June 2020 to avoid that risk to the environment?

A. Yes. The change that's reflected here, as I understand it, fell out of the joint witness statement from the primary sector group who advised that using a broader date range would enable a more representative assessment of climatic conditions and I guess the historical use over that period. But I agree that there is a risk around having an open approach to that technique and I was certainly aware of that discussion yesterday in regards to whether not having an earlier date might then enable less efficient water systems and allocation or historical use to be used in that circumstance. I'm not supportive of, I guess, gaming the water because of that risk to the environment, and yeah, so I'm not adverse to introducing parameters.

1020

Q. So when you think about introducing parameters, the, perhaps, clearest and most direct parameter would be putting the date of June 2020 back in to simply avoid that risk.

5 A. My understanding is that date responds to a water year, which would seem to be more appropriate than a notification date, for example, of March 2020 for that circumstance.

Q. And the same would apply in relation to the matter of control (vi) which relates to the annual volumes.

A. It would have to be consistent.

10 Q. Now, you were in court yesterday when you heard some discussion about the 2015 date and the potential risks of system change not being reflected when using maxima, and to put that in context, if a system's changes at some point in the past from border dyke or wild flood irrigation to a more efficient, say, spray irrigation, the risk of using historical data relating to the inefficient historic methods of irrigation might give a number which does not reflect historic usage for the current system, and when you think about that risk, is that, perhaps, a gap in relation to this part of the rule that might need to be addressed?

15 A. Yes, it might, and I guess there are other ways of dealing with it too. It might be that there's a restricted discretionary activity pathway that those outside of the date range are kicked into. That RDA would enable that assessment of whether there is some gaming going on in terms of the data that's been put up, but in the controlled activity, it's a very tight framework around the historical use proved through the schedule 10A and consented in accordance of what it's been applied for, so it's tighter, limited.

25 Q. So when these adjustments were recommended in the joint witness conferencing, is it a fair reflection to say that you were tight on time as a group and perhaps hadn't really considered some of the implications of removing the limits on that date range?

30 A. It was a tight timeframe, yes.

Q. I want to now discuss with you that your understanding of the restricted discretionary rule, and in particular, the matter of discretion A, this is the one that commences with: "Within the limits of historical use, it has

established, through consideration of water meter data and other relevant methods and data.” Now, you will recall that Mr de Pelsemaeker has expressed some concerns in relation to the breadth of the meaning of the words “other relevant methods and data.” When you think about those words in the context of this matter, to which the discretion is reserved, what do you understand those words to be pointing at?

5

A. So the discussion that was had at the conferencing – I might just add that I’m certainly no expert in the types of data, in the types of models or guidelines of information basis that might inform that assessment – but the discussion and the result was the need to provide a very broad range of options, of information bases that could be put forward in an application to prove historic use, so that was the background and the intent in terms of that matter of discretion, but I’ve talked to Mr de Pelsemaeker about it, I know he’s keen to see some tighter criteria or some criteria in there that provides some parameters around what might or might not be acceptable. That would seem reasonable and worth exploring.

10

15

Q. So when you think about that matter of discretion, the outcome that you’re seeking is still an outcome of reflecting historical use.

A. Absolutely. I’ve only ever seen that rule as an extension of the controlled activity historical use rule.

20

Q. And so, when it comes to the drafting there, in light of the concerns raised by Mr de Pelsemaeker, you wouldn’t be opposed to tightening up that wording to ensure that those other methods were very clearly only being used to establish historical use?

25

A. In my opinion, it must, yes.

Q. And, for example, using a method that is used to calculate reasonable use in a nine years out of 10 situation might not be reflective of historical use?

30

A. I’m not an expert in that area, but I understand that that might be useful in forming the picture but it might not be the only data source that you might use in that assessment.

CROSS-EXAMINATION: MS BAKER-GALLOWAY

Q. Good morning.

A. Good morning.

Q. I'm actually just going to start with a paragraph from counsel's opening submissions yesterday – I don't know if you've got a copy of that handy, see if somebody's got a copy – and it's paragraph 19.

5 **WITNESS REFERRED TO OPENING SUBMISSIONS**

A. Sorry, what was the paragraph?

Q. 19.

A. 19.

10 Q. So it's the second sentence, the second half of that paragraph, have a read of that sentence. I'll read for the record: "Inclusion of select environmental outcomes which are to be set through the national objectives framework of MPSFM 2020 should not be included in PC7, as this selection could lead to a judgement outcomes are important, despite council not having taken consultation or values setting process," and so
15 that statement very clearly states Hort NZ's position that it's not appropriate to cherry pick statements of what environmental outcomes should be achieved and shouldn't be achieved. So do you support that position in terms of PC7?

20 A. Yeah, I see the issue of environmental outcomes being really difficult to include in PC7 as a process plan change. It's not that it doesn't deliver on some environmental outcomes, which I understand it's the point of carrying forward existing conditions of consent or deemed water permits where there are minimum flows or cessation conditions or rates of take, whatever they are. That has an outcome, which might be as best as
25 maintain in terms of the environment, and the maximum irrigated area, as well, will deliver on some of those outcomes, but very hard to – I don't know if cherry pick is the right word, but it's quite hard to then include a full set of environmental outcomes without having gone through that process, which is where the (inaudible 10:29:23) leads us.

30 Q. That's right. In your evidence-in-chief at para 45 and 46, when looking at objective 2.1 of the NPS, consistent with what you've just said, you've said it's unclear how far PC7 can give effect to Te Mana o te Wai and objective 2.1

A. That's right.

Q. And then at 46, you also state that PC7 must still contribute positively to the objective 2.1 in the MPSFM.

A. That's my opinion, yes.

1030

5 WITNESS REFERRED TO PARAGRAPH 65 OF EVIDENCE-IN-CHIEF

Q. Yes. And at your paragraph 65 in your evidence-in-chief, when looking at the objective of plan change 7, like Mr de Pelsemaeker you took guidance from the QP website on what an objective is.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

10 Q. Sorry which paragraph are you up to?

A. 65.

Q. 65, sorry.

CROSS-EXAMINATION CONTINUES: MS BAKER-GALLOWAY

15 Q. With the extract from the QP website describing it as, "an objective is a statement of what is to be achieved through the resolution of a particular issue", so if plan change 7 were to express an environmental element of its objective, is one of the issues the effect of the extent of allocation of water currently?

20 A. Yes.

Q. And one of the – what is to be achieved in an environmental sense is to stop any further degradation associated with further allocation, isn't it?

A. At best it can, yes.

25 Q. At best it – yes. And everyone I think is in agreement that extraction or abstraction is only one element and PC7 can't hold the line necessarily in terms of other adverse effects on fresh water such as water quality?

A. Agreed.

Q. Yes. And you were present yesterday when Ms Marr gave evidence?

A. I was, yes.

30 Q. And the terms Ms Marr used in her evidence were terms like, "holding the line" and "changing the direction of travel", do you agree that those are helpful concepts in terms of the environmental outcome that's hoped for in – from plan change 7?

A. Absolutely and I think that's part of that journey along – giving effect to Te Manu te Wai.

THE COURT: JUDGE BORTHWICK TO MS BAKER-GALLOWAY

Q. Sorry, I actually missed those two concepts. What are they again?

5 A. Holding the line.

Q. Yes.

A. And – sorry it was correcting the direction of travel.

Q. Oh, correcting the direction of travel. Yes.

A. So as useful catch phrases –

10 Q. Yes.

A. – in terms of those environmental outcomes associated with abstraction.

MR HODGSON:

Agreed.

15

CROSS-EXAMINATION CONTINUES: MS BAKER-GALLOWAY

Q. So, have you looked at Mr Farrell's supplementary evidence for Fish and Game?

A. No I'm sorry.

20 **WITNESS REFERRED TO MR FARRELL'S SUPPLEMENTARY EVIDENCE**

Q. That's okay. So Mr Farrell's supplementary evidence, if you go to his appendix.

A. Yes I'm there thank you.

25

Q. And you'll see in objective 10A 11, the blue writing is Mr Farrell's proposal which is to add into the objective an environmental element that is specific to adverse effects of water abstraction and that relates to protecting the health and well-being of water bodies from further adverse effects from water abstraction. So in terms of an expression of a general environmental objective that doesn't select some elements and not others, what's your impression of something along those lines?

30

A. I would have no problem with that objective. In as much as it is able to be achieved through the very limited range of tools that plan change 7 provides.

RE-EXAMINATION: MS FORD

- 5 Q. You were asked by Ms Baker-Galloway that – whether PC7 mu– whether you consider that plan change 7 must still contribute positively towards the MPSFM, can you just expand on what you think contributing positively towards that within the tools of PC7 means?
- A. Giving effect to priority 1 in the first instance that the health and well-being of the river or the, sorry, the water bodies is the first priority is put first. And in my opinion plan change 7 achieves that through those methods of “holding the line” and making some measures to halt degradation as far as it can.
- 10 Q. With the objective of – as you just said to give effect to that first objective, what about the objectives of Te Mana o te Wai?
- A. A little hard to do outside of an off-process I think, in terms of those other priorities. Yes. Not much further travel could be made.
- 15 Q. You’re also asked about what environmental outcomes could be included, if any and do you recall your answer to that question?
- A. No, I’m sorry you...
- Q. You said that the maximum irrigated area is an outcome as well that could be included that could go towards that, could you expand on that a little bit please?
- 20 A. Yes, no, what I was saying there was that my understanding of the environmental outcomes at plan change 7 might be (inaudible 10:37:32) was quite limited and limited really to that that could be achieved via carrying over the existing conditions of the permits and the expiring consents. And also in regards to that – the limit that’s put on irrigation area.
- 25 Q. Do you think that the limit that is being put on the irrigation area is appropriate?
- A. Yes, it needs a limit. It needs a threshold and in my experience in nutrient management plans, plan change 1 in the Waikato for example and in the Horizons with plan change 2, it is appropriate that a land area limit be used as a control. Particularly where there is some uncertainties around discharge effects.
- 30

Q. Is there any options for that irrigated area to be expanded on through the cascade of rules in plan change 7?

5 A. That's a non-complying activity and as I said at the start of my opening, that pathway looks particularly closed to me via the avoid policy that's there. With the irrigated area being an outcome that could be positively made, through that irrigated area, is it a close door of the non-complying appropriate?

10 Q. I'm sensitive to the issues that I heard yesterday in regards to Ms Marr's evidence around those farmers that might have committed to an area of expansion via – giving effect to earthworks or buying infrastructure or putting infrastructure in and I understand that Port New Zealand witness, Mr Webb will explain his issue he's got with tree purchase, purchasing plants that he had hoped to put into the ground post the March 2020 limit, that's in the plan. So, I'm aware of that issue, that problem, but I guess
15 the issue is how that might be addressed in the plan, that, as I say it's a controlled – sorry, it's a non-complying activity at the moment, it's hard to really wedge in some flexibility for that type of an activity. If it was to be provided then I don't know that I'd be comfortable doing it as another rule, it would probably be something that maybe could be accommodated in
20 some flexibility into the policy, but it would still need some parameters, it couldn't be that unfettered irrigation expansion could occur over the life of this plan, over the next six years; I think that cuts to the purpose again of Plan Change 7 and would have a, potentially have a significant adverse effect, and in terms of horticultural interests I would expect there be a concern around how that might affect future allocation decisions as well.
25 But yeah, maybe there's an option for some flexibility around dealing with those particular unfortunate circumstances that have been caught by the transition into this plan, but as I say you would need some parameters around that. I mean, maybe, maybe the date could be moved. I'm not
30 sure.

1040

Q. Have you turned your mind to other than moving the date, what other parameters might be possible or what that might look like through the plan?

A. Turning back again that to experience I've had in the nutrient management plan changes that have come in in the Waikato, there is the provision in there for an area of commercial vegetable production growth above a limit that's been set a trans- a limit in a transitional plan, the parameters around that are based on an area approach so it is from memory it lines up with the national environment standards for freshwater management five-hectare threshold above which an horticultural activity would be required to supply a farm environment plan when those regulations come in. so that's an approach is to use an area, a land area allocation. The difficulty there is quantifying the effect of that and indeed the cumulative effect that that might have as well, so, and I'm not sure where you would set that limit.

Q. So are you suggesting that irrigation expansion could be provided for through one of the activity rules?

A. No, I would suggest you would want to maintain the integrity of the plan with the non-complying activity status for that activity, but maybe there's an opportunity to provide a more friendly policy approach.

Q. Thank you.

THE COURT: JUDGE BORTHWICK

Q. I think the issue that you've had and it's the issue that many have had in seeking greater flexibility is to provide the four corners and we've been saying that now for the last four weeks, what are the four corners, how are these things bound? So, that a section 32 analysis can be done actually by your planner and by the other planners, so the issue has been live throughout the hearing. Anyway, I've got a question for your witness. I'm assuming under the non-complying activity rule that horticulturists can apply under a non-complying rule either to increase the volume or increase the maximum rate, the maximum area, provided that the effects of both are not more than minor, and that's a pretty tough test, but that is the test, that is the gateway that they would be coming through, and that would be limited effectively by Policy.3 to a six year consent, is that your understanding?

A. That's my interpretation, yes.

- Q. Yes, okay. I was really interested, I am interested in the objective and I was very interested in your evidence where you clearly take us through Tom de Pelsemaeker's evidence about what he says the purpose of the objective being, and I was, without any environmental outcome, and with, and you've talked about what the limitations are there, you know, just to what extent this plan change can work on environmental outcomes is fairly limited, it's limited by the rollover of conditions which attach to the environment, such as minimum flows, and you will get some impact through the limitational maximum area as well, but so without an environmental bent or a process bent, I was just wondering whether they were, whether the signals that the region wishes to send out through this plan change, that objective, are clearly articulated or sufficiently articulated, or whether there needed to be a greater signalling as to what the outcomes are, and had in mind the, you know, the matters that you list at paragraph 20 and 21 of your evidence, where you are quoting Mr de Pelsemaeker, is there anything else that needs to be brought forward such that the outcome is indeed secured? You might want to have a look at what you've got in the evidence in chief.
- 5
- 10
- 15
- A. I don't think there is. I mean, it's, yeah, t's the tension that we're in with this plan change and the scope of it, there's obviously a lot more to come in the next round and you know the value setting exercise is really important and then reflecting that into a proper plan. In terms of how this plan can go, very limited.
- 20
- Q. Not – mmm. Should this plan change if there is scope or even under 293, for example, more clearly articulate your paragraph 21C and here's it's the reduction of risk of further environmental degradation and unforeseen or indeed foreseen economic hardship, so that there's clear signalling now to the community that we, that over the next period are moving into an area of considerable uncertainty actually for the community as a whole, and signalling is, "Do not invest in further irrigation change" so that in particular should that be brought forwards into the objective?
- 25
- 30
- A. Oh well in principle, yes, absolutely I think that would be very reasonable. It is the intent of the plan, and if that can be made clearer in that policy framework then absolutely, I agree.

Q. Okay. have you turned your mind to deemed permits?

A. No. Only, only late last night in terms of –

Q. Late last night.

5 A. – looking through the memo. What a challenge. Look, I can't give you a lot of help there, I'm sorry.

Q. Okay.

A. We've certainly got a grower that can –

Q. Talk about it, mmm.

10 A. – I understand, provide some on the ground experience, but I can't. and we had a team talk about how we might be able to help, and the best we could come up with would be to be able to provide some examples back to the court of where Horticultural New Zealand have been involved in coordinating water user groups.

Q. Mmm.

15 A. And there's an example in the Hawkes Bay with Twyteford, as I understand it. HortNZ were the catalyst for bringing growers, and from memory about 220 consent holders ground and surface water takes together, and initially sharing that process, sharing the group, coordinating the group in terms of outcomes that were being achieved
20 through a plan change process but certainly in terms of assisting with water sharing and working together, and I don't know whether much more can be achieved in terms of this plan around that, I mean it's yeah, hopefully there's a - there's an element of collaboration I understand from Mr Webb that you know this, there's a real informality around how this
25 stuff plays out in the community.

Q. Mmm.

A. And probably a lot of that is legacy going right back to when these permits were established, and those that are in the community and their knowledge of each other and their systems, but formalising that just, I
30 don't know how to do that.

Q. Yeah, and I'm not even sure whether formalisation is the right, necessarily the right way to go, because I am not sure that those holders of those deemed permits would want the regional council interfering in what seems to be non-regulatory methods of organising themselves as a

community, either sub-catchment or catchment. Would, is that your understanding of it?

1050

5 A. That's right, but I mean, there would be a place, I think, in a plan that signalled those non-regulatory methods, and signalling the Otago Regional Council's role or responsibility or assistance in pulling that together, but it's not easy. Sorry I can't give any more.

10 Q. No, there's just been some evidence that some deemed permit holders, if no recognition was made, those priorities cease to exist on 1 October, I suppose, for want of a better word, might go rogue, and there would be chaos on the water body, and, you know, it's easy to say, oh, yes, they'll go rogue and there'll be chaos, but the likelihood of that happening, that's what I was trying to get a sense of, and I haven't got there yet.

A. No, and I can't assist there, but I'm hoping the farmers might be able to.

15 Q. All right, and the last question I had, I was interested in your evidence on a s 128 review, because, again, a lot of sectors, they said just review us, you know, you can get a new land and water plan that determines that there is over-allocation, just review us, review our consents, and I didn't think that that was an approach that you were in favour of.

20 A. It's not, no.

Q. No.

A. No, it's not. I see some significant challenges there, and setting up expectations that may not be able to be realised.

25 Q. Yeah, yeah, and that's what a permit grant does now, it sets up expectations, encourages investment and continued use of water in the expectation that nothing will change should the plan come. Would that be fair?

A. Absolutely.

30 Q. So permit holders might be cognisant of a review clause, but whether they factor that into decisions being made in terms of the exercise of consent, that's something. Do they, or do they not, or do they say that's just a risk for the bank?

A. Well, that's right. I mean, the legacy, as I've always understood it, is that land users assumed that their consents would be resumed, assumed they

would roll over, assumed they would get what they've always had, but that's not the case in all circumstances, and who knows what the new plan's going to deliver, so it's a very risky scenario to be introducing conditions or framing consents purely around review clauses, I think.

5 Q. Anything else you want to add to that conversation about the effectiveness of that method as well, to bring, I guess the entire region under the framework of a new land and water plan, as opposed to the effectiveness of this method, where a substantial number of permits are up for renewal before 2025, and putting them on short term consents.
10 Which of the two methods is more likely to be effective in terms of achieving the outcomes for a new plan, a review or a short-term consent?

A. A short-term consent, absolutely.

Q. And why do you say that?

A. Well, the primary issue with the review clause is that the consents can't
15 be cancelled, and there's potentially a significant shift in the region in the allocation framework, and that has to happen, that's fair, that's the result of the new NPS and it will be the result of the (inaudible 10:53:50) process, and if we allocate purely on a review clause situation, that ability to claw back, if we have to, it's going to be very difficult. I assume there's
20 some significant administrative issues in trying to do that for the council as well, so it has to be factored in as to whether that's an efficient and effective method.

Q. Yeah. The administrative issues for the council, is that in terms of the number of permits that would need to be reviewed?

25 A. Absolutely.

Q. Yeah, okay, and I guess the confidence capacity of council staff, technical staff, together with consultancies to be able to do that.

A. It would appear very tricky.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

30 Q. Mr Maw asked you about the restriction discretionary activity, and I think that was clause A, the first matter in the restricted discretionary activity. Have to find it myself. And you said that you would agree to tightening it up, so I wondered if we could just explore how you might think it could be

tightened up. Perhaps not the specific drafting, but more just understanding the reach of it, because you did answer some questions about that, but I was left a little puzzled as to what you meant, basically.

A. Thank you, Commissioner.

5 Q. So what do you see is the purpose of this matter of discretion?

A. Yeah, so that response was in regards to, I guess, the breadth of the information sources that might be able to be drawn on to inform an assessment of historical use, and I'm sorry, I'm not across all of what might be relevant, and I'm aware, certainly through the expert conferencing, of a variety of information bases or guidelines. The hydroelectric sector talked about synthetic data, various models, various guidelines. My assumption is that there is a very broad range of information that might be available or might be used to inform that assessment and to determine what that historic use is, but it's beyond my
10 experience to be able to tell you what that might be, I'm sorry.

15 Q. So should that still be in terms of some sort of reference period, as was being talked about with the controlled activity?

A. Yes, yeah.

Q. Because otherwise, it has the same problems as the controlled activity, doesn't it? You could be going back to a very old date where there was inefficient wild flooding and border dyke, and that's not what's happening
20 now.

A. No, I agree. I mean, the RDA is just an extension of that controlled activity pathway. It needs to be subject to those same standards, those same entry conditions, and that's where those date thresholds become
25 relevant, they need to be consistent across both rules.

Q. So if you're working within that, then, would you see A as being different ways you might be able to generate the information to pin the historical use in that period?

30 A. That's how I saw it.

Q. Is that how you see it?

A. Yes.

Q. And you did say, you referred to a broad range of possible methods, and you said you didn't know about things like guidelines or other methods

that might be used, so what were you thinking of when you made that comment?

A. Well, yeah, again, the synthetic record data, may be paper records, may be the use of – I don't know much about Aqualinc other than it is, I understand it, a guideline or a tool to measure the need or the demand of water for plants. Whether there's some relevance in that, in being able to assess what might have happened in the past for a particular grower that might not have water metering data for whatever reason – I think Mr Webb is going to provide some evidence and examples of the problems he's had with his water metering, and that may well be a situation where this restricted discretionary activity pathway might be more appropriate.

Q. So some sort of tool, you mean, that might look at what was the operation that was being carried out in that period, and what's the sort of irrigation infrastructure, and what's that likely to have resulted it during that period?

A. That's right, yes.

Q. Is that what you're thinking?

A. Absolutely, yes. I guess there's some information that may be able to be gleaned from the infrastructure that's there and how much water might pass through that system over a given time, and maybe that might form part of that picture that's been built up for the purposes of that assessment. The thing with the restricted discretionary activity pathway is that, you know, this method provides Council with that discretion to analyse that data very thoroughly, and there are also the mechanisms in the Resource Management Act to test that or require more information if that's deemed to be insufficient –

1100

Q. Right.

A. – or if there's a problem with it, so it's a back-stop.

Q. Right and then the matter of discretion would mean the decision maker could look into that and make a decision on it?

A. That's the way it should work, yes.

Q. Yes. Okay, so that's helpful, thank you. So just in terms of the questions in relation to the objective of this plan change, will it, those – I might broaden the question out a little and in terms of the environmental

outcomes, this plan change is trying to achieve, this whole historical use of the water, isn't that another environmental outcome that this plan change is directed at in terms of environmental outcomes?

A. It is and within that is the pulling back of that paper allocation –

5 Q. Right.

A. – as I understand it as well which is an environmental outcome, it's removing that risk from the environment of someone acting on that paper allocation, yes.

Q. Right, so should that be reflected in the objective?

10 A. Yes, yeah it should.

Q. Okay.

A. It's a real, yes, it's hard to know where to stop -

Q. Well –

A. – with the objective. Yes but no, I appreciate it, that –

15 Q. Yes I just wondered if that was one of the major -

A. Yes.

Q. – environmental outcome gains that –

A. Yes agreed.

Q. – you get out of this plan change. Would you see it like that?

20 A. Yes, yes I do. I certainly see that, yes, particularly dealing with that paper allocation issue, I see that as being really important for the future allocation decision making.

Q. Right, well thank you. I don't have any other questions.

QUESTIONS FROM THE COURT – COMMISSIONER BUNTING -NIL

25 QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. And just to round that out, why is dealing with the paper allocation important for MPS decision making to come in the future?

A. Well that's where our value setting process will kick in –

Q. Yes, okay.

30 A. – and we'll make those decisions at an FMU level at a catchment or a sub-catchment level with iwi, with our communities, with our users and decide who gets what really and for what purpose and for horticulture I

can see that there will be valid arguments that will be put forward around food security, food supply and that will help inform that application, discussion.

5 Q. And why does paper allocation in relation to those deemed permits all – how does paper allocation frustrate the decision making process to come? I'm assuming that your view is that it does frustrate the process?

A. It does, I mean there's a quantum of water -

Q. Yes.

A. – that's been tied up –

10 Q. Yes.

A. – and unavailable, potentially unavailable for redistribution, reallocation for what either purpose, whether it's a particular environmental outcome, whether it's another user sitting in priority 2 and 3 in Te Mana o te Wai.

15 Q. Yes. Very good. All right, no, understand all that. Anything arising from the Court's questions?

RE-EXAMINATION: MS FORD

20 Q. Her Honour asked you a question around clarifying your understanding of the non-complying rule for expanded irrigated area and noted that it would be open to a volume and area increase, do you recall that question and that conversation?

A. With me?

Q. Yes?

A. Yes, yes.

25 Q. However, policy 10A.2.1 is an avoid policy that says to avoid granting resource consents for the permit – replacement permits except where there is no increase in the area under irrigation?

A. Mhm.

Q. How can that still – how can an increase in irrigation then still fit under that non-complying?

30 A. Well that's where that policy loop becomes very tight. That looks – I can't advance a case that I would know of where it might navigate through the 104D test and then through 104 in regards to this, so as I said earlier, if the Court was of a mind to make some change around accommodating a

level of irrigation expansion and maintaining the integrity of that non-complying activity pathway, but needing to add some friendly matters into the plan, then it would be necessary to make a change to that particular matter in the policy.

5 1105

Q. Because otherwise the non-complying rule for an irrigated expansion of an irrigated area would essentially be closed, is that correct?

A. That's right.

10 Q. And that wouldn't fit with the intent of a non-complying rule if a doorway for an exception was closed?

A. Only as much as the non-complying activity status is expected to be a very hard pathway.

Q. But that pathway should be a pathway nonetheless that can be pursued?

A. Well the alternative I suppose is a privet activity status.

15 Q. And your understanding of HortNZ's case is that that prohibited activity status is very detrimental to the industry in Otago?

A. Detrimental, well I understand it's a problem if there is a privet activity status yes.

20 Q. And so the pathway, the solution could be to have friendlier policies which allow for expanded irrigation area through or provide some friendlier policy for that expansion in the irrigation area through that non-compliant pathway?

25 A. That's what I've said but I think, yes, you wouldn't want to open up that rule per se across this transitional plan. There's a real problem there but if there is a need to provide a little wriggle room, then that's the only avenue I would expect you would be able to take.

Q. Thank you.

THE COURT: JUDGE BORTHWICK

30 Q. All right, thank you. Thank you very much for your evidence. So as I said before, you are in the same position as many others, what are the four corners of the activities that you see going through the doorway and it's not unusual for the Court to be presented cases where individual growers have committed to an irrigation expansion and are caught out by this plan.

In saying that, that's unfortunately what happens across the country with plans. Does the Court respond? Does the Court not respond? That your task always was to get us – to show us how the wide doorway and the circumstances that it might apply.

5

MS FORD:

Yes your Honour.

THE COURT: JUDGE BORTHWICK TO MS FORD

Q. And you haven't got there yet. You haven't got there.

10 A. We hope that Mr Webb will be able to provide a –

Q. It's a planning issue.

A. But if you're looking for an example where –

Q. Mmm, mmm.

A. – what that might look like, we hope that Mr Webb will be able to provide
15 some guidance on that, from a farmer perspective and if you would like
further guidance we would be more than happy to provide a memo early
next week –

Q. Yes.

A. – just setting out what that looks like for Horticulture.

20 Q. Yes, but then the question then becomes, can you land it in policy in a
way that doesn't throw the door wide open, because in the last case, Beef
and Lamb, the planner there was also trying to nudge that door just a little
bit and tightly control circumstances, but testing with her how wide that
door was, it was wide enough to take in all of Manuherikia catchment,
25 possibly Cardrona, possibly Arrow, not at all what she intended. This is
difficult stuff in terms of writing policy around it?

A. My understanding from Ms Marr's evidence yesterday was that it was
trying to open that up slightly through the –

Q. Yes.

30 A. – RDA rule.

Q. But she didn't.

A. Yes.

Q. The problem was she didn't.

A. Yes.

Q. And what I'm reflecting back is that this is harder than you think?

A. Yes.

Q. Yes and the burden then comes on your witness to do it?

5 A. Yes and I guess that's where our case differs from Beef and Lamb's case yesterday is that we accept that it should be a non-complying activity, but that it shouldn't be a shut door, there needs to be some sort of wiggle room in that policy as opposed to that avoid policy.

1110

10 Q. But then you needed to bring it that in planning evidence and thus far your witness is quite clear where he stands and we will consider, respect his position and will consider that, and if you want him to consider another scenario you need to be careful to put the scenario to him and consider how in a policy sense can that be expressed in a way that just doesn't
15 open slather, because where as your client may be looking for a narrow door that narrow door will be pushed open, or could be pushed open by people who are not horticulturalists.

A. I guess we would like to offer a memo early next week just expanding on that to hopefully be of assistance to your Honour.

20 Q. Not sure of it – well, we need to talk generally actually about what on earth are we doing in the last week of the hearing, where people might come back. Yes.

MR MAW:

25 Yes I was going to address you on this issue and as you have put it, the four corners of parties' cases, once this part, once this case is concluded today, just given we are rid of the hearing. And I wonder whether we might pick that up at that point.

THE COURT:

30 Yep, yep. Yep. I keep on referring to minutes that I am meant to be writing and indeed I am writing but every time I get to a minute the content of the minute changes. Yes. We will pick it up again, as Mr Maw suggests, because people might have, will have to come back and what that looks like following further

and formal conferencing over the schedule, I don't know. The Court certainly has questions that it wants landed in terms of the schedule and there are other questions that the Court may have. Okay. Thank you.

5

MS FORD CALLS**JOHN SIMON WEBB (AFFIRMED)**

Q. Welcome. Thank you for being here today. Can you please confirm that your full name is Simon Webb?

5 A. It is.

Q. And you provided a statement of evidence dated 5 February 2021?

A. I did.

Q. Do you have any corrections to make to that?

A. I do, there's two corrections in there.

10 Q. Mhm.

A. In paragraph 4, we leased 30 hectares of land.

THE COURT:

Q. So, paragraph 4, edit the first line to delete 6, and write...?

A. To delete "a further 6", and we leased 30 hectares.

15 Q. A further 30, or just?

A. "We leased 30 hectares".

Q. Okay. All right.

A. And also in paragraph 6 in the last line, "We relinquished and sold this water stake".

20 Q. Mhm.

EXAMINATION CONTINUES: MS FORD

Q. Hopefully, as you would have heard, the Court is very interested in the deemed permits, and as I understand you have some experience of know of people that have deemed permits, and you said that you relinquished yours. Can you just talk through your understanding and experience of deemed permits, please.

25

A. Okay, so we currently have a deemed permit out of the lake, and in the past we've held a deemed or many deemed permits for a water right out of the Pisa Ranges, so yeah that was, they date back to the 1860s and have been running to our property and used for horticulture since the 1890s. These deemed permits were always on a priority, so we always

30

had a first priority of the main water body of our main deemed permit, I suppose.

1115

THE COURT: JUDGE BORTHWICK

5 Q. Is that the lake one?

A. No, this is out of the Parkburn Creek.

Q. Oh, Parkburn Creek, you were the first priority? Okay.

A. Yeah, so that's probably about 15 kilometres up the road from Cromwell.

THE COURT: COMMISSIONER EDMONDS

10 Q. So this is the one that you relinquished, is that right, the Parkburn (inaudible 11:15:25).

A. We sold the right to the Parkburn Creek.

Q. So in the past?

A. It's in the past.

15 Q. You're referring to this in the past?

A. Yes.

Q. Right.

A. So we had the first right, and so we had the second right out of another catchment, the Lowburn catchment, so in the early spring, we worked in together, so in the early spring, we would allow the second and third right holders of the Parkburn to get water for their farming operations, and we would use our second right out of the Lowburn catchment for our orchard and operations, but as water got tight during the summertime, we'd exercise our first priority in the Parkburn catchment, which would then reduce or stop the water to the lower priority holders in the Parkburn catchment, and we'd normally exercise that when the first priority holders in the Lowburn catchment exercised their right of priority over us, so when we sold and relinquished our rights, we made sure that the second right holder still had their priority, so we sold it to them, because otherwise it could be the seventh priority. If we sold our priority to the seventh priority, they'd have priority of the second priority.

20

25

30

THE COURT: JUDGE BORTHWICK

Q. Would that matter?

A. Yes.

Q. Why would that matter?

5 A. Because it would put their farming operation at risk, because when we sold it to them, they then became the priority right, which then gave them the right to convey the water, and a better security for their farm.

Q. Yeah, I know why it matters to the second to have access to the first priority. Why does it matter that the seventh, the least reliable, I'm assuming, in Parkburn, why would it matter that they purchased it?

10

A. Well, if we put it on the open market, for example, which we didn't do, if we put it on the open market, the highest bidder would get it, and then they'd have first priority.

Q. That's right.

15 A. Yes, and that wouldn't be – well, we didn't think it was a morally correct decision to do. We had a shareholding meeting, we thought the morally correct decision was to sell it to the second priority. Well, probably another reason behind that was they relied on it for a family as living, and a lot of the other priority holders were smaller lifestylers, and it wasn't a living for them. So, yeah, we tried to make it as morally as we could, and also, it gave them a chance, because they were also a large water user in the catchment, when they applied for their resource consent, they were able to let residual flows through because they could give up a water allocation because they had excess water allocation at that time, so they were able, I suppose, to concede something for when they applied for a resource consent.

20

25

Q. Which you wouldn't get if you just sort of fractured it.

A. Yeah, but they worked as a water group too to do that in the catchment.

Q. Okay, so this is still talking about Parkburn, tell us about the water group. There was a water group in Parkburn?

30

A. Yes, they came together as a water group, yes.

Q. So tell us about that, because you have got some farmers and you have got some lifestylers, I think you said.

A. Yes.

Q. So how does that all go?

A. I was removed from it when we sold our take, but there's a lot of hard conversations to be had. I mean, they've worked through it, it's been a very costly experience for them, you know, the farmer we sold our right to, he hasn't told me how much it cost, but it's over six figures.

5

Q. To just get a group together?

A. No, this is to apply for his consent.

Q. Oh, to apply for his consent. So I'm probably more interested in the group.

10

A. In the group.

Q. Yeah, the group dynamics. How did you come together and -

A. We came together through the ORC, so the ORC brought us together as a group, so we had meetings that Bruce Monaghan facilitated for us through the ORC, so we're discussing about the future and – I mean and that was one of the reasons that we came to the decision to relinquish and sell our right is because we'd 25 kilometres of race to our property.

15

1120

Q. Mmm.

A. It was inefficient, you know we were losing water along the way. We had other options because we had another deemed permit out of the lake that was much closer to home. So we had other options that were sufficient to supply our place with water, so, yes we came together to work out options and the best to suit the catchment and the ORC helped us through that process.

20

25 Q. Were they facilitating meetings?

A. They fac– yes they brought, you know they facilitated some meeting and then we had some private meetings without them all, so...

Q. Yes.

A. Yes.

30

Q. And so where do things now stand with the Park Burn group, is there a fairly clear-eyed understanding of how those rights work or if not, rights, maybe how each of the water permit holds, their relationship with each other, the need or demand that they have for water and how that can be

satisfied, how does it all sort of – what did you get out of the process?
And where does it go next because you're out of it now.

A. Well as I say we removed our self from the process so it's quite hard for me to give you an exact clear understanding but as I understand it, most
5 – because they got their resource consent now.

Q. Oh right, okay so they've got in early and they've got a consent, yes.

A. Yes, as I understand and I think, most parties are fairly satisfied and I – my understanding is there still a priority order but I'm not certain on that.

Q. So when...

10 **THE COURT: COMMISSIONER EDMONDS TO MR WEBB**

Q. On the resource consent or separately, or you don't know?

A. No, I couldn't tell you that side of it.

THE COURT: JUDGE BORTHWICK TO MR WEBB

Q. So we can just have a wee check of the Park Burn consent, I think you
15 were checking some other consent mentioned by Ms Dicey as to whether those priorities were somehow formally recognised in the consent document or whether they are embodied, if you like in some manner in the flow sharing agreement which may or may not be part of the consent terms. It will be quite interesting again to know how does that come
20 through. Yes.

THE COURT: JUDGE BORTHWICK TO MR MAW

A. There's a Small Burn one I think.

Q. Yes.

A. Are you happy to add Park? Was it Park Burn?

25 Q. Park Burn to that as well.

A. Find that and add that to the list.

THE COURT: JUDGE BORTHWICK TO MR WEBB

A. Well it's the Small Burn that purchased our share.

Q. Same thing. Okay, no that's helpful. Yes, we really are trying to
30 understand, do we have a gap in this plan change or has actually quite

some considerable work been done by people and communities in readiness for 1 October of this year? And if that's the case, does it get reflected in deemed permit consent applications to come or how does it or, you know. Yes.

5 A. Yes.

Q. Again it's one of those questions that are very tough to articulate, you know in policy terms. Question is also whether it needs to be done.

A. Yes.

Q. Yes. So Park Burn, how long have you had that particular permit?

10 A. From the top of my head, since the 1860s.

Q. Oh, not but you didn't.

A. Oh, no. Well, our – my family's had it since 1914.

Q. 1914, okay.

A. Yes.

15 Q. And so how were those conversations – in your living memory, how were those conversations had you know with other water users on the Park Burn?

A. Well we always had priority so you just, you had the rank over the other water users.

20 Q. So what did you do, just pick up the phone and say, "look the flows are trending downwards, you're gonna have to stop" or was it as blunt as that or did you say, "hey look probably in two weeks you'll need to stop" or.

A. Well people normally knew through the environment anyway –

Q. Yes.

25 A. – when you're about to do it. But you know it's always a communication thing.

Q. Yes.

A. And you're always polite. You know because we needed access over people's land also.

30 Q. Yes.

A. To be able to you know, but which we always had the right to do –

Q. Yes.

A. – because you know there are easements and 417s over the land –

Q. Yes.

- A. – but, you are always, you know, you are always had conversations, you always worked in as best as you could with people.
- Q. Because they – other people had their own needs, so –
- A. Mm.
- 5 Q. – you know, if they were finishing off crops at a time that you needed the water, what you take that in to account? And you try and work in with in terms of what their irrigation planning was or could you be quite sort of, “you know you’re off”.
- A. Yes, pretty much, “you’re off”.
- 10 Q. Oh, “you’re off”. Okay, yes.
- A. Yes, most definitely. Yes because you know we had our own needs and our own water scheme and our own shareholding of the West Moreland Water Race.
- Q. Mm.
- 15 A. So we had to look after our users. That was our priority. Some people needed it for domestic water, for stock water and also you know to keep orchards and vineyards running.
- Q. Mm. So the extent to which there is signalling that you know, you might pick up the phone and talk to other users –
- 20 A. Mm.
- Q. – that signalling actually comes from the environment as opposed to any initial contact that’s you know from yourselves that said, “heads up, we’re going to be – you’re need to restrict or decrease”.
- A. Yes.
- 25 Q. It’s an environment signal?
- A. Yes, I mean because if there’s plenty of flow there then we wouldn’t –
- Q. Yes.
- A. – yes, so the environmental signal was how much water that was coming down the creek.
- 30 Q. Mm.
- A. You know if you had a good rain, just when it was starting to look dry then they could get more water again you know because there would be enough water for the second priority in that case but then you know, so

they – if we got a good rain in the middle of December or January, you know the second priority you may get water again.

Q. Mm.

A. But you know if it got very, very dry then there was no water for them.

5 Q. Mm. The water that you are using, is it water – the deemed permit itself, is that water to go into a race as opposed to any other form of take?

A. You're talking about the one out of the Park Burn?

Q. Yes.

A. Yes, so it was into an old goldminer's race.

10 Q. And, okay. And in relation to the other deemed permits, where you're exercising priority, is that also into a race, whether it's an old – well presumably an old miner's race but it could have been updated since then. Or are they into other structures?

A. No, also into the same race.

15 Q. Into the same race.

A. Mhm.

Q. Okay. The one out the lake is it (inaudible 11:27:03) into a race or your deemed permit with the lake?

20 A. So it's into the sort of lower, fifth of the water race, so it has a – because there are different shareholders –

Q. Yes.

A. – so we have our own private race until it bypassed the other shareholders of the West Moreland –

Q. Mm.

25 A. – and then it dropped into the West Moreland Water Race for you know personal use.

Q. Is that West Moreland Race a new thing or is that a thing created out of the old mining days?

A. The West Moreland Race is a historical race from the mining days.

30 Q. From the mining days.

A. Mm.

Q. Okay.

A. Which is now abandoned. Unfortunately.

- Q. Mm. Again, with the experience that you have with your own deemed permits, are there arrangements informal or formal through flow sharing agreements in place as to the exercise of – in every case, in place as to the – and I know they won't make sense that question – forget that. So then in readiness for 1 October this year, what have folk being doing who hold deemed permits?
- 5 A. Well they've – to my knowledge in the Lowburn and Park Burn areas because that's the areas we're involved in (inaudible 11:28:35) working with the Otago Regional Council we created the water user groups.
- 10 Q. Mm.
- A. And then they've come together as collectives to get resource consents.
- Q. Mhm.
- A. As a group rather than individuals mainly, I think.
- Q. Mhm.
- 15 A. Whereas a lot of them were individual deemed permits, they've tried to come together as groups to get their resource consents and then you know we've been working on that, well I don't know for, you know long time.
- Q. A fair while.
- 20 A. A long time.
- Q. Okay, so you've got your consents for both – for Lowburn now? Or are they to come?
- A. No, so the consent for Lowburn, we've relinquished –
- Q. Yes you did. Yes.
- 25 A. – that consent and then we have applied for a resource consent out of the lake. We used to have a deemed permit, no sorry we used to have a mining right out of the dredge ponds when it was a river –
- Q. Yes.
- A. – and then we go ta deemed permit out of the lake when the Crown
- 30 created the lake.
- Q. Yes.
- A. And so we've applied for a resource consent out of the lake.
- Q. And I take it in that case, at least under the, you know the Regional Council's framework of six years, if you're out of a lake, you don't have

any other deemed permit holders to be contending with, and you can just simply apply in your own right for a replacement, or are there also groups associated with the lake as well?

1130

- 5 A. No, we've got our own private scheme in the lake, and I'm involved as a shareholder in another scheme out of the lake also.
- Q. Okay, so you've got two interests and deemed permits out of the lake.
- A. One's a resource consent and one's a deemed permit.
- Q. Okay, right, and you're seeking to replace both or just one?
- 10 A. Just the deemed permit.
- Q. Just the deemed permit, and that's a race coming out of the lake?
- A. It's piped out of the lake, so it's got about an 80-metre lift out of the lake, and then it's into a water race, which then is gravity fed through the properties.
- 15 Q. And you're the holder, or are there a bunch of shareholders who collectively own that deemed permit?
- A. The deemed permit is just ours, my mother and myself and my wife.
- Q. Okay, so it's a family owned deemed permit. Right, and in that case, no water sharing group?
- 20 A. We've got my company that my wife and I own, and then my mother has a small block of land, so we have to share it with her.
- Q. Yeah, you do. I was going to say outside of your family, there's no group, per se, that you need to be talking to or working in with?
- A. But we still need a water share agreement in case her property gets sold.
- 25 Q. Oh, yeah, that's a fair point, yeah, and you've got that, presumably?
- A. No.
- Q. No.
- A. But we will.
- Q. But you will have.
- 30 A. But we haven't got a consent right now. Under the deemed permit, she's just entitled to a share.
- Q. Yeah, and she's the second? Well, no, actually, there's just one deemed permit, or is she the permit-holder in her own right?
- A. Just one deemed permit.

- Q. One deemed permit, okay. So anything we should no as a court about deemed permits, do you need to manage, how to manage, are the questions before the Court. Do we need to do anything from 1 October or do nothing to support folk whose permits are going to expire and recognising relationships, and they can be fraught, of a water body?
- 5
- A. Because, yeah, idealistically, the water users' groups, hopefully, that have been set up, and hopefully will function to get the resource consents, but it only takes one to fragment, and it's how you control that. I mean, I'm not sure of the correct answer there and how you would do it through
- 10
- policy.
- Q. Except, I mean, one of the things you could perhaps do through policy, and, you know, it's already in the operative plan, is that policy signalling, strong signalling that folk ought to be in one of these groups, and from what I understand your evidence, is that's actually been really useful, getting ready for, you know, your application for resource consent.
- 15
- A. Yes.
- Q. Would that be fair? So, okay, anything else, apart from signalling in policy this is how you ought to be thinking or organising yourselves collectively?
- A. No, I think that's it.
- 20
- Q. Okay, right, so no other tools you can suggest to us?
- A. No, I've probably been so far removed from it now that it's hard to understand what headspace they're in and put my head back into that space.
- Q. Yeah. It's interesting because, I mean, it obviously worked, although it might have been, as you said, hard conversations at times before water-sharing groups, and then you've moved to a regime of more structured talking through a water-sharing group. One of the farming experts talked about, you know, that social capital or social licence is generated and required to make this work for people, so it's for people and by people,
- 25
- really.
- 30
- A. Most definitely, you need social licence, otherwise you can't practice it.
- Q. Yeah, yeah. Okay, that's very helpful.

EXAMINATION CONTINUES: MS FORD

Q. We've talked a wee bit about what rights you had to water previously. Let's talk about now. Since you relinquished the deemed permit, what's your irrigation, where does your water come from, how does that all work for you now?

5

A. Okay, so we've currently got two irrigation rights, we've got the Burn Cottage irrigation scheme, which we're a shareholder in, and our own private right, out of the lake, probably we've got about five kilometres of water race to our property, currently. It's open channel. It's a very efficient scheme. When we need water, we just go, we turn the pumps on. It's metered, and so we water to our property through that open channel, and then we've got two storage dams on the property, and from there, we've got articulation around the property, when and where we need water.

10

Q. You mentioned water metering. How successful is that?

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A. We have not had a lot of luck with water metering. The first water meter we put in was a manual, I suppose, wheel meter. At that stage, we were still using the Westmoreland water race, and every time we went to use it, it just didn't work, and we took it out, and we were told it was from overuse, twice, which we had to explain to them it had never been used. So after three new water meters, we changed service provider to a different service provider. We put a new pulse meter in, which has been a lot more accurate. We have had some trouble when they put in the cycle trail, that they cut our lines. The service provider that we are currently using seems to have taken quite some time to provide service, which is infuriating, and we've a lot of trouble with noise in the last 12 months, coming down power lines, which is disrupting the pulse meter reading, and so now we're in the stage of inquiring about putting solar in, even though we've got power right there, so we're having to put solar in just to remove everything off the grid so that the pulse meter isn't getting interfered with by the noise down the line. That's what the service provider is telling us is creating inaccurate readings. We can only pump 70 litres a second with our pump, it can't do any more or less, but, you know, it was saying we were pumping 7,000, and then it was saying we

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25

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were pumping naught, and then the thing was going and being very erratic. I'm just trying to think of what other issues we've had with it. The battery and the telemetry went, so, you know, it only lasts so long, and all of a sudden, you're getting a phone call from the ORC, wondering why they're not getting any readings, but the battery's gone. I mean, it was a very simple fix, but it's still, by the time they told us they weren't getting the readings, I think we were eight months without recordings.

5

Q. Is there no way you could have checked the battery yourself, or checked to ensure that there was a signal being sent to the ORC?

10

A. We now have access to a website, so we can check that, but at the time, we did not have access to a website so we could check that, so we didn't, I suppose, in essence, have access to our own records beforehand, but once that happened and we inquired, we have now access to a website so we can now check our own records, so we do know when they're being sent through, and when we do have issues, now, we can contact the service provider rather than ORC contacting us a long time after, which I understand they can't check our records all the time as well.

15

1140

Q. Mmm.

20 **EXAMINATION CONTINUES: MS FORD**

Q. Do you get enough water for your uses?

A. Most definitely we've got a lot of water in our water right, excess water in our water right. Yes.

Q. Are you applying for the same amount of water?

25

A. No, we're not. No, so we have used that aqualink figures in our resource consent because what we are applying – yeah, our records were inaccurate, and also when we applied for our resource consent we put in the six hectares we still haven't planted out.

Q. Let's talk about that. You haven't planted out six hectares yet. What is your development plan, how does that fit within the framework of this plan change? What you have done? Let's just talk through your experience of that.

30

A. Okay, so after discussions with our neighbour and things, he had 140 hectares of land right beside us that has had no stock on it, probably except 80 goats for a two years period all my life, so it's technically I suppose just a piece of land with rabbits, pines and briar and broom. But I was, saw the horticultural potential so I suppose when I came home from...I'd been in conversation with him about it and he proposed to me a lease.

5

Q. Mhm.

A. So, as he was unwilling to sell and we came, within discussions we came to a 30 year lease.

10

Q. Mhm.

A. And that was in a lot of ways because that's how long, you know, it takes a long time to recoup your money and if you're going to put infrastructure in, like irrigation, frost machines and plant, you know, and the life of a tree is probably 20 to 30 years also, depending on what you plant, so we came to a 30 year lease because you know a lot of your infrastructure that's the life of it, you, and to and recoup your investment from that. so we, I suppose by the time we negotiated that and we got the lease in place, I think we started the lease in 2017.

15

20 THE COURT: COMMISSIONER EDMONDS

Q. How much of that 140 hectares did you lease, the whole lot, or just part of it?

A. No, just the 30 hectares we can plant out.

Q. Just 30 hectares, okay, so that's your paragraph 4, is it? "We leased 30 hectares of land."

25

A. Ah, 30 hectares, yes. It was in paragraph 5, yes. Or maybe 4.

Q. So, okay. So you took on the lease in 2017?

A. Yes. And we started developing straight away.

Q. Mhm, what does that look like, when you say "start developing" what does that mean?

30

A. All right, so I mean it was fairly nicely contoured to begin with, so we had to clear the land of the wilding pines and it was a I suppose a bit of a junkyard, you know, there was a lot of old cars and scraps of iron and

things like that so we had to tidy that up, some old, yeah. And then we had to, you know, work up the land just to cultivate it, applied fertiliser, put irrigation in, which is it's under-tree irrigation, and then plant the trees. Yes.

5 THE COURT: COMMISSIONER EDMONDS

Q. So, how much of the land would that be, the entire 30 hectares or just a portion of it? In terms of your starting development?

A. Currently we've developed 22 hectares of it.

Q. 22, all right, that's... okay.

10 EXAMINATION CONTINUES: MS FORD

Q. When did the discussions about the lease begin?

A. The discussions about the lease began probably about 2014, yeah.

Q. When a formal agreement in place in 2017?

A. Yes.

15 Q. And you have started developing right away, with your first set of trees going in when?

A. 2017.

Q. And you've developed 22 hectares so far. What's the plan going forward for that extra eight hectares?

20 A. So we've got, like there's a couple of hectares we can't develop because it's going to be headlands and roadways and things, and so we've got six hectares left to develop so we've, we put an order in for trees for the whole six hectares probably nearly - 'cos you've got to order the roto stocks and they've got to grow them and then it takes 18 months after that to grow the tree. So you are very much a two and a half year lead-in, so we've
25 already got the irrigation up there to do it though we haven't ins- so we've got a main line to the six hectare block, we've got the pumps, all the infrastructure in to do the block, we just haven't put the submains in and put the irrigation in. We've got the trees which we've had on order, and
30 so we've got four hectares of that coming this winter and two hectares next winter. And we pushed forward with the development, you know, we communicated with the ORC before we signed the lease. So

Bruce Monaghan was my point of call 'cos we'd dealt with him through the water user groups and he seemed to be a contact man and so yeah we asked him about the surety of water for the lease, if we're allowed to put the water up there, because the land already had its own water right but it had not been operated for many years and it wasn't practicable to bring that water back in, cost-prohibitive and would have upset other landowners. So we asked about using our water right on that land and the surety, I suppose, of getting renewal of a water right which we were assured wouldn't be too much issue out of the lake.

10 **THE COURT: JUDGE BORTHWICK**

Q. And was that prior to or after PC7 was notified?

A. Oh definitely, oh before we signed the lease.

Q. Yeah, okay.

A. I mean to, I mean before we even ordered the trees so back in 2016, 2017.

Q. So knowing what you do know now about PC7, and the plan to come, will you put that six hectare development, so that's trees and I think you said subveins (*sic*) to go?

A. I've pretty much spent the money already.

20 Q. Have you spent, like, when you say spend the money on the trees that's growing up the root stock and then growing on the tree from there, do you actually have to purchase that outright?

A. No, no. Deposits.

Q. Deposits, okay. Are they refundable or not?

25 A. Well, no because other people wouldn't want those.

Q. Wouldn't, yeah, yeah. Okay.

A. It's normally quite personal to the grower which trees and varieties you've ordered.

Q. So beyond a deposit, have you paid now the full purchase price for those trees?

30

A. No, I have not.

Q. You haven't, so it's a deposit.

A. It's a deposit on the trees. I've put the infrastructure on up, you know, for the irrigation also.

Q. So the mainline's in but you still have to do somewhat, lateral...

A. Some submains and laterals.

5 Q. Yeah, sub- yeah.

A. But I specced it all to do the 30 hectares, I didn't spec it all to do 22 hectares.

Q. No, no I understand that yep. Okay.

EXAMINATION CONTINUES: MS FORD

10 Q. What happens to the trees if you don't take them on?

A. Um, they could try to onsell them or they could just be burnt, yeah.

Q. Have you done the maths on what figure, what financial cost this plan change would mean for you?

THE COURT: JUDGE BORTHWICK

15 What does that mean?

EXAMINATION CONTINUES: MS FORD

Q. So you said that you've done the specs, and I – have you done on the 30 hectares as opposed to the 22?

A. Mhm.

20 Q. What's the difference in the cost of the infrastructure, the trees and all that sort of thing, for the doing it at a scale of 30 hectares compared to having to pull that back to that 22?

A. No, I haven't done that, but it will be considerable because we have upgraded other infrastructure also to take this into account, you know, for
25 future growth, so we've upgraded our packing shed, our cool storage, our staff accommodation and also our, you know, tractors and things, you know, with that all in plan, so there's considerable cost there of what we've upgraded and a lot of that was, you know, been done over the years as we've worked ourselves into production and developed the lease
30 block.

1150

Q. Let's talk through some of the issues specifically that you talk about in your evidence, you've got some concerns with the plan change, do you want to talk to that?

5 A. So I suppose our – one of my personal concerns is how much we've
invested that may now just, if we're unable to go ahead or if we do go
ahead and then have to pull back, how much we've invested into that
block of land and on our home block also, it's just a waste of money,
infrastructure, energy, and you put your heart and soul into it, it's – and a
lot of pride in what you're doing and then it's also the people we've
10 employed, even this year with that extra four hectares that we're planting
out, I've taken extra staff on for the winter so we're on top of our pruning,
so then that we're able to put the irrigation, plant the trees and you're
doing a good job of it also because it's all good and well to go and plant
a block of land but there's no use making a half job of it, so we tried to
15 make good moral decisions by giving it, relinquishing our water rights, I
mean that was through talking to the group and in consultation with the
ORC, so we've made good moral decisions there in relinquishing our
water rights, now we're taking it from a fairly sustainable resource in the
Clutha River and I mean what – the amount of water we're taking out of
20 there is I mean it's a drop in the ocean, I mean there's a lot bigger, newer
consent holders coming that had been – have got resource consents
lately that are going to have a lot higher I suppose impact on things than
what we have and we've been doing this for a very long time, so I'm pretty
concerned about the six year period, we signed the lease for 30 years for
25 a reason and that's because you can't invest in something for a short
period of time, we're investing in this for a long period of time, it's going
to see me out and it is one of the reasons, 30 years, it's an investment for
that period of time to – and you – to cover all your costs of all your inputs
into it. So you can't invest heavily into all that infrastructure and expect
30 to recover your costs in six years, I mean it just doesn't add up, it wouldn't
work in in any of my cashflows that I do and I love –

THE COURT: JUDGE BORTHWICK

Q. So there needs to be a strong policy signalled to discourage people taking on new infrastructure in a period where ongoing access on the same terms and conditions to water is highly uncertain? That would be fair?

5 A. Well yes I mean it just would be nice to have certainty.

Q. That's the one thing no-one in this country –

A. But I know, I mean that's just not easily done. But if you discourage it, then we're just discouraging growth too and I mean there's, what we're doing has very, well I would've thought if anything, it's good for that bit of
10 land, I mean it was just overrun with rabbits and briars and wilding pines and there was nothing there and what we're doing has got very little input, it's amazing what water can do.

Q. All right.

EXAMINATION CONTINUES: MS FORD

15 Q. You've been here the last couple of days and have heard talk around this expanded irrigation area coming under a non-complying rule?

A. Mmm.

Q. Is that helpful for you in your experiencing in applying for consents or is it prohibitive?

20 A. It's not going to work for us. It's –

THE COURT: JUDGE BORTHWICK

Q. Why is that? Is that because you know you're going to have more than minor effects on the environment?

A. Well I think we, well I'd hope we could get through with that.

25 Q. Yes.

A. But it's an uncertainty isn't it?

Q. It's another uncertainty but yes –

A. But it –

30 Q. But if you say you're going to have no more than minor effects on the environment, back that, why wouldn't you back that?

A. I would back it and I would go for it but it, it's again how wide ajar that door is and how many people are they going to let through until it starts flooding through but I think –

Q. Depends on who's kicking down that door I suspect, but -

5 A. Yes, but, like I'd back myself to get through that door.

Q. You would?

A. Yes.

Q. Okay.

10 A. I'd hope that it's wide enough ajar. If it's not wide enough ajar to do what we're doing, it's way too shut.

Q. Okay. All right.

MS FORD:

15 Q. As I'm sure the Court's aware, Mr Webb's farm is one of the ones on the site visit roster, so you'll be able to see what he's talking through.

THE COURT: COMMISSIONER EDMONDS

Yes.

THE COURT: JUDGE BORTHWICK

Mhm. Good.

20

MS FORD:

Those are the questions that I have at this stage, but like Mr Weaver yesterday, if my learned friends have questions, can you please and the Court just remain?

THE COURT: JUDGE BORTHWICK

25 Q. Do you want to take a break whilst you think about any questions or do you want to box on with your questions? I know, it's just we've sailed through morning tea and we could sail through lunch time at the rate we're going but it's been really interesting so (inaudible 11:56:39).

THE COURT: COMMISSIONER EDMONDS

We don't have lunch on Fridays.

THE COURT: JUDGE BORTHWICK

Oh yes (inaudible 11:56:43).

5 **THE COURT: COMMISSIONER EDMONDS**

We have a slightly longer break, yes.

MR MAW:

I'm happy to keep going, it's interesting and –

10 **THE COURT: JUDGE BORTHWICK**

It is interesting, yes.

MR MAW:

It depends if the Court has quite a few questions left.

15 **THE COURT: JUDGE BORTHWICK**

No I've asked all my questions.

THE COURT: COMMISSIONER EDMONDS

I don't have many questions left, Judge asked them.

20 **MR MAW:**

Okay, no, I think we keep going.

THE COURT: JUDGE BORTHWICK

Yes, keep going, okay.

25 **MR MAW:**

Yes I have a couple of topics.

MR MAW TO UNIDENTIFIED SPEAKER:

Q. Do you have questions?

A. No.

CROSS-EXAMINATION: MR MAW

5 Q. I'm interested in the purchasing of root stock as one of those preliminary steps where you're committing to in this context, the expansion of an orchard, so can you step me through the steps you take when you are purchasing the root stock, so you've talked about paying a deposit whilst the root stock and then the subsequent trees are grown?

10 A. Mhm.

Q. But can you just explain in a little more detail for my benefit and the Court's benefit, what that part of the process looks like? So you've made the decision, you've got, you've leased your land, you need some trees, what happens next?

15 A. Okay, so if you're wanting a tree, you have to – the start of it is a root stock, so it's grown from, in our case of what mo- we've – most of what we've planted up there, is a Golden Queen's fruit stone, so in a nursery bed they'll grow that for 12 months. So they've got a small Golden Queen tree.

20 Q. Right so when you – so you've made that decision –

A. Mhm.

Q. – is there a – is it a local nursery or where's the nursery, how did that conversation or discussion start?

A. So the nurseries are normally based in Hawkes Bay or the Waikato.

25 Q. Right, so do you enter into a contract with them at that precise point in time?

A. We – mhm, yes.

Q. And is that a written contract?

A. Somet- yes it gets written up at some stage, yes.

30 Q. Right so thinking about the trees that you have to come for your remaining six hectares, do you have a written contract in relation to those trees?

A. I ha- the people I'm purchasing it through a marketing company, MG Marketing and they have a written a contract for those trees, yes.

Q. So when did you enter into that contract?

A. With MG Marketing? I have entered into that contract with them, I only signed that in February, verbally before that, yes.

5 Q. Okay so when precisely did that process start for those trees? So when did you, in a sense place the order?

A. Placed the order when we – would've been oh probably about a year and a half ago.

Q. Okay, so the contract comes, now I want to be quite precise with –

A. Well we only signed the contract in February yes.

10 Q. So February this year?

THE COURT: JUDGE BORTHWICK

Q. February of this year?

A. February this year, yes.

CROSS-EXAMINATION CONTINUES: MR MAW

15 Q. And just so I'm really clear, the order was placed back before February of this year, how much back? How further back?

A. Oh it'd be about a year and a half before.

Q. So I'm going to write, October 2019, is that about right?

A. About then, yes.

20 Q. And when's the deposit paid? Is it paid back in October or at some other time?

A. The first deposit is paid on budding of the trees which would've been in March last year.

Q. Okay, so –

25 A. Oh, March last year.

1200

Q. Yes, so the order October, budding of trees about six months later.

A. Mhm.

Q. Give or take deposit paid at that point.

30 A. There's a deposit paid at that point.

Q. And do you get sent an invoice. What triggers, how do you know to pay the deposits, you haven't at that point got a written contract?

A. No.

Q. So how do you know when you have to hand over some tin?

A. They'll send us an invoice.

Q. Right. And that sets out the quantity of trees ordered?

5 A. Yes.

Q. And in terms of the deposit payable at that point, what percentage and it may vary, but what, how much of a deposit they expect?

A. Roughly 30 per cent.

10 Q. And then in this situation a formal contract has come through in February 2021?

A. It's come through MG Marketing.

Q. So is that a new –

A. - they've purchased the trees on our behalf.

Q. So who, do you talk to MG marketing when you put your first order in?

15 A. Yes.

Q. Yes, so it's the same entity, it hasn't changed on the way through?

A. No.

Q. And is that the same process that was followed for the previous development, so from 2017?

20 A. Some has been through MG Marketing and some has been personally.

Q. Okay, so when you say – so I am interested in the difference, so some personally, is that contracting directly with the nursery or –

A. Yes.

Q. – are you growing the trees or stock yourself?

25 A. Depends on which nursery we ordered it through, depends on how we order it, so some of it has been, we personally done it through some nurseries and MG Marketing because they own the rights of the marketing of the fruit, but they have done it themselves.

30 Q. All right, so thinking about the personal situation where you've liaised directly with the nurseries, does that follow a similar sort of a process, a deposit is paid once the trees have budded?

A. Yes, so it's a, budding is 12 months normally after they've grown the queen stock.

Q. And in terms of your business records you'd keep copies of those invoices?

A. Mhm.

5 Q. And it wouldn't be too difficult for you to produce those as evidence that you had purchased root stock at a particular time?

A. That - I've got the invoice fo when we were budding. Yes.

Q. And presumably you would also have a bank record of the deposit having been paid.

A. Oh most definitely.

10 THE COURT: COMMISSIONER EDMONDS

Q. So when you get MG Marketing to do things, do you send them something in writing saying you want this and then they organise it? Is, is – how do you, presumably they don't just do things without your instructing them to do them?

15 A. Ah, yeah no, we definitely have a lot of conversations about it. would I have it in writing? I couldn't tell you if I have it in writing, I've got the contract currently for the trees and for the, you know, for my payment of the trees, there.

Q. Right. I was thinking sort of back earlier.

20 A. But, further back no, I don't think I, for the trees going in this year I don't know if I do have it in writing, no.

Q. So do you have a general contract with MG Marketing?

25 A. I have a contract to purchase, plant and repay the, for the trees, but I don't, not so much for the deposit, that's their side of it was, so we talked about ordering the trees which they did.

Q. Right, yes.

A. And but the deposit side of it and that I haven't, I'm not sure how they deal with the nursery and that side.

30 Q. Right, so possibly though they have a record of the conversation that you had with them?

A. Well they know I had the conversation yes, yes.

Q. Yeah, well you'd imagine they might have some sort of paper trail but they don't send it to you?

A. Yes.

Q. You're not aware of –

A. Well, that the –

5 Q. - you haven't got an email or something, saying, "Further to your discussion" or whatever?

A. No, I do not.

Q. Nothing like that? Recording what it is that you might have agreed to the phone, nothing like that?

A. No.

10 Q. They might have it but you don't have it.

THE COURT: JUDGE BORTHWICK

Commissioner, what he will have is an invoice from the marketing company.

WITNESS:

15 I have a contract of my repayment for these trees.

THE COURT: JUDGE BORTHWICK

And the deposit, yeah.

THE COURT: COMMISSIONER EDMONDS

20 Q. Yes, but not necessarily going back that – I mean, you talked about placing an order a year and a half ago but that seemed to be through them.

A. Yes.

Q. And then invoice thing came along later.

A. Yes, so –

25 Q. So that's why I take – so I'm going back right to the point where you had your discussion with MG Marketing and it was clear what it was they had to do.

A. Yes

30 Q. And then this contract has come along much much later in the invoicing thing, so I'm saying do you have a paper trail going right back to what is it, October 2019?

A. No, I don't think I do. No I don't think I do.

Q. But they may have recorded the discussion in some way.

A. They may...I am sure they have a paper trail with the nursery.

5 Q. Yes. It's just a step removed but I was just trying to understand how this all works.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. It's like you trying to find the first step at which there's a paper record of something having happened. That's been helpful thank you, just in terms of understanding that part of the process when commitment to root stock occurs and then and how that might be reflected. The second topic I wanted to explore with you relates to the irrigable area on your farming property. Have you got a pretty clear picture of the area that is under irrigation currently?

A. Most definitely.

15 Q. And if I asked you to show me on a map that maximum area of land irrigated between September 2017 and March 2020 - I'll just those dates right, bear with me. well, we're not far off, yeah 1 September 2017 to 18 March 2020, you could draw me on a map of your property precisely the area or the maximum area you had under irrigation during that period

20 of time?

A. I could.

Q. And you'd be able to calculate the area relatively easily?

A. Fairly easily, yes.

Q. Thank you.

25 **RE-EXAMINATION: MS FORD**

Q. It was asked when the deposit was paid, and that was at the budding of the trees.

A. Yes.

Q. Why is that, why is there that delay, between -

30 A. I suppose that's when the costs start getting incurred by the nurserymen. I don't know. It's traditionally when you've been asked for a deposit is when budding occurs.

THE COURT: JUDGE BORTHWICK

Q. I thought it's when they got something to sell you, a budding tree, as opposed to failed root stock, but I could be wrong.

5 A. So yeah, when they bud a tree it's still 18 months until you have a tree to plant, so if they put a little bud in there it still takes 18 months until we get the tree.

RE-EXAMINATION CONTINUES: MS FORD

Q. MG Marketing, why do they get the marketing of the trees. What does that mean?

10 A. They own the variety rights to the trees that we plant, so you've got to have your approval to plant the tree and then they've got exclusive marketing of the fruit off those trees.

Q. Why not just do it all personally?

15 A. 'Cos then you will miss out on the new, newer varieties which may be better tasting, better looking, produce more fruit.

Q. And would, does that mean that it would then go towards your business decisions and who you sell that fruit to and that sort of stuff?

20 A. Yes. Yes. So, you know, if there are only very few people bringing new varieties of stonefruit into the country, MG Marketing and the people they associate with, the importers of the, um, they're a shareholder of the company that brings the fruit, the wood, into the country I suppose through quarantine and things, so yeah we associate with them because they're probably the most progressive and otherwise we're going to get left behind and we'd be growing varieties that the supermarkets aren't
25 going to want, is pretty much what it comes down to, if you're left growing older varieties that don't have consumer appeal nobody's going to buy your fruit.

Q. And that goes towards the domestic food supply then?

A. Yeah. So we mainly supply the domestic market.

30 Q. The repayment on the trees with MG Marketing.

A. Mhm.

Q. What's that repayment timeframe?

A. Um, so we've scheduled two and a half years after planting, to repay that.

Q. Okay, great, thank you.

1210

THE COURT: COMMISSIONER BUNTING

5 Q. I just have one question, in terms of this 30 hectares, you've got a development programme, right?

A. Mhm.

Q. Do you order all the trees of the total area at one time, or is it tied into the programme for development?

10 A. It's tied into the programme from development.

Q. Okay, so you only order enough for each stage as you go?

A. Yes.

QUESTIONS FROM THE COURT – COMMISSIONER EDMONDS - NIL

QUESTIONS FROM THE COURT – JUDGE BORTHWICK - NIL

15 **QUESTIONS ARISING – NIL**

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK TO MR WEBB

Thank you very much and thank you that's really interesting evidence and it certainly assists the Court and this is what we're looking now forward to
20 understanding primary – it's primary sector interest from their own particular circumstances, so thank you very much.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. That's us, but Mr Maw wants to address us on where we're going, where we've been, where we're going.

5 A. Thank you, your Honour. We'll go back a step. When I think about the case as it has developed to date, we have a range of parties who have raised quite possibly legitimate concerns in relation to the consequences or effects of plan change 7. However, those parties haven't put forward the relief that would address those concerns.

10 Q. Or they may have, and then it's been examined, and the Court needs to think about that.

15 A. Yes, so I see there are sort of two categories at play here. Some parties have actually put forward the relief, and the cross-examination of that, whilst it might be lengthy, is really important to test the extent and the potential maybe unforeseen consequences, relief drafting, et cetera. So at least in those situations, I contest that, and to understand just the extent. Where I'm having some difficulty is where concerns are raised, but the relief being pursued either is still possibly vague to the extent of: "There's a problem, here's the problem, maybe it could be sorted," and I'm really grappling to understand how we might resolve that issue without
20 wording being put up to test. I'm becoming a little concerned as to what might happen at the back end of the hearing in terms of some of what parties may be considering are loose ends, where parties think there might still be an opportunity to be suggesting – it's possibly even within the scope – but new wording to address some of these concerns, and
25 then we go back in a loop in terms of them having to examine very carefully what's being suggested. I know directions have previously been issued requiring parties to put up the relief that they are pursuing.

Q. And I have done that now multiple times, and parties have disregarded those directions.

30 A. Yes, and in the ordinary sense, in the ordinary event, once the party has appeared, and if they have walked away from their relief, that's it, in a sense for that party other than if there are issues which had been clearly signalled within relief that might usefully be conferenced upon, but the opportunity then, for example – and just picking this situation to put

forward a new planning frame that addresses the issues that Mr Webb, perhaps, has identified – is going to get quite difficult for the last two or three weeks of the hearing if we have a whole lot of parties then saying: “We’ve thought about it a little bit further,” because we go back to this point in the hearing.

5

Q. Yeah, yeah, yeah, so how do you manage it? That’s fair enough.

A. That’s the bit I’m really grappling with.

Q. So this party is clearly in illustration of what you’re saying, that’s where the experts have not articulated relief, which is in support of where the party themselves might want to go, and so what do you do? Do you just let the party articulate it, from a duly qualified expert putting words around it? You know, that’s what my expert might say, but I want to something different, and that’s problematic, because then that casts the drafting burden either back on the ORC or back on the Court, and I don’t think it’s for the Court to be drafting a plan change, or do you say what, exactly? You can have another opportunity to look at it, but then where do you draw the line on that? Cases where you think there could be merit and then other cases where you think that’s just kicking the door open and it would actually undermine the objective of the plan change, so it’s actually problematic.

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A. Yeah, no, it is. Thinking about the situation where you have an expert planner engaged, and that expert planner is making recommendations, it would, perhaps, be helpful if those recommendations differ from the relief being sought by parties, that it’s really clearly expressed in opening by those parties, and I think your words, what the four corners of the case are in terms of relief being sought, because then I can work out, somehow, which witness to cross-examination on the relief the party is seeking, where it might be different from the relief that the plan is then recommending, and then there’s a question of who does the Court then place weight on, the qualified expert or some other witness? It gets difficult.

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Q. So there’s always that potential, although it seems to me to be greatest on this hearing than any other I have encountered over 12 years, but there’s always that potential, so how do you resolve it? I mean, there’s

always that potential that you send folk of to an expert conferencing, well, that's the witnesses, but, you know, the party themselves might say, well, that might be their thinking, but that thinking's not informed by other circumstances and it needs to be brought to bear, and in a way, that actually could be also what's at play here, where you send people with expertise and data off to do their thing, but they haven't factored into account some very important considerations that the planners could bring to bear, and so are you bound by the data folk? No, because there are a wider set of circumstances that should have been – could, it's not should have been thought about – need to be brought to account before a decision is landed.

5
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A. So what do we do with it?

Q. So that's happening in this hearing, that's what I expect to be happening in this hearing, and in any hearing, and that's quite legitimate. To the extent that it's a bit surprising is to have more than one party present a technical case which is not actually supporting the outcome of the advocate or the lawyer. That seems to me to be clearly at risk here, also the previous case.

15
A. I mean, it leaves the council in a challenge position. I mean, from a legal perspective, I can simply make the submission, well, the expert witness gave the expert opinion. The relief simply wasn't articulated, it wasn't tested, it wasn't grounded in s 32, simply, it can't be pursued.

Q. So you don't know what to do? Or you do know what to do, you want to say close it out?

20
25 A. Well, I guess I'm signalling that is the submission that I'll end up making, and as we track forward for the balance of this hearing, and I know the directions have been issued, and what's exercising my mind is what further can be done to ensure that if there's been any misunderstanding about the previous directions, which, to be fair, they were pretty clear.

30 Q. They were astonishingly clear, and they were repeated more than once, I think, in directions, and then parties didn't comply, and in this instance, I didn't know that the parties hadn't complied until I started preparing for this leg of the hearing, but it was very clear as to what needed to have been done, and then reading the evidence, I could see there was a

mismatch, actually, between what Hort NZ wanted to achieve, which is just whack on a review clause everywhere, and where, perhaps, your evidence from your experts were tracking.

5 MS FORD:

I wouldn't necessarily agree that it was to whack on a review clause everywhere. Hort's position is that that noncomplying pathway needs to be that viable option for exceptions to those rules.

THE COURT: JUDGE BORTHWICK TO MS FORD

10 Q. Yes, but do you understand what Mr Maw is saying?

A. Yes.

Q. That might be your position, but it is not supported by a witness, and from my point of view, it's very easy to say have an open door, but as I've said now for many weeks, what goes through the door? Is it who you imagine might be going through the door, the Mr Webbs of this world, or are there actually a whole load of people in these circumstances that you haven't foreseen and the Court can't imagine that will walk through the door. You haven't put that relief in front of us, have you? I mean, am I to open up your original submission on the plan change and will I see the relief there?

15

I suspect I won't, but will I is the question for you?

20 A. In the original submission, we definitely did seek a longer term to that 15 years, and that, from memory – I'll just find it for you, your Honour.

Q. Where in your evidence have you articulated policy that you wish to pursue now?

25 A. I think that would be the difficulty.

Q. And so Mr Maw wants to know what's to happen? Do we just start your case again?

A. No, your Honour.

Q. And that's what Mr Maw's concerned about, you know, this endless looping back. You know, when the Court's been asking questions about certain provisions, it's because at least everybody's on the same page, or everybody we've heard to date is on the same page about those provisions, so the Court's pressing into the controlled activity rule

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because, by and large, everybody is accepting there is to be this single plan change 7 and it will have a controlled activity rule, of course, looking for blind spots and closing those blind spots out. So that's where we've been pressing in, also RDA for the same reason. Haven't looked beyond that to ask is there any merit in the other cases because the parties are far apart. So you are wanting to pursue relief which is not before the Court?

5 A. I guess that is something that could have been signalled more clearly.

Q. It's not that it should have been in evidence?

10 A. Yes, your Honour.

Q. Is that not fair? And then Mr Maw would have had a chance to test it.

A. Fair enough, your Honour.

Q. As in the last case, it was in evidence, and I suspect in that case, that was another case where we had to ask for it, I think, because it wasn't produced in accordance with the directions, and then what the planner hoped to achieve there, which was also opening a door, a different door, but a door, it was blown wide open, as opposed to where she wanted to go, but we knew that because we could test it to see what the implications were.

15 A. Your Honour, I guess that comes back to the moving beast that this hearing has been.

Q. No, no, I would agree with you if you had put in the relief, and then we could see there was merit in the relief, and we could test it, and we could go perhaps that one ought to be pursued, but you haven't actually put it in evidence yet.

25 A. Not through planning evidence, no, but the relief for that longer-term and the irrigation area, because of the growth in the industry, is still presented through our industry in economic evidence. The policy side of things could have been –

30 Q. So what do you want me to do? Do you want me to write your own rules and policies?

A. I would suggest that we provide a memo to the Court early next week, just clearly setting out what it is.

Q. So then you want to open up the case again? I don't want a memo, I'd be wanting evidence, that's the first thing, because I know what your case is, so I'd want evidence from your planner how to land the door. Mr Maw, I think, might have a concern about allowing second chance litigation.

5 THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Mr Maw?

A. Well, I would, your Honour, and we're going to have the parties that are in the same position then seeking, perhaps, a similar indulgence and putting up another regime, and we go around in a circle in a situation
10 where time is tight on this plan change hearing.

COURT ADJOURNS: 12.25 PM

COURT RESUMES: 12.48 PM

THE COURT: JUDGE BORTHWICK

Right I did say lunch, and then we got ahead of ourselves because we have a
15 fairly firm idea at the moment and that's actually not to allow further evidence. If the Court thinks that there is something of merit to be explored, a gap that needs to be filled, it is likely to issue an interim decision and then call for evidence. We allow your client to fill a gap and having, especially having heard your planner about the difficulties of that gap filling process but if we allow
20 HortNZ to fill a gap well that would be allowing every party thus far to fill gaps because there were strengths and weaknesses in every case presented for different reasons but that's just it and so the answer is no we're not going to make that direction but if there's something of merit and something that we feel that need to close out it's likely to be an interim and then we'll do so in a
25 structured way where we can be thinking about the cases presented by everybody and whether they also fall into the – have something of merit which needs to be addressed.

UNIDENTIFIED FEMALE SPEAKER:

30 Yes your Honour.

THE COURT: JUDGE BORTHWICK

Thank you. So that answers your question. So going forward in the minute that's yet to appear, so we're going to hopefully, if I get to it today, issue a minute about the conferencing on that schedule and which is proceeding informally but may yet require facilitation and the indication is
5 Commissioner Dunlop is available in the weeks that we are adjourned following this hearing, this part of the hearing and so the minute will be to liaise with everybody, I'm looking at you now Ms Melhopt, to liaise with everybody to see whether their witnesses are available and what are their preferred days and of
10 course one of the messages coming out of the conferencing to date is that insufficient time was allowed for that – really to land the conferencing and even when the Court had allowed further time, parties put their witnesses on a plane and sent them home and so they weren't available on the extra day, so we'll look to direct – rather than allowing for extra days if required, we'll just put in a
15 large sum of days, the but best guesses we have, it's about three days for what we're going to propose is an all in conference now with technical bods and planning witnesses, three days to close out the schedule. It's not only questions that you all have as between the different groups but also questions from the Court, especially about that date range and around the issue of, for the RDA,
20 what does historical data mean anyway and how might that be tested and what sort of information might be brought to bear, so the Court's got similar questions on the controlled and on the RDA which need to be addressed. Now a question for you Mr Maw and it is this, so sometimes you can use a joint witness statement to substitute for evidence where the statement is hopefully is all
25 agreed as between the parties, it is comprehensive. Now that's not these joint witness statements and that's a reflection of both time and I think complexity and I think the effort taken to bridge quite divergent positions going into the conference and so it's not a criticism of the product at all that it was a very, a tough task and I think the witnesses have all done very well to get where they
30 are but in looking at the hearing to cover this, especially in the last week, can the JWS appropriately substitute as a brief of evidence, if there's full agreement, should there be nominated witnesses to present or do we need everybody back in? I don't expect to answer now but I do, but these are things that I'm going to have to canvass in terms of trying to manage that backing process.

MR MAW:

Yes I have, I've been, I have turned my mind to that back end of the hearing –

THE COURT: JUDGE BORTHWICK TO MR MAW

5 Q. Mmm.

A. - just from a timing perspective about what is it we might do –

Q. Yes.

A. - and if all the technical witnesses and the planners are agreed, then a comprehensive statement presented perhaps by a representative planner and a representative technical person would –

10

Q. I certainly thought you needed two, yes, yes.

A. – suffice or might suffice, the question then is well what happens if they don't quite get there and in that situation I had started to contemplate some hot tubbing to tease out the differences between those holding a different position. Now that, depending on how many people were dealing with that –

15

Q. (Inaudible 12:53:43) there different positions?

A. - it might be a disaster.

Q. They could be in there, but in saying that, you'd need evidence wouldn't you?

20

A. I –

Q. Yes.

A. – my pick is we would need and it may well be you have two or three camps that planners are sitting in or the groups are sitting in, there might be three different positions in terms of – or three areas of disagreement and it may well be that there needs to be evidence put up in relation to each of those three positions and then you might, you could hot tub representatives from those three positions or potentially of you could cross each of them individually depending on just how narrow or how broad the different is that remain are and it may well be, I mean good progress was made in a short period of time –

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Q. Mmm.

A. – and there strikes me as being a desire to land that schedule, so the optimist in me says they might well get there or if there are differences they may be very small, so that was as far as my thinking had reached on that at this stages.

5 THE COURT: COMMISSIONER EDMONDS TO MR MAW

Q. Sorry, when we're talking about the schedule, the parameters there are in the rules for the entry and the –

A. No they're connected.

1255

10 Q. Yes, yes I don't think you can just refer to the schedule without thinking about all the other dimensions that relate to this schedule?

A. Yes, they're – and we've been traversing those connections –

Q. Yes.

A. When we look at the matters of control and then the link to the schedule.

15 Those matters are connected –

Q. And the entry conditions, yes.

A. The part – and not yet sure where we get to this, but by next Wednesday I will have something to say hopefully. Where there is for example a fundamental difference between the, whether there should be a restricted discretionary activity pathway for, for example a beef and lamb auction or whether there should be something done to a, as a discretionary activity, which was sought by Ms Perkins and Ms Dicey. I don't see any benefit in cross-ex – sorry, conferencing on, that's an issue for the Court.

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THE COURT: JUDGE BORTHWICK TO MR MAW

25 Q. No, I think they're – they're decisions for the Court to make.

A. Yes.

Q. Yes, as I said we've pressed into those provisions where there's board agreements –

A. Yes.

30 Q. So there should be a control. There should be an RDA in certain circumstances where there is no broad agreement. As I said, it's just a decision that needs to be made.

A. Yes, I agree.

Q. And so we haven't, we weren't thinking of any further directions on that, yes.

A. Okay, no that's, that I think that aligns with where the thinking on –

5 Q. You're thinking. And then if there's merit and it's not landed, there's merit in some of the ideas but not yet satisfactorily landed, that's the interim decision with the referral back for evidence.

A. Yes.

Q. Yes.

10 A. And that might be a tidy way to respond to what may well be legitimate issues being raised.

Q. Okay, so that's good. So the potential is all are agreed, a comprehensive JWS with a full analysis under s 32 would be very good, and then with a representative plan, a representative technical person to present if everybody's agreed and that seems sensible. But then if not, if people are not agreed and there are two or more camps, then for evidence to be called and the possibility there again is representative planner, a representative technical person provides that brief and parties can say: "Yes I adopt that evidence", "Don't adopt that evidence". So you know, we haven't got 10 technical bods saying the same thing. And then we can consider whether hot-tubbing is going to be beneficial. But for those folk, again a full worked up s 32. Now, you will all appreciate that for the JWS to date it's testing certain scenarios which the Court is not familiar with. You know, so wherever they get to on their JWS, you shouldn't assume that the Court's just going to endorse it because the Court doesn't rubberstamp anything, and so there needs to be, you know, careful explanation of where people have got to and why people have got to and it needs – not only the s 32, but there needs to be some careful thought as to how that can be then properly demonstrated to the Court. Do you need whiteboards, do you need – how are you going to run the methodology through the scenario so that the Court can see it working. You have to think carefully about what are the tools in the toolbox to actually carefully explain what's going on here, because we haven't had

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the benefit of being inside the room, you know, when all of this is being thrashed out between the witnesses.

A. Yeah, we'll give that some thought. I'm just thinking in terms of a – well, I'd be interested to see a live example tested if –

5 Q. So would I.

A. Let's assume the method gets landed, well –

Q. Yes.

A. What does it look like? Is it a coded spreadsheet in an Excel thing, we can put that up on a screen and parameters go in and we see what comes
10 out. That would be helpful, or.

Q. And yes and how workable? And how understandable is it for applicants? Do you need a PHD to sort of even get how, press into that space, so I think you know, it's –

A. Well, Ms Bright will have her PHD by then.

15 Q. Well, some of them will have PHD's but I won't, so. But it's important, you know, sometimes, sometimes methodologies can be so far removed from permit holders that it's, it almost disenfranchises people from, from this process.

A. It becomes the black box.

20 Q. Yes.

A. And there's the tension between the simplicity of something that you can read and you can see precisely the steps, but the answers might not be what, what is appropriate and as you add layers of sophistication to get the answer closer to where it might land, complexity increases and
25 there's, there's a balance somewhere in there.

Q. Yes, I think there is.

A. Yeah.

1300

Q. I think there is, so it would be interesting to see how the methodology is
30 being worked, and are the inputs and outputs, variables which are commonly understood within the primary sector especially, but maybe also TAs and hydro. You can expect them to have ready access to experts, not necessarily the primary sector, so is it an accessible methodology, the methodology is accessible to people with me, without a

PhD, and to people like farmers, who, whilst experts in farming systems, are not necessarily experts in this methodology, so it would be quite interesting to see how that goes. Yeah. So that is that, and so probably, I will release a minute – I keep on saying that – I will release a minute today.

THE COURT: COMMISSIONER EDMONDS

Well, maybe not today, Judge, maybe Monday.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Maybe he's had to work over the weekend. We will see how we go. No, well, we need to signal, there has to be a minute today to signal when our intended timing is for the conference.

A. The date, yeah, that would be helpful.

Q. So that would be helpful, and maybe the (inaudible 13:01:19) minute comes some other time. The second thing is I need to ask the TAs when are they coming back and what are they going to do.

A. Good question.

Q. We will probably just release an email direction from the registry about that today, so they are to propose directions, and court will give some thought about the general TA case and we will have questions, I suspect, once we have had a chance to do so, once we have had that two-week break, and we will probably have questions for both territorial authorities and region. Are there any other interested parties in the territorial case?

A. I don't think so.

Q. Don't think so? So we need to sort of be thinking around the NPS and perhaps some directed questions into that, the two NPSs and questions into that space, but in the meantime, we will ask TA what it is that they are going to do when they come back.

A. Yeah.

Q. Yeah, okay.

A. Yes, that would certainly provide some further clarity from where we are now.

Q. So we know we need to do that. Deemed permits, we are obviously very interested in. What is your appetite, your client's appetite?

A. In terms of the deemed permits?

Q. Yeah, whether there's a gap, no gap?

5 A. I might speak for myself rather than my client, it's an ongoing discussion. it strikes me that there might well be a gap in terms of the consequences of not having the priorities stay in place over the next six-year period. There's some complexity, potentially, about how you get there in terms of not enshrining the priorities beyond that six-year period. I think that issue
10 can be addressed through drafting, but the very real risk of priorities falling away when the priorities appear, to me, at least, have been underpinning some of the informal or non-regulatory approaches within the community. It seems to be the driver that gets people in the room. The potential for that to fall away could create a different environment over the next six-
15 year period. Perhaps the second observation I'd make is that, in situation where your highest priority's further down the river or stream, I foresee, if that priority arrangement changes, then whoever is taking at the top of the stream will have full access to the resource, and that will fundamentally change the flow pattern within a river, and without a driver
20 to ensure that doesn't happen, there is a very real risk. So my thinking at this point is there needs to be a mechanism for them to come down somehow, but there needs to be greater care as to how that occurs.

Q. Okay, so I think you are saying, actually, there may be, on a merits-based argument, a policy to respond, and we should be responding, but creature
25 of statute, which finally expires on the 1st of October.

A. It is, in a sense, it's creating a new – I was going to say a new creature of statute, but it's a new creature under the Resource Management Act at that point, and potentially hanging off a policy and a rule in a regional plan, but then real care needs to be exercised in terms of how s 124 works
30 in six years' time, such that priority is not then necessarily –

Q. Based on this creature.

A. Yes, because that was never the intention.

Q. That is troubling.

A. And that's something certainly exercising my mind at the moment.

- Q. So I think you are saying, in response to the Court's minute. Yes, it is a creature of statute, and yes, it does finally expire on the 1st of October, but nevertheless, that creature of statute still has value in terms of organising relationships and consequential flows in the river. The question is how do we respond without a fully worked-up regional plan that has minimum flows, et cetera, which was meant to be filling this gap. So it is a bit gappy, how do we fill the gap without actually having unintended legislative consequences? Which, you know, (inaudible 13:06:18) to those issues, and so then the question, you know, do you do what region has done, which is, you know, have the policies with non-regulatory methods, is that the approach? Do you have voluntarily responses, is that the approach?
- 5
- 10
- A. Yeah, the question – and it is a live question, certainly in my mind – is policy absent a rule or the imposition of some form of condition on a permit going to be enough? And I don't know yet, but the evidence in terms of just what's going on out there, which we haven't yet heard, may inform that.
- 15
- Q. And that is why Mr Webb's evidence today is extremely important, because it is all about relationships, but those relationships are underpinned by a very real benefit, which is recognisable in law but which will cease to exist, probably.
- 20
- A. Yes, and my suspicion is that the existence of the priorities are driving the behaviour to form the groups that are forming the informal – dealing with the non-regulatory water-sharing, for example.
- 25
- Q. So then how should I advance that? Because by the time I get lawyers in the room talking to me about deemed permits, that is actually sort of week three of the hearing to come in Dunedin, so how do you advance that? Can you advance it with two drivers, both a planning driver, assuming there is a gap and it should somehow be filled, and then also looking, and then maybe with that product to be given to lawyers who can talk about, you know, the questions that I have posed in terms of creature of statute or not. Planners are an input to the lawyers' thinking, perhaps.
- 30
- A. I think there ought to be, because if these things, or something like them, is to come down, there's going to need to be some drafting in the plan,

and that's in the domain of the planners, not the lawyers, I would have thought, and there will be planning questions in terms of how to do that.

Q. Yeah, and I think the only concern I would have there is for planners to think, if I say the word "priorities," therefore, I am creating a legal right.

5 That might be wrong because that is only a right which can be conferred by the Crown by its legislation. Or maybe they are right, I do not know, it really depends on where the counsel are landed on that.

A. It strikes me that we need to shift away from use of the word priority –

Q. To something else, yeah.

10 A. – because that's something that will disappear, but that which the priorities do needs to be described in new words, and that is an exercise that the planners might be able to assist with, and there are a few different ways that you might approach that task.

Q. Because I issued the minute, see, this is what I am thinking about, going
15 to be talking to, hopefully, a lot of farmers about this and how it works in practice, but what is the direction to come? I think I would like you to propose that direction, having consulted with other parties and counsel, I guess.

A. Okay, we will put some thinking into that.

20 1310

THE COURT: JUDGE BORTHWICK:

But bear in mind we've got hardly any time now so, because we're still pressing on with that hearing, but I can say that Commissioner Dunlop is generally available, but you know, it's not really his availability, that's an issue it's actually
25 everybody else's availability.

MS FORD:

That and witnesses.

THE COURT: JUDGE BORTHWICK

Mmm. Here I see Hort New Zealand playing a very real role and, you know,
30 particularly given that your witness has experience of these creatures somewhere else in the country, mmm.

MS MEHLHOPT:

If it would assist, Hort NZ can provide that example from the Hawkes Bay.

THE COURT: JUDGE BORTHWICK

I think it's actually the example is brought into the planning conference, yes,
 5 and yes, it's brought into the planning conference, yes and you know, this might
 – thank you – this might be overthinking, I suppose planners might be directed
 to think if the benefit exists post 1 October or if the benefit doesn't exist, but a
 new creature needs to be created now an, you know, R&A creature, no, a
 regional plan creature. Shall we do it on both chances not to close it – not
 10 presupposing what the lawyers' submissions might be? Yes, I don't know.

MR MAW:

Yes, it might well be because my suspicion is the lawyers won't have finished
 their thinking in sufficient time, so that's probably sensible for –

15 THE COURT: JUDGE BORTHWICK

Okay, could you – when do you think you could get back to us in terms of draft
 directions having consulted (inaudible 13:11:29)?

MR MAW:

20 My learned junior tells me it depends a little bit on the availability of others, but
 it strikes me that the end of next week might be a sensible period of time
 because it gives us time in hearing, but also some time Thursday/Friday next
 week to wrangle part of our response, so next Friday?

THE COURT: JUDGE BORTHWICK

25 Good and I must say that if you find folk are not responding to you, you are to
 just say: "Judge, these are the people who have responded and these are the
 directions I have endeavoured to contact blah, blah, blah, no response" and I
 will take it from there, but you know, you must not beat yourself up about trying
 to get people on the same page because that's my job to, you know, to get
 30 people to comply, so just file it and yes, just be frank about who has been co-
 operating or not co-operating, yes.

MS MELHOPT:

I'm must aware of some High Court commitments of other counsel next week, so just wanting an extra couple of days.

5 THE COURT: JUDGE BORTHWICK TO MS MELHOPT

Q. Yes, I know, so that's Lindis running next week? Okay, yes.

MS BAKER-GALLOWAY:

A. That's Monday, Tuesday and probably Wednesday, yes but that's it.

10 THE COURT: JUDGE BORTHWICK

Q. Good. So yes as soon as you start consulting the better I suppose, although lawyers minds are somewhere else. You shouldn't be here.

UNIDENTIFIED FEMALE SPEAKER:

15 I won't book.

THE COURT: JUDGE BORTHWICK

You'll be –

UNIDENTIFIED FEMALE SPEAKER:

I won't be here next week.

20 THE COURT: JUDGE BORTHWICK

Right, good.

UNIDENTIFIED FEMALE SPEAKER:

So Ms Giles will be here next week.

25 THE COURT: JUDGE BORTHWICK

Okay, all right. So we need to do something about priorities. You'll make some draft directions by next Friday, we need to get the – I will issue perhaps a shorter minute because I have time to do that much at least on say heads up, the schedule conferencing associated provs to happen in the two week break,

confirm, everybody confirm to the region that they're available and what days and we'll probably really allow three days for that process because it will be the Court's questions as well as your own, as well as any outstanding area of disagreement, we'll ask, we'll probably do something today about the TAs asking them to file for directions as to the completion of their case and filing of supplementary legal submissions as to any matter of interpretation and then as I said when we get back in our two week adjournment we'll look into that TA case and probably have our own questions which we'll ask the TAs to answer with a right of reply from Mr de Pelsemaker if he wants to go there, yes.

10

MR MAW TO THE COURT: JUDGE BORTHWICK

Q. Now just one of the points you just highlighted there was the direction in relation to the experts confirming or otherwise their availability?

A. Yes, yes.

15 Q. Now I wonder whether just to assist with that process, you might be very direct in terms of witnesses who have unavailability setting out their reasons as to why there is unavailability?

A. Oh I know, unavailable.

Q. Because we've had real trouble –

20 A. Yes.

Q. – with that and the excuses given, other than I'm in a higher Court or a different Environment Court case –

A. Yes.

Q. – we get a wide range of –

25 A. Yes, yes,

Q. – or we sometimes we get nothing other than I can only do one day, so.

A. Yes, yes and look people should know better, okay.

Q. They should but it would maybe help.

A. Okay, so assuming that they do know better and nevertheless behaving like this, what direction do you want me to ask?

30

Q. That they confirm their availability and that they provide a reason as to any unavailability and noting the overriding duties to the court in terms of their availability, the court processes, something along those lines might give them a nudge.

A. Okay, good, I shall do that.

THE COURT: JUDGE BORTHWICK

Q. Okay, anything else that I need to do, anything else that they've got in play?

5 A. Yesterday, I sought leave to question the lay witnesses in relation to and you will have seen some of the questions I have been putting. I'm minded to continue putting those types of questions and I wondered whether to make sure there are no surprises to those witnesses to come. I might file a formal notice in relation to that just so it will signal -

10 Q. That would be good and you might note also, it comes out of the court's interests in the operation of deemed permits because if we are asking questions it is absolutely an entirely inappropriate that you ask questions, yes, so you might want to note that as well?

A. Yes, so I might note that and I might –

15 Q. Yes.

A. - the irrigation area is the other sort of topic that I've been exploring a little.

Q. Yes, well, yes, you can and I understand why and yes, you can note that - yes, that seems sensible just to file a memo and when do you think you will have that in by?

20

A. By Monday, I'm lively informed.

THE COURT: JUDGE BORTHWICK

Q. So file a memo seeking leave, okay and on that basis, I would grant it, yes.

25 A. Thank you.

Q. And there was something else. I've forgotten. What else? There was something else and I've totally forgotten.

THE COURT: COMMISSIONER EDMONDS

30 I didn't have anything else, sorry.

THE COURT: JUDGE BORTHWICK

No, there was something else that I thought of.

MR MAW:

5 Ms Mehlhopt reminds me that we are providing this copy of the Smallburn consent, so –

THE COURT: JUDGE BORTHWICK

Yes. Do you want to cover that off in a memo, so we don't have multiple memos and further to the court's direction, here is a copy of the Smallburn consent and
10 confirm and confirmed whether or not that I think either the application I sought to give recognition to existing rights of priorities or whether priorities have ceased and have now been taken over by other more – other R&A tools which we're more familiar with, yes.

MR MAW:

15 And presumably, there will be some conditions to that effect if that's happened, so we will highlight those.

THE COURT: JUDGE BORTHWICK

Yes. So really like to know what happened there. So Smallburn, so if you deal
20 with it in the same memo, that will be good.

MR MAW:

And this is in the memorandum seeking leave, that one?

THE COURT: JUDGE BORTHWICK

Yes, yes, so it has two parts, so I don't have multiple memos coming in.
25

MR MAW:

Yes, no, that should be fine.

THE COURT: JUDGE BORTHWICK

There's something else I needed.

THE COURT: COMMISSIONER EDMONDS

Mr Maw is going to report back on Wednesday in relation to what?

THE COURT: JUDGE BORTHWICK

Yes, but he knows that he has to do that.

5 **THE COURT: COMMISSIONER EDMONDS**

Technical experts, so he's still going to be doing that on Wednesday?

THE COURT: JUDGE BORTHWICK

Yes. Let me just see if there's anything else in my notes.

THE COURT: COMMISSIONER EDMONDS

10 Sorry, that was the only other thing that I had.

THE COURT: JUDGE BORTHWICK

I have it back in my mind there's something else I needed to ask you to do.

MR MAW:

15 There is a memo that you will see at 3 o'clock today or shortly before in relation to whether discharges are included within deemed permits and thus captured in the plan change.

THE COURT: JUDGE BORTHWICK

Yes.

20

MR MAW:

So that's nearly ready to go.

THE COURT: JUDGE BORTHWICK

That's a memo?

25

MR MAW:

Yes.

THE COURT: JUDGE BORTHWICK

Okay and then the only other thing I've got to do is granting leave in relation to Dr Chrystal's supplementary evidence and I will grant it and I just need to record that in the minutes, I suppose. Okay, all right, if I think of the thing – the other
 5 thing that I thought needed to be addressed, I will obviously let you know in a minute, yes.

THE COURT: COMMISSIONER EDMONDS

Very good.

THE COURT: JUDGE BORTHWICK

10 Very good, so we are adjourned on that basis. All right, thank you. Is there anything else arising or you are all happy with that. Very good. No, there is.

MS FORD:

Can I just make one comment your Honour? With the seeking leave to
 15 cross-examine some of the lay witnesses, I am sure you will cross it, but it might just be worth making sure that they know what their obligations are under oath and what they can, what their obligations are for the information that they provide obviously, all true, but within the confines of potential commercial issues there, yes.

20

1320

THE COURT: JUDGE BORTHWICK TO MS FORD

Q. Oh, I see, you mean in terms of any questions Mr Maw might ask?

A. Yes, and commercial sensitivity, because they are all farmers competing
 25 for the same stuff.

Q. Competitive farmers, yeah, no, I see what you mean.

A. So maybe just making a note of what their obligations are, and if there is something that is commercially sensitive, that they – how that works.

Q. I think, I do not know, I mean, my feeling is just to let's see how it runs.
 30 Speaking for myself, I was quite interested in the question of what date you enter into a contract, even if it's just a verbal purchase, when was the

deposit paid, because that all goes to creating the exception. Whether the exception should be recognised because the engagement was prior to the notification or if it was post-notification, and, in fact, the file was on risk, so I was interested in that line of questioning for that thinking.

5 A. My thinking is in terms of the licensing.

Q. Licensing?

A. Yes, and the particular types of fruit in the question of Mr Webb. There was some commercial sensitivity there, as I was informed of afterwards, and I wasn't aware of the commercial sensitivity of it, and so I just want to make sure no other farmers are –

10

Q. Okay, it's lost on me as well. I don't know why that would be sensitive.

A. Just with the terms of those contracts might not be as favourable for other –

Q. You mean in terms of you can pay your deposit after the tree buds?

15

A. No, my understanding is in terms of the repayments.

Q. Oh, the repayment schedule.

A. And that kind of thing. I understood from Mr Webb he wasn't sure whether or not he could not answer because of the oath.

Q. Oh, I see what you mean.

20

A. And so just flagging that as a potential issue going forward with lay witnesses.

Q. I don't know how you want me to cover that off.

A. I think maybe it could just be – I don't have a solution in mind, I just want to, at this stage, just to flag it.

25

Q. Well, you've flagged it, and I suppose you flagged it to Mr Maw that, you know, he needs to be careful of pressing into commercially sensitive information. I don't actually think that was his intention or purpose.

A. No, I think that was my mistake, to be honest.

Q. Oh, your mistake.

30

A. Sorry, your Honour, so, yes, just flagging it as a potential to be aware of.

MR MAW:

Yeah, it's fair, but I was quite careful this morning with what I didn't ask that I might otherwise have wanted to ask in terms of how much money was paid for

deposits, how much has been paid for irrigation, and I'm not minded to go there, I'm more interested in when a record might have been created prior to plan change 7 and what does it look like.

THE COURT: JUDGE BORTHWICK TO MR MAW

5 Q. Yeah, so it's whether you're on or off risk, that's really what the question is.

A. Yeah, it is.

Q. And so you're trying to carve out is there a true exception or not?

A. Yes.

10

MS FORD:

Yes, so I'm just flagging my mistake, I guess.

THE COURT: JUDGE BORTHWICK TO MS FORD

15 Q. That's okay, no, I understand that, and actually, for the same reason, didn't ask anything about the value of the contract, the value of the deposit. That would be a hopeless are to get into in terms of looking at policy, it just would. So, no, I understand that, I understand what the issue is. The Court was alert to it, Mr Maw is alert to it. I'm probably not going to say anything because that might get people overthinking their
20 evidence, and we don't want them to do that either.

A. Thank you.

Q. Okay, all right, thank you. All right, and we are adjourned.

COURT ADJOURNS: 1.24 PM

25

COURT RESUMES ON MONDAY 19 APRIL 2021 AT 9.31 AM**THE COURT: JUDGE BORTHWICK TO MR MAW**

- Q. Good morning everybody. Anything arising over the weekend that I need to know about and make directions of?
- 5 A. Nothing from us your Honour.
- Q. Great, all right. Very good. So we're now moving into the case of Federated Farmers. If you just give me two ticks I'm going to grab the evidence folder okay.

THE COURT: JUDGE BORTHWICK TO MS REILLY

- 10 Q. So Ms Reilly we're in your hands, you have an opening statement and you're also given evidence, on behalf of Federated Farmers?
- A. Yes, thank you your Honour, Mr Maw do I need to get sworn in?

THE COURT: JUDGE BORTHWICK TO MR MAW

- A. I've offered to assist with the swearing in of the witnesses.
- 15 Q. No, that's all good that's...
- A. And I have...
- Q. Mr Maw's been multitasking across the entire case, so that's all fine. Yes.
- A. Ms Reilly has what she's described to me, as a summary of her evidence which is the document which is referred to as the opening statement.
- 20 Q. Opening statement, so actually if it's the summary of the evidence, we might just –
- A. Yes.
- Q. – swear you in.

THE COURT: JUDGE BORTHWICK TO MS REILLY

- 25 Q. Okay, yes, no that's fine. I thought it might have been a statement in addition to your evidence but no, absolutely fine so we'll have you sworn –
- A. Okay.

Q. – and then you can give the summary and then we'll move through to questions because the Courts already read your evidence as is everybody else.

A. Yes, okay. No, thank you. Thank you your Honour.

5 Q. Yes, you go take the witness stand and have a seat.

MR MAW CALLS

KIM LOUISE REILLY (AFFIRMED)

Q. Do you confirm that your full name is Kim Louise Reilly?

10 A. Yes I do.

Q. And you are the Federated Farmers of New Zealand, South Island, Regional Policy Manager?

A. Yes I am.

Q. And you've prepared a statement of evidence dated 5 February 2021?

15 A. Yes I have.

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

A. No, there's not.

Q. Do you confirm that that statement of evidence is true and correct to the best of your knowledge and belief?

20 A. Yes it is.

Q. Now in addition to that statement of evidence, I understand that you have provided to the Court, a marked up version of plan change 7, setting out some changes. Now I understand that you wish to explain to the Court the basis on which you provided that document.

25 A. Yes, so I did not lodge that amended copy with my evidence. I wasn't sure whether because I'd asked for the plan to – change to be withdrawn whether I should be proposing detailed planning solutions as I'm not a planner and I was aware there was number of planners who were traversing similar matters so I hadn't lodged anything and then the –
30 Mr Cooper came back and asked that I do lodge a copy of the plan change with my amendments so I put, strike-out through the provisions that we had asked to be deleted on the basis that we had asked for the plan change to be withdrawn. So, wasn't sure whether it was appropriate

to then be offering detailed planning solutions when our primary relief was that the matter be withdrawn.

THE COURT: JUDGE BORTHWICK TO MS REILLY

5 Q. Sorry, I hadn't appreciated when I had read your evidence, I saw that there were no amendments proposed and I hadn't appreciated that your evidence was solely withdraw the plan or whether there were, I think I, when reading your evidence sensed that there were other relief apart from withdraw the plan which if that was the case, we needed to know what the wording was.

10 A. Yes. Sorry your Honour, I did confuse matters by my primary relief being, withdraw and then I commented on provisions as to why we were concerned –

Q. Mm.

15 A. – what aspects troubled us and we thought, warranted further consideration by the Court during the process but because I wasn't a planner, I didn't know whether it was appropriate that I then went into detailed solutions. Mr Maw, I understand that is an issue. But I have attempted to explain in my opening statement, what our concerns are and where we believe the Court is heading in the right direction with the process so far as far as it's expanding on those and going through with witnesses and many of our matters we have raised in our background evidence has been traversed in and movement and discussion on those matters so I – my opening statement is intended to expand on those matters. We understand the Court has been traversing in to try and assist, acknowledging that our primary relief was withdraw the plan change.

20

25

Q. Mm. Well Mr Maw you see that would be of assistance too to us given –

A. Mm.

30 Q. – that it's Federated Farmers and given it's reached within the farming community to know how Federated Farmers regards the quite significant change from the Regional Council and also where the Court's indicates that it is pressing into matters not yet covered but which appear to be blind spots in this plan change. In saying that you might say – so that,

yes, in other words, how does the position where Mr de Pelsemaeker has reached today, acknowledging it's not the final position, address the real concerns raised by Federated Farmers, what remains outstanding, is that outstanding content such that you would reject the plan change. Given that, reject the plan change or withdraw, I'm not sure whether I could withdraw the plan but reject the plan change is on the table. Mm.

THE COURT: JUDGE BORTHWICK TO MR MAW

A. Yes I hadn't appreciated that the relief, being pursued was "withdrawal of the plan change" –

10 Q. Mm.

A. – on withdrawal or relief rejecting the plan change in terms of how I've approached preparation of my question –

Q. Yes.

A. – I've done so in the light of the document that had been filed but that's fine, it think I can work within what I have prepared in terms of exploring the reasons underpinning the request for the plan change to be rejected and in a sense they're issues we have been grappling with on the way through this hearing, so they're not in a sense new issues so I'll test those underlining reasons through cross and in terms of exploring whether the most recent version of the plan change –

20

Q. Mm.

A. – so, and I think about that is the joint witness statement from the planners. Noting that there is still some...

Q. Yes that – to be fair it is that. The 8th of April one? Yes.

25 A. Yes. In terms of testing whether that actually addresses some of the underlying concerns –

Q. Yes.

A. – perhaps I can test that on the way through.

Q. Yes.

30 A. Now I'm not sure whether Ms Reilly has familiarised herself with latest state of play in terms of the planning provisions.

MS REILLY:

Yes I have and I've based my opening statement around those provisions and where we support and believe they've gone a good way to accommodating some of the concerns we have raised.

5

MR MAW:

I wonder whether we might usefully hear your summary / opening and that might inform us as to where –

10 **MS REILLY:**

Okay.

MR MAW:

– Federated Farmers is.

15 **THE COURT: JUDGE BORTHWICK TO MS REILLY**

Q. And if, for example you now depart from your proposed relief which you filed after you filed your evidence you should say so if you know –

0940

A. Yes.

20 Q. – if what is now in play in the joint witness statement or planners provides a surer foundation for Federated Farmers, you should say so and we then don't have to worry about that –

A. Okay.

Q. – terribly much. Or if we do then no doubt Mr Maw will explore.

25 A. Thank you your Honour, I can confirm that our position is that the plan change is – we're working on is moved in a significant enough direction that we consider there's work that's been done that would be lost if we, at the primary position being withdrawal – rejection continues –

Q. Oh right.

30 A. – so we believe there has been progress made and obviously more caucusing intended so we've just commented on where we believe those further areas may usefully probe and...

Q. And that would be really helpful –

A. Okay.

Q. – to know your views on that actually.

A. Great.

Q. Yes.

5 A. Thanks your Honour.

Q. Okay, so we're with you and reading your opening.

A. Okay, thank you.

**WITNESS READS OPENING STATEMENT OF REPRESENTATION FOR
10 FEDERATED FARMERS OF NEW ZEALAND**

A. "May it please the Court:

1. Thank you for the opportunity to appear before you today. My name is Kim Louise Reilly. I am the Federated Farmers of New Zealand South Island Regional Policy Manager.

15

2. As part of this statement, I will provide information on what and why Federated Farmers has an interest in this plan change. I will introduce you to Federated Farmers' witnesses, and I will expand on some matters covered within my Evidence-in-Chief."

20

3. Please note that "this is an advocacy statement" that is being "lodged on behalf of Federated Farmers" this is because "I have previously expressed opinion and made comments, including within media articles, on what I consider to be the flawed approach Otago Regional Council" had "taken to this plan change, from the time staff advice was given to Councillors encouraging them to ask the Minister to 'call it in', to the time the notified version was released.

25

4. Federated Farmers' general approach to" plan change 7 "is in support of the evidence and positions of other primary sector parties and witnesses, in particular evidence presented to the Court by the Otago Water Resource Users Group and Landpro Limited representatives.

30

5. I appreciate that as part of this extensive hearing process, in addition to the planning, technical and scientific information, submissions and evidence lodged by parties, the Court has also had the benefit of hearing from a wide range of experts. I note this has included specific scientific input from three different expert groups — that being, representatives for the primary sector, community water, and hydroelectricity generation - along with planning caucusing. The Court has also heard from a range of individuals and representatives.

35

40

- 5
6. We support the endeavours the Court is taking to identify the most appropriate ways of addressing the significant legal and scientific challenges and issues raised through submissions, evidence, and questioning.
- 10
7. I am not a scientist, and neither am I appearing before you in an expert planning capacity. My statement will not purport to contradict, or confuse, the wealth of scientific and planning information the Court has already received as part of both hearings and caucusing processes.
- 15
8. We note that further caucusing has also now been set down, providing additional opportunities for experts to traverse, and propose solutions, for some of the complex matters identified by the Court as likely to benefit from further discussion and agreement. We support such endeavours being made. Dr Lionel Hume has attended previous caucusing on behalf of Federated Farmers and considered this to be worthwhile.
- 20
9. Further in this statement I will expand on Federated Farmers' current position on specified matters, with brief reasoning what these issues are, and how they impact water users, and rural communities.
- 25
10. Evidence presented as part of Federated Farmers' position today includes that from the following witnesses:"
- 30
- (a) Firstly, "Dr Lionel Hume, who has attended prior caucusing."
 (b) Secondly, "Phill Hunt, a farmer representative; and"
 (c) Third, "Rowena McDiarmid, a farmer representative.
- 35
- Due to conflicting, existing, employment commitments, our witnesses below will now appear before the Court in May 2021:"
- 40
- (d) And that is, "Dr Fiona Doolan-Noble, our expert in rural mental health; and
 (e) Michael Lord, on behalf of the Otago Rural Support Trust."
- 45
11. Just to expand on our interest in plan change 7, "Federated Farmers is a not for profit, member-funded organisation. It" is "a long and proud history of representing the needs and interests of New Zealand farmers.
12. Federated Farmers is a pan-sector organisation that works with farmers to seek reasonable, practical, and affordable solutions to planning regulations where they have the potential to impact farming activities, while promoting good environmental outcomes.

- 5 13. As an organisation, Federated Farmers submits on virtually every national or regional regulation or proposal impacting farmers, including regional policy statements, regional plans, water plans, district plans, annual plans, bylaws, and other regulations. With the breadth and volume of regulations recently proposed, this is becoming an increasingly onerous task.
- 10 14. Our Otago members are engaged in a wide range of land-use activities, including producing sheep and beef for meat and wool, dairy farming, cattle grazing for dairy support, deer for meat and velvet, cropping, commercial vegetable growing, and forestry, through to diversification into a range of other products and services.
- 15 15. However, the agricultural sector in reality, encompasses the whole supply chain, from farming and growing through to the processing, manufacturing, and trading of agricultural products and services, and it also more broadly includes the rural communities within which these activities take place.
- 20 16. The Otago region contains an immense rural land area, richly diverse in its geography, climate, soil types, land use, water use, water body type and land stability. On that basis, it is important that the Otago regional planning framework provides the basis for each farmer within Otago to respond in a way that is appropriate for the receiving environment, for their catchment, and for their particular farming system.
- 25 17. Freshwater and its management are topics that Federated Farmers is particularly interested in. Freshwater is the lifeblood of all farming and growing activities, and our members across Otago rely upon both water takes and good quality water to sustain their businesses. Farming uses of water include animal drinking water, irrigation of pasture and crops, milk cooling, frost-fighting, takes for water storage, milking shed and equipment washdowns, through to” hydroelectricity “generation and domestic uses. Certainty around sufficient and reliable water supply is a fundamental consideration for farming operations.
- 30 35 40 18. The primary sector is critical to the New Zealand economy, contributing just under \$50 billion in export receipts to the national economy annually, surpassing 2021 expectations despite international trading and pandemic challenges.

19. Primary production also makes a significant contribution to the social, and cultural well-being, and the continued viability, of Otago towns and rural communities.

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20. As an organisation, Federated Farmers is critically aware of the impacts that planning processes can have on both individual and community wellbeing, and this will be a key focus for us through the plan change 7 “hearing and will be expanded upon further by our witnesses.

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21. Federated Farmers supports efforts to improve water management and quality. However, we consider these efforts need to be effects-based, targeted, and balanced with economic and social costs” and audited “to achieve sustainable management.”

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So, comments on the plan change process:

22. We understand that our submissions, further submissions, and detailed evidence statements are taken as read. On that basis, we will not go through those matters again in detail. We also understand that some of our comments may have already, to a degree, become moot, with further Council amendments proposed for” plan change 7 “provisions.

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23. On that basis, the primary purpose for us here today, is in support of those of our members impacted by, or potentially impacted by” plan change 7. “We are seeking that the final” plan change 7 “decision reflect the reality that” plan change 7 “is not just about numbers on a water permit. It is also about people, families, the rural workforce, and communities, along with the environments in which they live. We also acknowledge the important role Ngäi Tāhu has across Otago.

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24. Primary producers and rural communities are the people that grow our food and fibre. They have typically already been working together in catchments or water sharing groups, along with consultants,” in order “to identify optimum solutions for water sharing, environmental, hydrological, ecological, and other considerations. Often this is because the necessary background work simply hasn't yet been done by Council within the timeframes required.

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25. At the end of the day, long after the court process has ended, it is Council and these rural people, their representatives, and communities, that will be left to deal with the consequences, and implementation, of final” plan change 7 “decisions.
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26. It is Federated Farmers’ view that too often we see a mass of experts, lawyers and consultants involved in intensive hearing and mediation processes, who then pack up, return to their cities, and move onto the next planning matter. This is not a criticism of any of these parties. It is a reality of processes under the Resource Management Act, which have become increasingly protracted, complex, litigious, and resource-intensive over the years.
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27. In many instances, despite Federated Farmers and other stakeholders flagging concerns with the workability and practicality of Council proposals 'on the ground', end plans are not easily, or appropriately implemented. Too often it is rural resource users who pay that price, through additional uncertainty, complexity of processes, delays, and costs.
- 20
28. A key factor behind” plan change 7, “has been the prior lack of timeliness, and investment by Council into science and data collection in the region. Similarly, we do not consider sufficient planning, consenting, or land relationship resourcing has been provided for, or retained, by Council.
- 25
29. Federated Farmers is very concerned as to what this might mean over the next six years for subsequent Otago planning processes. It is our view that prior to notification, plan changes in the region must undergo greater consultation with impacted communities and stakeholders. It is not sufficient for Council to say that confined timeframes prevented any real or in-depth consultation beyond 'targeted' or 'self-selected' consultation. Plan changes must be more refined,” they “must have a stronger evidentiary basis, they must undergo better cost-benefit evaluation, and consideration of alternatives.
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30. Without better processes it means vital front-loading, consultation and strength testing of provisions is missed due to unrealistically fast notification; and unfortunately, that means that like in this case,

these issues become matters the Court ultimately has to grapple with through” the “hearing processes.

- 5 31. We've seen the significant efforts Mr Maw has made into questioning, cross-examination, expanding upon or clarifying various parties' positions. In our view, there would be much better starting positions for plan changes if these types of questioning and discussions were carried out by Council, up-front through meaningful workshopping and consultation, prior to any notification.
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- 15 32. We do need to point out, that while the Court has genuinely endeavoured to try and make this process as open and accessible to farmers and other lay individuals as possible, by its very nature, court complexes are more intimidating, stressful, resource-intensive, costly, and demanding than council hearings. This is in no way intended to be a criticism of the Court, and neither is it intended to be a criticism of those Council staff who have been working tirelessly over many months on this process.
- 20 33. But it is a consequence and reality that decision-makers will not have the benefit of hearing from as many impacted resource users as would have been expected under normal Schedule 1 processes. In our view, this is evidenced in the number of people who submitted to the process versus those who have appeared before
- 25 the Court.
- 30 34. It also means that” many primary sector “individuals and stakeholders who have remained involved in” plan change 7 “have had to carefully budget and consider what aspects or days of the case they can feasibility follow, attend, or resource, what evidence could be” produced “or what experts could be contracted. By my estimate there are over 11,000 pages of documents on the court website for this process alone, and it is incredibly onerous for many organisations and individuals to keep on top of these. This is a
- 35 reality of fast-tracked 'call-in' processes and in our view, this was not reflected in the Council” staff “advice to councillors at the time 'call-in' decisions were recommended.
- 40 35. A further concern for Federated Farmers is that we have plan changes 1 and 8 set to undergo similar fast-tracked processes. The Otago” Regional Policy Statement “is also currently being re-written

and will be” re-released “within the next two to three months, and again, this will be fast-tracked. We also have an expedited Land and Water Plan review process due before December 2023.

- 5 36. It is our strong view that Council must ensure that in future it undertakes better consultation, resourcing, cost-benefit analysis, option considerations, and frontloading of any 'fast-tracked' processes before they are handed to the Court to resolve.”

10 Just to expand on our overview of our position:

- 15 37. “As expanded upon within our evidence, Federated Farmers opposed” plan change 7, “ as notified, in its entirety. We did not consider it was the most efficient, effective, or reasonable way of addressing the issues before Council. We questioned the process in which” plan change 7 “was called in, the consultation (or lack of) that occurred with impacted communities, and we questioned whether section 32 of the Resource Management Act had been met, particularly in light of its potential impacts on water users and communities.
- 20

- 25 38. It was Federated Farmers’ view that the economic, social, and cultural wellbeing of water users and rural communities was not given adequate consideration or regard by the Council in” plan change 7 “as notified.

- 30 39. It remains our view that” plan change 7, “as notified, risked having worse impacts on the environment, economy, and wellbeing of communities than would have occurred had the existing Water Plan process continued.

- 35 40. That said, we are encouraged to see” the “progress being made through the course of” this “hearing, through changing drafts and additional expert and planner input, which we hope will ensure both refinement and increased workability of provisions We understand further caucusing is now confirmed, and we endorse the Court's endeavours in this regard.

- 40 41. The planning environment over the next six years is to a degree unknown. We don't yet know what the final Otago Regional Policy

Statement will look like, and the Otago Land and Water Plan is yet to be drafted, although we” do “understand Council considers many background aspects complete. We have continued to express concerns that timeframes and necessary resourcing to have the full” Land and Water Regional Plan “review in place will be impacted by” the fact “all” regional “councils across New Zealand” are “required to undergo water plan reviews and hearings within the same period, using broadly the same experts, as part of their requirement to give effect to the National Policy Statement for Freshwater Management 2020 (NPSFM 2020). The Resource Management Act itself is also being reformed, and we anticipate some fairly fundamental changes to Part 2, and key approaches” within the Act as part of that “process.

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42. All of these regulatory changes have implications for resource users, including an increase in uncertainty and stress.

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43. We also caution that without further refinement of” plan change 7 from notified version, “there’s a risk that there will be a glut of water permits all needing renewal in six years’ time. These could all end up coming through to Council, over a similar period to” those “processes” signalled “above, with Council staff already committed to a range of other water plan, climate change, biodiversity, and other obligations. This is something we note the Court has already recognised, but we reinforce that it is a dilemma accompanying” plan change 7.

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Just to talk on rural well-being issues:

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44. “As” plan change 7 “was notified with 'immediate legal effect', despite the flaws now acknowledged in specific planning proposals, it impacted plan users from the moment of notification, in particular those with applications underway or ready to lodge.

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45. Water users who had in good faith been working towards long-set statutory deadlines, were immediately caught up in Council's eleventh hour changes. This added significant uncertainty, stress, costs, and anxiety to” those “impacted. We refer to the evidence of Dawn and David Sangster, who will present to you in May, as an example of this situation.

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46. In our evidence, we expressed concern with the 'hold the” line' “nature of” plan change 7, giving “it is intended to provide an

interim” solution until the new Land and Water Regional Plan is in place. The new” Land and Water Regional Plan “has not yet been drafted. Its contents or provisions remain unknown and undetermined” to the primary sector. Even though a six year consent” term may be granted, there is still uncertainty, with permit holders not knowing what the process thereafter will look like.

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47. As expanded upon within our evidence, not all rural regions and the communities that live within them are currently thriving, and if anything, the impacts of the COVID-19 pandemic have been a harsh reminder to not take our core sectors for granted. As a region, Central Otago has been significantly impacted by the economic and employment impacts of COVID-19. The full impacts of COVID19 are also not yet known and remain highly uncertain. There are similar uncertainties around climate change and what that” will “mean for future water” users “and vegetation growth rates in Otago.

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48. Unfortunately, uncertainty and stress are becoming increasingly burdensome on rural wellbeing.” And “I refer to the evidence of Dr Fiona Doolan-Noble, Michael Lord, Rowena McDiarmid, and Philip Hunt, in this regard.

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49. My evidence highlighted Federated Farmers' concerns with the” plan change “process, starting from the commencement of the Minister for the Environment's direct involvement in Otago water planning matters in August 2018, through to the findings of Professor Skelton's investigations and report,” the “Ministerial recommendations, and the responding Council commitments.

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50. Plan change 7 “is noted to be an interim 'hold-the-line' plan change, yet as notified, it went further than holding the line, by attempting to push back water usage through a one-size fits” all “approach. It is our view that adopting an interim plan change should not be justification for Council to avoid its responsibilities around robust science or hydrological modelling, or to inadequately evaluate economic impacts unless it is a very simple, low-cost process.

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51. Furthermore, because of” plan change 7’s “shifting” goalposts, “there is now a fundamental social inequity between those water users who completed the transfer process prior to” plan change 7's

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“notification (who now have long-term consents), and those who for a range of different reasons — whether financing, complexity of their catchment,” the “number of permit holders in” their “water management groups or otherwise — had in good faith been working towards the legislative 31 October 2021 expiry date for deemed permits as set out in section 413(3) of the RMA.

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52. Water users caught up in the” plan change 7 “process will now be facing much shorter term consents than those who” had “already” had their “transfers complete, despite taking on board, considering, and assessing the same environmental and other considerations.

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53. “If” plan change 7 “is not withdrawn, changes will need to be made to provisions as notified, to ensure they better address community impacts and considerations.

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So, what we are seeking:

54. In our view,” plan change 7 is “an interim plan,” that “should be largely process-driven. The full review of the Otago Land and Water Regional Plan, due for notification by December 2023, is where the National Policy Statement for Freshwater Management should be given full effect to. By that point in time, Council should have sufficient hydrological, ecological, and other scientific, economic, cultural, and social information and data, such that it can make full and proper determinations as to what responding planning framework is appropriate.

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55. On that basis, we support the signalled change of direction as shown in the 14 March 2021 version of” plan change 7 “to a much simpler process-oriented plan change, which appears to be more in line with the Minister's recommendations.

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56. As flagged above,” plan change 7 “as notified” had “already shown to have placed a disproportionate burden on applicants to date, requiring a substantial amount of information and expert input for the short term consent at” stake. “On that basis, we also consider other changes” to plan change 7 do “remain necessary-

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57. Federated Farmers primary recommendations” and support for proposed changes to date” are as follows:

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- 5 • Firstly, “that” plan change 7 provides “for a simple controlled activity rule, that is process-driven, cost-effective, and risk-free, effectively allowing current permits to be exercised as they are currently (reflecting historic use rather than paper use), pending the finalisation of the” Otago Land and Water Regional Plan. “There is a need to ensure continued reliability of supply. This is to a degree addressed” by “the” 14th of “March version of the rule” and policy but we also “support the additional changes proposed via the Supplementary Evidence of Sally Dicey for “Otago Water Resource Users Group dated” 19th of “March 2021 in this regard.”

- 10 • We do still seek “removal of the restriction on the area able to be irrigated under Policy IOA.2.1(b). While the” 14th of “March version is an improvement to that originally notified, we still consider the door should be left ajar for some circumstances of increased” areas, “such as where a change to more efficient irrigation over a larger area, is to be adopted” or where development had been finalised prior to plan change 7 but was not yet fully complete. “We note that the National Environmental Standard for Freshwater 2020 will provide a limit on hectarage in any regard. More efficient irrigation can occur without an additional water consumption use. However, generally a greater area will need to be irrigated to ensure the investment is feasible from a returns’ perspective. We note and support evidence and responses from “Otago Water Resource Users Group, “Landpro and Beef +” Lamb “in this regard, and” we “support Helen Marr’s proposed change to IOA.2.1(b) (with the accompanying ‘Note’) and” to “Rule IOA.3. IA. 1 which seeks to accommodate this change while endeavouring to address the Court and Council’s concerns” that had been raised.

- 20 • We support the Joint Witness Statement amendments to IOA.2.1 (c) and (d) — reflecting the carryover of flows and cessation conditions over to new permits, and” the “reference to historical abstraction rather than ‘actual’ abstraction.

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- 5

• We support the proposed change from the strict period 1 July 2015 to June 2020, to "water years (1 July to 30 June) for which water meter data is available" as now shown "in Rule IOA.3.1.1 of the" 14th of "March version.
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• We still seek the removal of deemed permits relating to the damming and discharge of water from" plan change 7, "leaving them to be assessed under the existing Otago Regional Plan for Water.
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• We" do "support provision for an additional pathway for longer-term consents, particularly where significant" background "work" on applications "has already been undertaken, noting that Council has advised attendees at recent community meetings" for Arrow and Cardrona "that the" Land and Water Regional Plan "work" was "complete for some catchments.
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• We support the proposal within the" 14th of "March 2021 version" of plan change 7, "that Policy IOA-2.1(e) is amended from 'no reduction' (which" is something that "we had opposed) to 'no increase' in water taken. In our view, as notified Council had not provided sufficient information to show why such a blanket reduction of water volume was necessary or justified in all" the "circumstances. Requiring 'no reduction'" had "wrongly assumed that all water use was unsustainable, and" penalise "those who" had "used water most efficiently" those "who would find it considerably more difficult to find further efficiencies.
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• We opposed the Ministry for the" Environment's submission point 70034.01 where they" had "sought the deletion of any reference to a non-complying activity pathway. If this is not withdrawn, we seek it be rejected." The Ministry for the Environment's "proposal would have in effect limited all water consent terms to a maximum of six years with" restricted "conditions, with no ability or pathway in which they could seek a longer term, irrespective of the

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level of supporting evidence produced.

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• We opposed some of the extensive matters of control specified for Rule 1OA.3.1.1 as notified, finding them disproportionately onerous and expensive to satisfy. It was our position that the extent of information required under Rule IOA.3.1.1 was inconsistent with a six-year” controlled activity “consent term, and that it failed to meet the Minister's recommendations for a narrow plan change, based around low-cost fast issuing of new consents as an interim measure. On that basis we strongly support the” 14th of “March 2021 version in which matters (a), (c), (d), (f), (g) and (ga) are deleted.
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• We had opposed Rule IOA.3.1 .I(b)(iii) in regard to the need for the total land area irrigated to not exceed that irrigated in the 2017-2018 season. We argued that it was not sufficiently explained why that one historic irrigation year had been chosen, or how it has been justified. As proposed, the rule left water users either having to reduce the area” of irrigation “back to that that particular irrigation season or” to “apply for a non-complying consent under Rule IOA3.2.1, with all the other additional costs and hurdles that introduced. We” also “sought allowance for irrigation development that had occurred after the 2017/18 season,” where that was needed “to account for seasonal fluctuations such as those relating to climate, soil moisture levels,” changes “in farm system, ownership or management, or changes” as “to what is grown on that farm. We noted that “there could have been family or financial issues during that particular” one “season which had impacted” total “irrigation. On that basis, we support the proposed change in the” 14th of “March version to extend” the years out “to 2020. Whether the months specified are appropriate or not may be a matter experts in that area further deliberate upon.
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• Federated Farmers opposed Rule IOA.3.1.1(b)(iv) and (vi) as we opposed the use of average maximums,” we found “these” are “likely” to “result in a reduction below actual usage, which may not be necessary or appropriate in all cases. In our view, it was not sufficiently justified by Council's scientific evidence to date. We support the 14th of “March version moving away from average maximums. We also support alignment of

years used, as above, from 2012 to 2017, to” that of “2015 to 2020. Federated Farmers further comments in this regard will be expanded upon within the evidence of Dr Lionel Hume.

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• The Ministry for the Environment (at submission point 70034.03) had sought a new rule whereby any activity that did “not meet one or more of the conditions of Rule IOA-3.1.1 became a prohibited activity. We opposed this via our Further Submissions on the basis that it was not an appropriate use of the prohibited activity status. It is our understanding that this relief has been abandoned, but for clarity, we reinforce our strong opposition to what was attempted and support its outright rejection.

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• We support Rule IOA.3.1A providing for a restricted discretionary path, although we query whether it goes far enough to account for all faulty or incomplete data. We support the additional evidence and” proposal “of Sally Dicey for” the Otago Water Resource Users Group “in her” 19th of “March 2021 evidence, and comments by Claire Perkins of Landpro Ltd in this regard.

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• We support Rule IOA.3.2 providing for an alternative consenting” pathway “where the controlled activity conditions cannot be met but where it can be demonstrated that a longer consent duration” is “appropriate It is Federated Farmers’ position that this rule should provide a genuine alternative consenting option Federated Farmers considers an” alternative pathway is necessary and we are encouraged to see further discussion and evidence being progressed in this regard.

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• Dr Lionel Hume attended expert caucusing in regard to Schedule IOA.4 and” he “will be able to expand upon concerns and reasoning in relation to the Schedule. We also support previous evidence provided by Mr Ian McIndoe on behalf of Horticulture NZ and the Otago Water Resource Users Group.

• We note detailed discussions in recent transcripts on 'priorities'. While we do not have firm views or solutions” as to “how these issues can be addressed, we urge the Court

to fully consider the evidence and solutions posed by” the Otago Water Resource Users Group “and Landpro representatives, who have close connection and working knowledge of these matters.

5 58. Thank you for your providing the opportunity to present to you today. Before handing over to our following witnesses, I am happy to” now answer “your questions.”

A. Thank you your Honour.

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THE COURT: JUDGE BORTHWICK

Q. Thank you. I don’t doubt for a second the impact of this process has been enormously stressful for your members and it’s not just this process, it’s the process to come and my suspicion is the process to come is that it
15 creates an even greater level of uncertainty, in response to which I can’t or this plan change just simply can’t bridge.

A. Completely agree.

Q. So we’ve tried to make the hearing accessible and I also understand –

A. I –

20 Q. – because it’s a court, people won’t find it that way.

A. And I certainly appreciate that and note all endeavours that have been taken to try and make this as smooth and easy as possible.

Q. I’m also aware every time I release a minute it seems to come with more legal language which people might find difficult to engage with, but as we
25 move through this hearing we are now really in the sticky end of some of the – some pressing legal issues –

A. Yes.

Q. – one of which is priorities?

A. Completely agree, yes sorry I should have added we support the court
30 taking a field trip around some places of interest as well.

Q. Mmm.

A. It’s something we think will be useful.

Q. Yes, yes. It almost always is particularly where we're guided as to what it is that we're looking and taking on board so that we're more than happy

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A. Yes.

5 Q. – to be doing that. All right, well I'm going to hand you over to – unless the Commissioners have any questions?

THE COURT: COMMISSIONER BUNTING

No thank you.

THE COURT: COMMISSIONER EDMONDS

10 (Inaudible 10:10:32).

THE COURT: JUDGE BORTHWICK

We're going to hand you over to Mr Maw and he's going to cross-examine you on this statement and your previous statement.

15 **MS REILLY:**

Yes, okay, thank you.

CROSS-EXAMINATION: MR MAW

Q. Good Morning.

A. Good Morning Mr Maw.

20 Q. Thank you for your opening statement that's provided some further clarity about the position of Federated Farmers. Now I'm still left a little uncertain about whether Federated Farmers is still pursuing its relief that Plan Change 7 should be rejected in its entirety or whether it's position has moved onto the position that you've outlined towards the end of your

25 opening representation?

A. Yes Mr Maw, I think given the considerable amount of time and effort and energies that everyone has been working on to try and find a better solution and pathway forward, we support the endeavours and are not pursuing our rejection outright of the plan change, we consider that the

30 plan change 14th of March with accompanying details as we've

progressed is a better now pathway now given the time and effort that's gone in to try and make this as workable as possible.

5 Q. So in that regard, you accept that the case for PC7 has been made (inaudible 10:11:51) but that there's still some refinement to the provisions that Federated Farmers is pursuing?

A. We seek refinement, I think yes we believe in the circumstances there is a – the justification for where we're heading has been, I believe as notified that hadn't been made, but I believe it is tracking in the right direction.

10 Q. And so in your original statement of evidence you had referred to provisions in the MPSFM, part 2 of the Act and the regional water plan as supporting the primary position of abandoning or rejecting Plan Change 7, but having heard the hearing process to date and the evolution of the planning document, those concerns now have been addressed?

15 A. Yes they've certainly been abated to the point where we believe that it's now more likely to give effect to the higher order documents sitting above the plan.

Q. I want to explore with you a part of your evidence where you had referred to section 414 of the Resource Management Act and you did that at your paragraph 154?

20 A. Thank you.

Q. Now I read very carefully this part of your evidence and I wanted to ask you whether you remain of the view that section 414 of the RMA is engaged by Plan Change 7?

25 A. For dams and affected irrigat- water users if the infrastructure becomes unusable, then potentially, but the 14th of March version in tracking forward may not be such an issue. That was an idea I had when drafting my original evidence, a s 414 hadn't been something I'd seen covered a lot and it was just flagging that that to me was relevant.

30 Q. Section 414 is a particularly significant provision for the Council and that there's a compensation element included within it?

A. Yes.

Q. And so the question of whether section 414 is engaged or not is an important question to be considered?

A. I would anticipate that if legal counsel for other parties has not raised and pursued this, then it is something that we wouldn't strongly be necessary- we'd be pushing further. It was something I was flagging that if water deemed permits became unusable, then that was a consideration, but certainly in the way the plan change has evolved and progressed, I don't believe so.

MR MAW TO THE COURT: JUDGE BORTHWICK

Q. Your Honour I was going to put the provision to the witness, but I might just address that in closing.

10 A. Yes I'm just dialling it up now to-

Q. I do have copies of it if anyone else wants to see a copy.

A. Well, yes –

Q. Maybe I will just take –

A. Just take their – you might need to hand out your copy, slow on the dial up with the Wi-Fi but I have a hard copy. So I've got mine and if you could just provide that to – yes because this – your understanding of compensation provisions may be material to the position that you take, whether that understanding is correct or incorrect is a different issue, it's probably one for legal submission, but nevertheless the advice given to members of Federated Farmers might be quite important to know what the thinking was there.

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Q. Yes and that's what I was intending to understand and explore with the witness.

A. Yes.

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

Q. Now you have a copy there –

A. Yes I do.

Q. – of section 414, I want to start at subsection 1. "The Regional Council may in accordance with section 65 include a rule and regional plan for the purpose of securing minimum instream flow which has the effect of..."

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A. Yes.

Q. Now do you understand Plan Change 7 to be a rule to be containing rules in a regional plan for the purpose of securing minimum instream flow?

A. No.

Q. And then just to round that out, if you look at subsection 6, bottom of the page and over the other page, you'll see that if such a rule was to be included in a notified proposed plan, then notice had to be given that it contained rules that had the effect of being captured by s 414?

A. Yes I read that.

Q. And when the Council gave notice of this plan change it didn't give any such notice in relation to section 414 did it?

A. No. So that's been excellent that I raised it and that counsel's now fully traversed that and decided that that is not an issue, so thank you Mr Maw.

Q. Very good. We shall move on. Next topic that I had identified for exploring with you was the question of consent reviews and you've covered this topic at some length in your evidence?

A. Mhm.

Q. And my first question to you is, have you moved on in relation to the concerns you have expressed in relation to consent reviews being the answer to giving effect to the new land and water regional plan or do you still remain of the view that consent reviews are the appropriate tool to bring consents into line with the new land and water regional plan?

A. It was certainly our approach to Plan Change 7 that that would've been a useful way forward that could have addressed the concerns of parties – of issues that counsel had raised, that these were able to be input onto permits and we believe there was a real argument for that to have occurred. I read Mr de Pelsemaker's evidence in response to that issue and where the concerns counsel have are in that regard, I personally still believe as a lay witness, that that was a useful way forward but understand that the Court process has moved on from that. I still, I guess would be useful to, yes to understand why that has not been considered to be sufficient, I read from the evidence of the Council that it prevented any termination of a water permit, that it only amend – it didn't – and that there were concerns around the economic viability of consents having to be included or considered and we believe that was appropriate so I guess my reading of the process as I worked through it, was that that would've been a useful way of addressing concerns, but I certainly understand that

the Court's moved a long way forward and that hasn't been put on the table as the optimum solution for the plan change, so my personal view may not have been endorsed by other people, but that to me seemed like a useful answer.

5 1020

Q. When you think about the effect of short-term versus long-term consents and the effect that the duration has on the membership of federated farmers, and when you think about one of the purposes that the council says is behind plan change 7 and its short-term purposes is to send a very clear signal that great care should be taken about investment in significant infrastructure over the next six-year period, so that when the land and water plan comes into effect, water users have not invested based on expectations of securing water resources into the long-term. Do you accept that a shorter-term duration does send that signal?

10

A. It sends a clear signal, but whether it's a realistic signal, when landowners are left on the ground, trying to work out their 10-year, 20-year plan for their business, they may need to have secure financing for their operation. So I understand why council's wanting to do this, to make sure that matters don't get out of hand and the environment doesn't pay the price for that, it just seems to us that there is a price that hasn't really been explored. For my short-term concern, it's not just six years and then everyone moves forward, there's a lot of uncertainty and stress and anxiety that hangs over a six-term consent. There are financing implications for landowners, and there is the uncertainty that at the end of six years, we don't know what the new land and water regional plan will look like, we don't know what the new Resource Management Act direction will send. There are a number of factors that just add to the uncertainty that hangs over farmers when it's only a six-year consent.

20

25

Q. So, in light of the current regulatory environment, there are lots of reasons why great care should be taken before making significant investment in infrastructure for the long term.

30

A. Often, it's not significant investment, it's just the investment to get through. Farmers are undergoing a range of stresses from different areas, not just from plan change 7, and it's just having a comfort that the

business they're investing not just money but also their time and resources and energy and engaging of employees into is going to be something that's going to be viable in six years' time or beyond, and it's just that certainty that when you're explaining to your accountant or your farm advisor or your banker that you have that ongoing vision, and it is frustrating for people that they have been working towards and investing considerable time and effort into improving environmental outcomes, and then a six-year con term is put on the table as in what they had planned was necessarily, by its nature, going to be worse for the environment, when, certainly in many cases we're aware of, that has not been the case. It's to improve environment, it's to ensure more efficiency of irrigation use and to improve riparian planting and fencing and all those matters, so it's not a simple six years and then you're fine, it's the uncertainty that hangs over people when they have a short-term consent as to what next? Is it still viable for my children and my grandchildren?

Q. When you think about that uncertainty, isn't it the potential phasing out of over-allocation that the new land and water regional plan will be dealing with that presents the greatest uncertainty?

A. Where there is over-allocation, it sends a message, but it assumes that all water use is inefficient and it assumes that all waterways are over-allocated and it assumes that what investment that landowner may have been intending would lead the environment to a worse situation.

Q. I mean, you think about the types of – and you use the words the environmental improvements that were associated with investment. When you think about the shift from inefficient to more efficient infrastructure, is it your understanding that in order to fund that transition, additional irrigable land is often required?

A. Not in all cases, but in some cases, that may be required just to justify the investment.

Q. Do you have a working knowledge of how often an increase in land area is required?

A. No, that would just be in feedback. When a case comes through, we put out a member advisory, asking our members to provide feedback, and that's the sense that we got from our member feedback on this.

Q. I'm going to move on now to understand some of the concerns that have been raised in relation to the version of plan change 7 that has come through as a result of the planning joint witness conferencing, and on working through your opening statement from this morning, and I just want to understand whether I've understood correctly the position, and I may also need to reference the planning document that you have circulated back in March just to make sure I understand precisely where Federated Farmers' case is at.

A. Yes, yeah.

10 Q. The first topic that I wanted to explore was the question of whether the position has moved on, on the part of Federated Farmers, with respect to hydraulically connected groundwater, and whether that should or should not be captured by the provisions of plan change 7.

15 A. That is a matter, if possible, I would put to Dr Hume when he's on the stand, as a scientist.

Q. Okay, and in relation to whether plan change 7 should capture consents that are not the replacement of deemed permit, I had understood your strike-out version of the plan change to be removing those from the reach of plan change 7. Have you moved on with your thinking about that?

20 A. Yes, we consider certainly the 14th of March version and the evolution of the plan changes addresses our concerns around the inclusion, if it can be made more workable, as it seems to be tracking.

THE COURT: JUDGE BORTHWICK

25 Q. So do I understand that both deemed permits and water permits, which, you know, are not deemed permits, they're just water permits in their own right, you are now content for those both to go forward into the plan change?

A. Depending on where the final plan change leads, if it's workable for all.

30 Q. Which one had you excluded? Because I noted that you had excluded one, and I wasn't sure from the drafting whether you meant to or not.

A. Well, we were considering that the matter was relating to deemed permits, but yet it seemed to extend into everything else, and that the plan change provisions as notified didn't seem to really fairly capture those matters,

particularly around things like the matters of control for the controlled activity and other areas that have subsequently been looked at and evolved.

EXAMINATION CONTINUES: MR MAW

5 Q. Just want to move on now to para 57 of your opening statement, and you'll see there a series of bullet points.

A. Yes.

10 Q. I want to explore the first of those bullet points, and in particular, the last sentence, where you're referring to the controlled activity rule and you're accepting that it should be a process-driven, cost-effective, risk free, effective, allowing current permits to be exercised as they are currently, and again, that's picking up on reflecting historical use.

A. Yes.

15 Q. Now, towards the end of that paragraph, you note that you support the additional changes proposed by the supplementary evidence of Ms Dicey for OWRUG dated 19 March 2021.

A. Yes, just trying to find my copy of that 19th of March. So it was Ms Dicey's evidence at page 23, 24, of her 19th of March version.

1030

20 Q. Sorry, I've –

A. Sorry.

Q. Paragraph reference, was it?

25 A. Paragraph... I don't know if they're in paragraphs. It was at the back on page 23 and page 24 of Ms Dicey's evidence. It again raised the dilemma around priorities, and Sally had – Ms Dicey has proposed a potential way forward to address that. I understand from reading the transcript there's been a lot of dialogue on how priorities can or are priorities able to be factored into Plan Change 7 and it's an incredibly complex matter that is very difficult to try and put a one solution for, because each water catchment and water sharing group is so different in the priorities and personalities, so I tried to put my thinking into what a potential solution might be and while I agree that priorities are an issue that need to be
30 addressed, I could not come up with what I could consider be locked into

5 a plan change to address the very diverse and complex situation of priorities. On that basis, I had liked the proposal by Ms Dicey as providing a higher level but yet providing flexibility through that approach. As I am not a planner, I have not been able to come up with anything better than that, so I had supported Ms Dicey's approach.

THE COURT: JUDGE BORTHWICK

Q. Can you just pause there a second. I'm just trying to... this is, you support Ms Dicey at page 24?

A. Yes. It's the, for the controlled activity rule.

10 Q. Yeah. Just pause there and I will just see what she is saying, again. And which...?

A. There was a new bulletpoint.

Q. Oh, I see, point 4, is it?

A. Yes.

15 Q. Roman numeral (iv) on page 24?

A. Yes.

Q. So I'll just read that that. Oh yep. Don't know.

A. And I certainly appreciate the difficulties the Court has had with that particular matter.

20 Q. We're working on it.

A. And I have read the transcript and understand what your dilemmas are and how as a Court trying to find a solution, how difficult this is. And that was as good a solution as I could come up with because it is just so diverse and complex and...

25 Q. Yes. I understand. I mean, you have got two problems. You have got the legal problem which, you know, I've put out there in a minute, and you not having a counsel engaged I think might have been missed out when there was some discussion between OWRUG, DOC and Regional Council as to these sorts of issues, legal issues which might come up.
30 and I don't know whether you know you wish to, if you like, come back in, with counsel and so the legal issue is itself complex and we're looking, the Court is considering all of its options there. But in addition to that, there is that factual question which is the diversity of arrangements on

each water body, which could be catchment, sub-catchment, stem, main stem, or trib, I wasn't sure, and will ask you questions about that, but yes.

5 A. We're very comfortable that Ms Irving for Otago Water resources Users Group is the best person to be round that table when it comes to these matters, and talking with DOC's counsel and understanding the discussions that have gone on to date and how to understand that. We certainly believe the right people have been at the table as far as Ms Dicey and Claire from LandPro, they deal with this a lot and they understand the different nuances and complex nature of different arrangements in the smaller areas, so yeah we just confer to those experts in the field, they deal with this; we deal with the planning side of things and policy and get involved at plan change level, we don't have the resourcing to get involved in those individual consent re-

10 Q. You know, I get that too.

15 A. So I would not, it would not benefit the Court for me offering me a potential solution when I don't have the same in-depth understanding of what works in the particular catchment as those consultants who work with those landowners would have.

20 Q. But for the most part, most plans are not dealing with bespoke solutions for certain individuals.

A. Yes.

25 Q. Although some town, some urban plans do, you know, where they have the bespoke solution for a developer, but for the most part plans don't do that, they are arcing if you like, the policies are arcing the circumstances of all people.

A. Yes.

Q. And so to that extent other than just citing the word "priorities" there may be something that you can offer there.

A. As far as how that played out in the rule framework.

30 Q. Policy framework.

A. Either policy or rule.

Q. Policy or for rule, yeah.

A. The policy, I couldn't find a more nuanced way of doing it as has been done, as has been put to the Court. I am not sure if that is part of further caucusing as to –

Q. It's likely to be, yeah.

5 A. – that discussion, yeah, and I think that will be certainly a useful exercise to work through but I certainly don't envy the Court trying to make a solution in that regard. It's a complex...and Federated Farmers has a position that we struggle with one size fits all rules, at a national level particularly, but and it's because of the unworkability when it comes down
10 to small catchments and small areas, and I guess that's the golden solution, try to find something that fits for a plan framework and enables the court and others to give effect to higher order documents but is workable on the ground and everyone can move on.

Q. So you don't imagine yourself even as a Federated Farmers advocate
15 appearing in an expert conference situation looking to forges solutions?

A. I would certainly, certainly like to, but whether that was appropriate or not as I'm not a planner, but certainly would be welcome to do it.

Q. So when you say your policy, you don't mean planning policy then?

A. No, I have a strange range of roles. So I have a law degree and I've been
20 working for a number of years on planning matters for Federated Farmers attending select committee, other hearings, national, I'm our national spokesperson for – national policy lead on biodiversity, so have been on the biodiversity collaborative group, so I sort of write media and do whatever I'm asked to do that sort of fits in with progressing the cases of
25 farmers, but I have no planning qualifications, it's just what I've picked up over the last eight-plus years working on these detailed matters and across the South Island.

Q. Okay, thank you.

CROSS-EXAMINATION CONTINUES: MR MAW

30 Q. I want to move on now to the second bulletpoint which relates to the removal of the restriction on the area able to be irrigated under policy 10A.2.1B. Now, in this regard you defer to the evidence and responses from OWRUG, LandPro and Beef and Lamb in this regard?

A. Yes. And certainly reading the transcript of the question, the line of questions that has, that both the Court and counsel have taken, I can see where the dilemma starts and I suspect it's because those of us who work with the primary sector we work with people who are constructively trying to find a way through and we take them in good faith, and we see I guess the good side of intentions. So when it's explained, but if open the door and provide for this, then people are going to sneak in, and is that possible, and the answer is yes, potentially someone could take advantage of a particular rule, I believe that's come from the position that Council has to look after, there, has responsibilities under the Resource Management Act and that's the lens they're looking at these matters through. From the primary sector we're looking it through of what we see happening in practice and not writing rules that impact the majority for the fact the minority may do something and if you can have a bottom line or a regulation that addresses that concern, then that may be a way through that works without hammering the majority. On that basis, I had quite liked where the discussions had gone with providing a solution around where development had not yet been, had been agreed and supported and funded and had commenced but it hadn't yet been finalised, I felt helped address the concerns that Court and counsel have been raising about what if everyone then tried to do that. So that's why I supported where that was heading in those witnesses' statements, is that they were trying to find an answer that enabled an irrigated area to be increased without everyone then increasing their area, and I agree that not everyone should be suddenly all able to just increase their irrigation area but that the door should be left open for some situation.

Q. So, in a sense you are reflecting the underlying issue of concern and recognising that there may be a genuine area of concern for those that had invested and taken steps prior to the notification of Plan Change 7.

30 1040

A. Yes.

Q. But where it becomes more complicated is how you actually address that issue in terms of the drafting of the provisions of the plan?

A. Yes.

Q. And you will have seen that I explored at some length with particularly Ms Marr and also Ms Perkins the breadth of opportunity which might be provided by leaving the door ajar so to speak using the wording that they'd put forward and so there is a concern there in terms of how precisely to address the issue?

5

A. Yep.

Q. And in terms of that drafting you are simply saying, well you're deferring to those witnesses and haven't put forward alternative wording yourself?

A. No it was, it – the discussion Beef and Lamb's, their hearing, I think you'd had a thorough conversation with Ms Marr and in relation to how that would work through or could work through while providing counsel with peace of mind around that not being taken advantage of and I sort of felt that was heading in the right direction of the solutions posed by those planners from the primary sector to try and address those concerns that you had raised in your questioning.

15

Q. When you think about that issue, do you accept it's important that the door is not left too far ajar?

A. Yes.

Q. I want to move on to – I'm on page 10 of your document and I want to move to the second bullet point on that page which relates to the time period for water years?

20

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. When you say that document do you mean –

A. The opening.

25

Q. The opening, right.

A. The opening representation or the opening statement.

Q. Mhm.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So page 10?

30

A. Yes.

Q. Second bullet point which is about the date range for water years and here you say, Federated Farmers supports the change from the five year

period to including all water years in terms of the schedule. Now let me know if I should put these questions to Dr Hume in terms of the date range or whether that's something you feel that you can answer?

5 A. That would be preferable if given the detailed science behind that, that would be – and something that had been discussed at caucusing potentially, that would be something for Dr Hume. Sorry, Dr Hume.

10 Q. I'll make a note accordingly, thank you. Let's move onto the next bullet point. You seek removal of deemed permits relating to the damming and discharge of water from Plan Change 7 leaving them to be assessed under the existing Otago Regional Plan for Water. Now I'm wanting to understand the evidential foundation for the opinion expressed in that bullet point and I'm struggling to see within the evidence put forward by Federated Farmers, precisely what the evidential basis is. Have I missed something in your evidence?

15 A. In our submission and initial evidence we've flagged throughout, our concerns with dams being included, the deemed permits relating to dams being included for the reasons of the need to have a greater tenure of consent than a six year consent and that it raised a raft of issues around those dams and that ideally they would not be included as part of
20 Plan Change 7 because then they could be progressed with a full sweep of the Otago Water Regional Plan versus a short six term – six year consent.

25 Q. When you think about the suite of consents that attach to these types of dam, is it your understanding that they also include permits which relate to the volumes and allocation of water to be taken?

A. Yes.

30 Q. And when you think about the setting of an allocation and flow regime for let's say a river that has a large dam on it, you accept that the consent that relate to the allocation of water with respect to the dam have a significant impact in relation to the flow and allocation regime with respect to that water body?

A. Outside Plan Change 7 you mean when it – the Council's going through a minimum flow process?

Q. No, just as a general proposition?

A. As a general – yes.

Q. And so if we think about one of the purposes of Plan Change 7 is to ensure that the flow and allocation regimes, the NPSFM 2020 compliant flow and allocation regimes that are to be set out in the new land and water plan, one of the purposes of Plan Change 7 is to ensure the timely transition to those plans, granting long term consents for damming of water has the potential to significantly push out those time frames?

A. I guess that would depend on how quick a consent for a new dam would come through given the complexities around biodiversity and other matters that Council would be progressing so I don't think there's going to be a rush of every farmer in Otago seeking to put in a water storage dam, but I think it's something that should be certainly encouraged in light of climate change and, therefore, we would like to think that that is something that our farmers could have as an option and that re-consenting of the dams at issue, certainly I'm not a banker, but the feedback we got from our members that it would be very difficult to get a re-consent - a re-permit for a dam with a six year consent.

Q. When you use the word "dam", what is it that you mean when you are having this discussion? Are you talking about on-farm storage or are you talking about in-stream?

A. Water storage dams.

Q. So dams of main stems, Falls Dam, for example, which of those, or is it both?

A. Both.

Q. Right.

THE COURT: JUDGE BORTHWICK

Q. So which is both? So we've got Falls Dam which no doubt I will see on a site visit shortly, but, which is what, a damming of a main stem and water storage?

A. Yes just to make sure that water storage, other water storage dams that have been brought in for, from an irrigation point of view.

Q. And these are land use consents? When you say "dam", what type of consent do you also mean there?

A. I believe I'd have a range of consents that would relate to them, whether it be the deemed permit that originally –

Q. Yes.

A. - replied and then the land use consent and others.

5 Q. So it's just, it's water permit land use, maybe discharge as well, there's a whole bundle of activities?

A. That would already be considered under other aspects of the Otago Water Plan. Those other aspects.

10 Q. Is that right? Dams is something which hasn't been well explored to date, which isn't a criticism of you, it's just – it just hasn't really come through in the evidence?

A. I think there was a number and a plan of how many deemed permits related to dams and I can't remember the exact number, it was relatively low, a five or seven, I – but it was enough to be of an issue. When we –
15 certainly we got our feedback, this was an area we got a lot of feedback on concern that a dam and for health and safety and other reasons and infrastructure investment, that this would be an area that would be concerning if they were limited to a six year term for a dam consent.

CROSS-EXAMINATION CONTINUES: MR MAW

20 Q. When you think about the genesis of the deemed permits and when those permits came into existence many years ago, it's more likely to be those large dams on the main stem or a tributary of a river as opposed to on-farm storage dams and then if you think about the consents that may be required for on-farm storage dams, unlikely to be deemed permits?

25 A. Yes but this would extend beyond deemed permits to other water use permits, the Plan Change 7.

Q. Yes and when you think about the investment decisions that are being made for existing on-farm storage, those investment decisions would have been made through the lens of the consent term that was in place
30 at the time the investment was made?

A. Yes.

Q. And so the six year re-consenting in relation to those permits or the investment's sunk at that point isn't it? It's already been made?

- A. It is, but I don't imagine it would just be a very quick, here's a six year controlled activity consent, put your dam and there'll be a lot of work that would go on in the background to justify the other requirements around putting in a dam into an area so there would be a lot of background work that would go into such an application and six years is a long time in business, we've seen that with Covid-19, how many businesses have gone under very quickly, so if in a particular farming situation a water storage dam allowing takes from when water is more in abundance is a good environmental or other decision that that door should be left open for more than a six year term for when you're dealing with a 50 year plus investment.

THE COURT: JUDGE BORTHWICK

- Q. And sorry, I'm a bit confused. Are we talking about new proposals for on-farm storage or are we talking about -
- 15 A. Re-
- Q. – existing built on-farm storage which -
- A. Well my understanding from Plan Change 7 that was - that it related to both the deemed permits and other new permits that might come in.
- 1050
- 20 Q. Well, I think Mr Maw's questions to you regarding on-farm storage is that the parent permit, if I could put it that way, is unlikely to be a deemed permit because deemed permits are particularly concerned with flows to races – that's in terms of the water take – not on-farm storage. If you've got on-farm storages, changes are, I would have thought, that's come in under the Water and Soil Conservation Act, or RMA, but it's not a deemed permit, per se. You agree with that?
- 25 A. I would have thought both would have been included.
- Q. Possibly both.
- A. Possibly both.
- 30 Q. Both pieces of legislation, okay. So, again, we're looking at replacement consents, replacement in the sense that they have already got a water permit under the RMA sunk costs, that is, they've got built on-farm storage, and with a replacement consent of a six-year take, I think, is the

proposal, and in that case, what's the concern there around on-farm storage if you've already got it? Putting to one side the farmers who might want to put it in, but the farmers who have already got it in, being renewed, or those consents replaced, the water permits replaced for a period of six years.

5

A. I guess for that particular situation, it might be the maintenance around the structure that's needed to move it forward into the future.

Q. Right, and is that a land use issue?

A. Yes, but I understood it was caught up in plan change 7 as well.

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

Q. Well, it's the water allocation and the water permit that would be captured by plan change 7, is it not?

A. Yes, but if that was restricted to a six-year term and the other considerations opened the door for longer, I wasn't sure where that ended up as an overall application.

15

Q. So in relation to the renewal of permits for dams, you're of the opinion that a long-term consent should be granted with respect to the water allocation because dams are potentially expensive and might require significant maintenance.

20 A. I don't think I'm saying should be granted, I'm saying the door should be left ajar for an applicant to put forward a package of evidence to show why that may be appropriate in a particular circumstance, so it would need to be a high bar, or a higher bar, certainly, than controlled, but just to enable that to be a possibility through the plan change.

25 Q. And there would need to be some carefully worded provisions in the plan to achieve that outcome?

A. Correct, yes.

Q. And no party, as I understand it, has put forward such provisions.

A. No.

30 Q. Just to close out, then, the treatment of applications for new dams over the six-year period, do you accept that the construction of an on-farm storage dam would require a significant financial investment?

A. Yes.

Q. And when you think about that storage dam needing to be supplied with water, there is uncertainty as to whether water will be available when the new land and water plan comes through, and uncertainty as to the allocation and flow regime.

5 A. I would have considered that a water storage dam would be something that would be beneficial when we're working our way through the process, and that that water would be able to be used during an irrigation season instead of the water that's used from the take of the river, and therefore, not necessarily would be worse on the flow regime or the total allocation,
10 it would be something that could be used as an alternative in those times of high flow, and we've had farmers that have come to us with evidence of where they've released water to provide for environmental reasons or to provide for community water reasons, and therefore, not necessarily (inaudible 10:54:45), it's normally a supplementary allocation, and used
15 during high flows. I wouldn't necessarily say that it's going to add to the burden of the overall take.

Q. When you think about the machinery or the provisions within plan change 7, they don't deal with or don't provide any guidance as to how that allocation should occur?

20 A. No, which is why we suggested the easiest way would be for them not to be included as part of the plan change.

Q. At which stage, you end up back in the existing operative regional plan water.

25 A. Yes, which council has, for many years, defended strongly against us when we've been in processes.

Q. Now, I wasn't minded to take you back through the regional plan water.

A. I walked into that.

Q. I'm not going to unless you go there again. That's your evidence.

A. Okay.

30 Q. Just in terms, then, of new dams and supplementary flow, so by supplementary flow, I understand you to be referring to the taking of water in periods of high flow.

A. Yes.

- Q. And again, a flow and allocation regime is necessary to understand how much of the high flow can be taken without having adverse effects on instream river ecology, and a flow and allocation regime needs to be established to first understand how much supplementary water might be available from a water body.
- 5
- A. Yes, and some of those minimum flow processes have been finalised for Otago.
- Q. Well, none of those processes are recorded in an operative regional plan or notified regional plan, are they?
- 10
- A. No, to my knowledge.
- Q. Right, let's move on the next bullet point, support of a provision for an additional pathway for longer term consents, particularly where significant work has already been undertaken, noting that the council has advised attendees at recent community meetings that the LWRP work is complete
- 15
- for some catchments.

COURT ADJOURNS: 10.56 AM

COURT RESUMES: 11.14 AM**CROSS-EXAMINATION CONTINUES: MR MAW**

Q. Right, so we're on bullet point four on page 10.

A. Yes.

5 Q. And you have indicated there Federated Farmers support for an additional pathway for longer-term consents, particularly where significant work had already been undertaken. Now, before we delve into the details of that part of this bullet point, I want to deal first with the second part, where you note that the council, you say, has advised attendees at recent
10 community meetings that the LWRP work is complete for some catchments. Do you have any direct knowledge of the current state of affairs in relation to the council's work programme for some catchments?

A. No, just the comments that we'd had fed back to us by member feedback, that they were of the understanding that some of the background science
15 and environmental and other considerations had already been complete for those particular catchments, so that work was largely finished, and so the reason for including that was by saying that where that work had been largely progressed, that the council was now moving on to other matters, that that opened the door, potentially, for longer-term consents, because
20 the science was more understood, the hydrology was more understood, the ecology and all the other considerations were more understood, and therefore, council was able to make a decision on more thorough information as to whether a longer-term consent was appropriate.

Q. Right, so your opinion expressed earlier in this subparagraph is
25 predicated on your understanding that all of the work is complete?

A. I've noted that significant work was complete, but yes, maybe that was too generically explained.

Q. So if you think about this, when you say "some catchments," do you have any understanding of which catchments?

30 A. I think the Arrow and Cardrona had been – the meetings at issue. I think potentially the Taieri, given as another catchment, but then I'm speaking now beyond matters that I've been personally involved in.

Q. So let's hold with the thought that it might have been the Arrow and the Cardrona that were the subject of –

A. The meetings? Yes.

Q. Yes.

5 A. It was those two, feedback.

Q. There are other catchments in the region.

A. Yes.

Q. Manuherikia, for example, and what do we know about the Manuherikia? You accept that there's significant allocation of that water resource?

10 A. Yes, but the point being made there was that where applications had been progressed, and obviously applications don't get put together overnight, they can take years and years to get all the information that's required, and many of those were due to be lodged, or all of those would have been due to be lodged before 1 October 2021, so where considerable
15 background work had been undertaken on those applications in good faith to get them to where they needed to be lodged, that the consent term on those bases, that the information being provided would be through, it would include involvement from Ngāi Tahu, from the Department of Conservation, from Fish and Game, and would involve
20 more advanced science, that there would be a stronger case for longer term consents for those situations where a lot of background work over many years in good faith has been put together at considerable resourcing and cost to those landowners.

Q. Now, there are a number of concepts that you are speaking to here, so I
25 need to break it down a little further. You have connected the support for an additional pathway to the council having completed its work in some catchments. Are you suggesting that it should only be those catchments for which you say the LWRP work is complete that a long-term consenting pathway should be provided for?

30 A. No, I'm not saying that. Sorry, if that's how it reads, that wasn't my intent. My intent was to note two different scenarios, one where the application had been progressed to a point that it included a significant amount of background work, resourcing, dealing with other parties, et cetera, and was ready to be lodged.

- Q. Let's just pause there and deal with that situation first. So in those circumstances, where the LWRP framework has not been progressed to the point where you say it is complete, so let's stay with the Manuherikia for example. In that situation, do you accept that an environmental flow and allocation regime has not yet been set?
- 5 A. Yes, but through no fault of the farmers.
- Q. Do you accept that the flow and allocation regime that will be set in the upcoming land and water regional plan will need to comply with the NPS 2020?
- 10 A. Yes, and that was where, in my original evidence, I proposed s 128 being used to ensure they could be aligned.
- Q. We're not going to go back into consent reviews.
- A. Okay.
- Q. So when you think about the flow and allocation regime that needs to be set in the new land and water regional plan, it needs to reflect a range of values.
- 15 A. Yes.
- Q. And those values extend beyond what are referred to as the scientific values, in terms of ecology and hydrology.
- 20 A. And certainly, the background work that's been taking place over years with those consultants and with the teams of people involved have extended beyond purely hydrological. There's been a lot of work carried out with Fish and Game, with the Department of Conservation, looking at threatened species. There's a lot of work that has been underway and has been put together as part of these applications, so the first part of that paragraph is noting that in good faith, these applications, at considerable cost and time and maybe the thoroughness has been why they haven't
- 25 been lodged to date, keeping in mind 1 October was the deadline for applications to be transferred, and that people were working towards that date, and the fact this has come in a year early has detailed some of that work that was being done, has taken away the benefit of carrying out all that work at cost and resourcing.
- 30 Q. Now, one of the sets of values you didn't mention just then was cultural values.

A. Cultural, yes.

Q. Now, cultural values, you'd accept, are important?

A. Absolutely.

5 Q. And you've said and considered the evidence put forward by Ngā Rūnanga in this matter?

10 A. I haven't read the transcript for Ms McIntyre, but I have read through the evidence, and certainly, sorry, that was an oversight not to include that, and I understand Ngāi Tahu have been involved, or Kāi Tahu have been involved, with many of these applications and working, and the offer has been extended to ensure that work is fuller, and it's a resourcing issue, potentially, with Kāi Tahu and Ngāi Tahu that has not been able to fully include, but yes, completely appreciate that as part of the national policy statement, that will be a critical consideration.

15 Q. Was the evidence of a number of the witnesses called by Ngāi Tahu that cultural considerations under the current planning framework were simply unable to be taken into account?

A. I did read that. I haven't had personal experience with applications, but that didn't accord with my understanding, was that that wasn't because farmers or their representatives hadn't been trying to get that information.

20 Q. Do you accept that a planning framework, the current regional planning framework is deficient with respect to consideration of cultural values?

A. I wouldn't necessarily say it's deficient. I think there are improvements that could be made.

25 Q. That framework was put together at a time when the fundamental concept of Te Mana o te Wai wasn't the fundamental principle to be addressed?

30 A. In 2014, no, not the fundamental consideration, but it was still there and was still flagged as being something that needed to be front of mind. 2020 certainly put that higher up on the objectives and considerations, but in my mind, there's still strong feeling coming through from Te Mana o te Wai, that's a community conversation of where that best, how that works in practice, and that's probably where my –

Q. So that conversation needs to happen, doesn't it? It's yet to happen.

A. The detailed conversation? I wouldn't know, I'd be speaking beyond my experience on these detailed matters.

Q. So insofar as that detailed conversation does need to happen, that will inform the creation of the flow and allocation regime that will be set out in the land and water regional plan?

A. Yes.

5 Q. And so it's important that that allocation plan can come to fruition or be given expression in resource consents in the future?

A. Yes.

Q. And that needs to happen in a timely way?

10 A. I think a lot of these planning matters, that has been a past failing, the timeliness, so yes.

Q. And when you think about how you might bring that planning framework down into consents, requiring re consenting of activities is one way to achieve that?

15 A. Yes, but I think that the assumption that cultural values haven't been considered does not reflect my understanding of previous involvement and processes to date.

Q. Were you involved in the last chance decision?

A. No. I have seen transcripts around that.

20 Q. So I want to stay on this bullet point, you there make the statement that work is complete for some catchments, and you refer to the Arrow and the Cardrona. Is it your understanding that the work in relation to water quantity has progressed significantly?

A. In those catchments, from when it was originally proposed.

1125

25 Q. Is it also your understanding that the work in relation to water quality has not commenced in relation to those catchments?

30 A. Well the water quality matter is another whole consideration and that is one that, those of us involved in Plan Change 6A have views on as to where fault lies as to the progressing of the implementation of its water quality plan and certainly in our view, there, it's flagged to Ministry for the Environment at the time not long after Plan Change 6A came into view and I think it was Mr Hunt that flagged that. The plan could have gone in one of two directions, the water quality in Otago, it could have been the best in the country or if not well implemented it could be the worst and

due to Council's resourcing and approach to implementation, water quality planning in Otago has been through no fault of farmers and resource users landed where it has.

5 Q. When you think about water quality and water quantity, do you consider those are separate matters or those matters that need to be addressed together?

A. They are integrated.

Q. They are integrated and when you think about the NPSFM it reflects that integration through the use of the phrase Ki uta ki tai?

10 A. Yes and same with every other regional council that has until December 2024 or 2023, that's the opportunity to give effect to all of those considerations because this plan was notified before the National Policy Statement 2020 and now we're retro-fitting the impacts on resource users to fit what was not yet notified.

15 Q. So when you say in your paragraph that the LWP work is complete for some catchments by which you say the Arrow and Cardrona, given that the water quality aspects haven't even started yet, that statement's inaccurate isn't it?

20 A. Well I would've hoped that over the past year since 2012 when Otago Regional Council had Plan Change 6A in place, that a lot of work has advanced, so I would be disappointed to think in the past nine years water quality matters haven't been progressed because that was certainly the commitment, we – the matter we committed to as part of the mediation settlement was that Council would put a lot more work into its implementation of its water quality plan. So if it hasn't progressed since
25 two thous-

Q. Well you may well be disappointed, but your statement in your evidence that the work is complete for some catchments, is inaccurate isn't it?

30 A. My understanding from the people that were at the meeting was that they were told there wasn't going to be any additional work done, I think you're saying that's on water quantity and I'm saying that that should not, the fact that Otago Regional Council hasn't done additional work in quality should not be justification for not considering potential for longer term consents.

Q. Despite you say, the need for integrated management to occur in relation to fresh water resources?

5 A. Yes because I believe the consent applications that are being put together by representatives and the water groups and famers are putting greater information to Council. Every information provided by farmers is an improvement of the information that Otago Regional Council had by itself.

10 Q. You say in this bullet point, an additional pathway for longer term consents. Now I understand conceptually what that might mean, but precisely what do you mean and which pathway is it that Federated Farmers is supporting?

A. There's been restricted discretionary pathways put on the table by in the 14th of March version, additional ones proposed as –

15 Q. Press pause there, you're going to have to slow down a little bit. It's important I understand what it is you mean here in relation to longer duration, so...

A. Sorry, am I – you are – I'm waiting for an ans-

Q. So my question to you is which additional pathway for longer term consents does Federated Farmers support?

20 A. An additional longer term for restricted discretionary or longer or non-complying activity. For those matters, the applications that have been progressed, prior to notification of Plan Change 7 or prior to 1 October 2021, that they could be considered for longer periods.

THE COURT: JUDGE BORTHWICK

25 Q. Just pause there a second. So either through an RDA or non-complying route –

A. Yes.

Q. – pathway?

A. Yes.

30 1130

Q. You're saying something prior to what date?

A. Be 1 October 2021.

Q. So something prior to 1 October 2021 which is only a date that's important for deemed permits but –

5 A. Yes.

Q. – what before that date?

A. To plan notification that there be some potential to consider applications. I think just to have an alternative pathway beyond the six years and that it would need to be a higher bar and more in-depth applications information that would come alongside that, but already the applications that are being prepared are coming with a lot of information and in applying for the controlled activity, that that benefit of that work is potentially lost if it's a six year simple controlled – only controlled activity.

10

Q. So just leaping back to the original question, so all applications lodged prior to 1 October 2021, should be considered for a longer term consent, is that your evidence?

15

A. No just for a path – that there be a pathway that many may go through a controlled or the majority may go through controlled, but just for those situations where it has been highly progressed before –

20

Q. What does “highly progressed” mean?

A. That the background work over a period of years has been done working with other parties, background science undertaken and that the consent – the applications are ready to be put before Council.

Q. I would hope that's every application filed, but –

25

A. Well –

Q. See you obviously don't have that in mind. How does a Council sift between that, an application which is accepted, by the Council, not chucked out and sent back or not requested further information, so it's any application really that – which otherwise those two options don't apply, should have a longer term consent, the opportunity to consider for a longer term consent?

30

A. Yes and -

Q. Is that your evidence?

A. That the factory and the majority will go through a controlled –

Q. You know, I wouldn't think so, but anyway if you leave this door open, it will be kicked wide open, I just want to know where you're going to kick it to, that's – and I think that's what Mr Maw wants to know?

5 A. Well we're flagging we think the door – believe the door should be kept open for a longer term where the criteria – the information has been put forward to Council to justify that and I thought the evidence of Helen Marr and Sally Dicey had both explored different scenarios where from a planning solution point of view, I think Sally Dicey and particularly had put forward a potential route for the Council and for Court, that opened the door without having it kicked open and having everyone go down that path.

10 Q. Okay. So you're relying on Ms Dicey's formulation?

A. Well we haven't provided planner evidence, sorry your Honour.

Q. Yes, that's all right.

15 A. We haven't provided planning evidence on the basis that this is one of very, very many processes underway and looming for Otago, we have limited resources, we looked at which planners were already involved in this plan change, we strongly support the work of Sally Dicey and Claire Perkins and others, planners that are already involved in this process and we felt there was no benefit to us putting an additional or into the matter when those planners who deal with these matters on a regular basis at community level could provide a more detailed insight to benefit the Court.

20 Q. That wasn't a criticism –

25 A. Oh sorry.

Q. – my question, it was just like who's – which doorway were you supporting, because there's actually quite a few doors now?

A. Yes, no and it completely appreci- and I can see from reading the transcript why your Honour that has been explored as to the Court being mindful of not having the door open to people to misuse and again –

30 Q. It's not even misuse, I just, if you think that a comprehensive application which has been accepted by the Regional Council without any further information request represents the door, that's all you need to say, that's not a misuse of the door if you say that's what the door is, yes.

A. Well many applicants, applications that have come in before this came about, have been able to get long term permits based on the same information that water groups have now put together and been working on over extended years of time, now only have a six year and there seems to be a fundamental social inequity to having the same set off information prepared in both scenarios and just a timing of when Otago Regional Council committed to Minister Parker to change things, that it's the farmers have paid the price for that and we've raised, which I won't rehash, our concerns with the whole call in process.

5

10 Q. Yes, but I just want to know, which door are you knocking on, if I can put it that way?

A. The door we're knocking on will be non-complying and it would be just –

Q. Non-complying, that's your door?

A. Yes.

15 Q. Okay.

A. And the restricted discretionary door already nicely discussed by, in the 14th of March version and as expanded on by Sally Dicey in the evidence I referred to on 19th of March as to a potential additional restricted discretionary route alongside the potential for the non-technical, the matters that had needed to be expanded on for where there was no sufficient information provided.

20

1135

Q. That's a different matter.

A. Yes.

25 Q. Yes and I think most people seem to –

A. On the same page.

Q. – accepting of the fact that there needs to be an IDA rule where you got inadequate data or data problems. So don't worry about that door –

A. Okay well they're they doors – they're the doors I would kick open.

30 Q. – because that's not even – that's not a door that anyone – there's a door there and the ambit of the door has to be explored and the Court has asked questions about that, will ask questions about that as well just to test the thinking around that anyway, non-complying pathway or Ms Marr's RDA pathway or any pathway which you find yourself which

opens up, is it just any pathway you don't care as long as there's an opportunity?

A. I think just so there's an opportunity and that's something that planners can progress with their intricate knowledge of addressing the Court and council's concerns as to how that could be usefully constrained to not have it widely used but have it factoring in the genuine cases where – I mean considerable information has already been gathered and provided and then a ...

Q. Okay, now understood. Understood.

10 A. Yes. Okay, sorry. Yes.

Q. Yes, don't mean to cut you off but I understand you just want a pathway and you're not wedded to which policy or rule route that takes.

A. Yes.

Q. Okay.

15

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So when you think about the pathways that have been put forward by other parties, Ms Dicey had put forward a discretionary activity pathway which Ms Perkins seemed to agree with –

20 A. Yes.

Q. – and Ms Marr had put forward a restricted discretionary activity pathway that did some things she thought it did but not others, she thought it did. Have you reviewed the transcript in relation to my cross-examination of Ms Dicey?

25 A. Which version is that? I've got about 20 versions of...

Q. It was the transcript of my cross-examination –

A. Oh, sorry no.

Q. – of Ms Dicey.

A. No I haven't got that with me. I would have read it but...

30 Q. So when you read that transcript did you have it in mind that there were significant drafting issues associated with her discretionary activity pathway? The effect of which was that the door was blown wide up?

A. My reading of it was that there was potential, if you were to be more cynical than those of us who deal with the primary sector would be and

again we're looking at the lens of what happens and the taking a positive and constructive approach to what happens in the farming communities and what would be more likely to happen. I think Ms Dicey was asked is there a potential for this to be used in these situations and she had to argue – she had to reply “yes” because factually it was possible but I guess we're coming from it or certainly my reading of it is coming from it from a position where I work with land owners and I see the good work and the good intentions and I don't read it in the same way that just by opening a door means everyone will try and boot that door in.

5

10 Q. When you read through the transcript of my cross-examination did you understand that the door was wide open?

A. Well, through a discretionary activity pathway, potentially but then there was quite a high hurdle that Sally – Ms Dicey had proposed that still would need to be met and therefore it's likely those who have already put together a considerable body of evidence would more likely use that than every single person wanting to put in a new water permit. So I thought Ms Dicey had responded accurately and that this is the situation she believed it would appeal to versus everyone.

15

Q. And when I explored with Ms Dicey and with Ms Perkins the wording that had been put forward there was considerable uncertainty as to what the outcome might be.

20

A. Because we're looking into the future and crystal gazing, I believe there's uncertainty but from those of us who deal with landowners I would not have the same level of uncertainty.

25

Q. When I used the word “uncertainty” in that question, I refer to the drafting that had been put forward and the outcomes that were sought by the authors of that drafting.

30

A. I think, in defence of the drafting this is a lot of work that's gone on in a short timeframe to try and find a pathway through from a plan change that was notified very fast during COVID-19 and during those lockdown periods, word and submissions were being put together. This was the work on top of a considerable body of other work being done at that same time, that planners tried to find solutions for the Court and as I stated in my introductory statement, in an ideal world this would have been done

and traversed and worked through with the community prior to Otago Regional Council notifying the plan change versus now, when through cross-examination we're trying to hone in on every single word that people have proposed.

5 1140

Q. What do understand the purpose of Plan Change 7 to be?

A. As per the objective, bridging the gap until the Land and Water Regional Plan is fully in place, holding the line.

10 Q. So when you think about that, and you think about the potential for long term consents, do you accept that long term consents could undermine that outcome?

15 A. Without cooling conditions on them? Section 128 call-in conditions, if there was not section 128 call-in conditions there would be a risk, but I have not read through the transcript where I have been shown that it's not possible for call-in conditions to be put onto longer term consent conditions so that when Otago Regional Council had finalised those minimum flow plans that that work, that they could not be called in, and considered accordingly.

20 Q. So when I read your bullet point, I should also read that together with a reliance on section 128 review clauses, to ensure that any new flow and allocation regime put forward in the Land and Water Plan can come to fruition?

A. Yes, that was in our original submission.

25 Q. Do you accept that when it, assuming that is the case, there would be a significant number of consents for the council to review?

30 A. Having recently spent the last week working through Plan Change 8 and intensive winter grazing, I already appreciate that Council is going to have an incredibly heavy and high amount of consents coming through which will not be improved based on other regulations and plans coming through, so Council already has to find a way to ensure they can work through the consents and that's where I've flagged that if everyone is given a six year term, in six years' time Otago Regional Council is going to be in exactly the same quandary with how to resource and work through the glut of consents that will then need to be again repermited

looking into the new Otago Land and Water Regional Plan, so that's our

–

Q. Isn't the difference at that point in time that there is a flow and allocation regime that has been established that gives effect to the NPSFM?

5 A. Yes but it's still going to be considerable task when you consider the body of work that is going to be before Council in six years' time.

Q. And then when you think about reviewing consents, do you accept that needs to be done on a consent by consent basis?

A. Yes.

10 Q. And that a question of viability is a matter that needs to be taken into account on review?

A. It would not be to – well, my understanding of section 128 is that it doesn't terminate the consent, it just amends the – which would align with where water sharing agreements and others are coming into anyway, but if minimum flow was imposed on a river or a waterway that the minimum flow would be worked on by a water sharing agreement anyway, so it wouldn't have a, it wouldn't terminate the need for the investment. That would already be happening in a situation in the community.

15

Q. And what about allocation? What if there is simply insufficient allocation for the existing uses?

20

A. This is the situation Otago Regional Council was in from its situation in the past of science, and my understanding is there's been a considerable amount of work done by the community to try and bridge that gap in to where we get to to this point.

25 Q. Do you defer to the planning expertise of Ms Dicey, Ms Perkins and Ms Marr in relation to the additional pathways that you are recommending?

A. Yes I do.

Q. Right. I have turned over to page 11, and your second bullet point, and this relates to the irrigable area.

30

A. Yes.

Q. And the date range has been extended from a single irrigation season to three irrigation seasons?

1145

A. Yes.

Q. And you support that change?

5 A. We support that change. I wasn't sure because it's not something I deal with in a application basis whether those months specified were appropriate but I've just flagged that maybe a matter for experts when they have in their caucusing as to whether that's a matter that needs further refinement or whether that is appropriate. I wasn't a planning caucusing so don't understand the basis for those particular months to be selected. But yes, support the evolvement of that matter.

10 Q. So, is it your understanding from working with the farming community that farmers have a very clear understanding as to the area of land that they have under irrigation?

15 A. I have read the transcripts and know where this answer is going. That would depend on which period of time and how big – if it's an irrigation company – I've read through the different lang– the different – it's like reading Span– someone speaking Spanish and someone speaking French in response. I read it as the experts, trying to explain to you that it will not necessarily be easy for a landowner to go back in time to find the exact paddocks or area that they had irrigated but that's because
20 farmers haven't been or necessarily in all situations will have that same struggle. It was flagging that there may be some difficulties whether it be a land purchase, subsequent to someone's taken over a farm they are currently irrigating, they may not know details of historic paddocks that have been and I think from reading the transcripts the prior experts were
25 trying to just explain that "yes" most farmers when asked will know the total area they irrigate but there may be some situations, whether it be because of the extent or the amount of irrigators that were involved under a consent or whether it be because a land purchase or some other situation that there could be a situation where it's not easy to obtain that
30 information, so I have read the transcript and the struggles around people trying to explain what that mean and it's certainly not saying that farmers don't know which areas they irrigate. That seems to mean – have been a misunderstanding that's come through prior discussions.

THE COURT: JUDGE BORTHWICK

Q. That might reflect some of the evidence we've heard which is, I pointed out to one witness it be a double-edge sword to continue to pursue the farmers don't know what they're irrigating or the land that they're irrigating. I'd be very surprised it that that was the case – always the case.

5

A. And I believe – sorry your Honour –

Q. Yes?

A. – I believe most would be able to find that information but it just – I think the situations that were being flagged by prior witnesses that were that, given farmers didn't know plan change 7 was coming and was working with the operative plan in place at that time, depending on the irrigation company there may be scenarios where it is more difficult to obtain that information, depending on again, on how specific that information needed to be, is it an overall irrigation area on a land unit, is it down to a paddock scale? So it was – I wasn't clear from reading the Rule as to how the level of detail that would be then defined down to, is it – so I guess that was trying to work out, when you're talking about total irrigation area, is it paddock based, is it land holding based, is it for the irrigation company based and I think that (inaudible 11:48:28) was flagging there may be some who have some difficulties and is there an alternative way they could potentially provide that information, was my reading of the responses to Mr Maw's question.

10

15

20

Q. Well you may as well ask the question, I'd be interested to know, what level of information is required.

25

CROSS-EXAMINATION CONTINUES: MR MAW

Q. When you think about the level of information – or when you think about how you might provide that information, do you understand that information could be shown by shading a graph and...

30

A. A map?

Q. Yes, a map not a graph. Thank you.

A. I am paying attention.

Q. So you accept that information could be shown pictorially on a map?

A. Yes.

Q. And with GIS software it's freely available, it will be easy to calculate the area?

A. Based on the ability to use a map. I was basing my comment on the fact that it just says "total irrigation area" and I wasn't sure what level of detail would be required. If you're saying, "It will be shading in on a map the areas of the farm that have been historically irrigated", then I assume that will be something that farmers could obtain but again, I'm not dealing with farmers on a detailed consent application basis and I certainly would think Ms Dicey would have more practical understanding on the ground of what – the difficulties that farmers may face. I can see scenarios, potentially through a land transfer on to a new ownership that may have some difficulties but that could be obtained I'm – my instinct would be that farmers could find that information but there will be some situations where that could be a challenge.

Q. Well my recollection was that Ms Dicey's opinion was that, it wouldn't be easily accessible information and therefore the restriction on irrigable area should be removed. It was one of the reasons she gave for removing the restriction. Do you accept it's not an insurmountable hurdle?

A. In all cases – there will be some cases I believe it could be an insurmountable hurdle. But I'm not categorically stating I would sign every single farmer up to being able to meet that. I believe that the reason Ms Dicey flagged a concern was because in her practical experience there may be some landowners, who with not knowing plan change 7 was coming, may not have that data but again my instinct would have been that farmers could obtain that. but I'm speaking on instinct, not fact. Ms Dicey works with the farmers on the ground. I didn't like the reading that it meant farmers didn't know what they were doing because that wasn't what I think was intended by Ms Dicey when she made that comment.

30 **THE COURT: JUDGE BORTHWICK**

Q. It's good to know because it was – yes, anyway. So all right. You didn't have in mind that there may be difficulties because an individual farmer during the you know, the years in question, may be employing mixed

range of farming activities for example allowing paddocks to remain bare or stand off for a year or two and that created doubt. That wasn't sort of you know, in mind when you said it could be difficult for some? Or...

5 A. I think it was drawing on a map which areas had historically been irrigated on the property. That's diff-

Q. Yes. Not whether they were irrigated this year?

A. Yes.

10 Q. But whether they are historically irrigated even in some years, they may not be under irrigation because the paddock is being left without animals or without crops for good reason.

A. Yes.

Q. Yes. So, it's just historically irrigated? Yes.

A. Yes.

15 Q. Okay. All right. And there may be difficulty if you sell the land – if you've purchased the land recently...

A. And that may be something I would not to – like my learned colleague Dr Hume to – he may have some useful input as – in his involvement in irrigation in Canterbury, not, he would not be able to talk on Otago –

Q. Mm.

20 A. – but what sort of information may be able to be provided or through irrigation companies that I think the Otago specific situation, I would refer to the situation that Ms Dicey has flagged that in, not in all cases. I wouldn't go further than Ms Dicey.

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

Q. You wouldn't go anywhere near as far as Ms Dicey to say that that should be a reason as to why the restriction on irrigable area should be taken out of plan change 7?

30 A. If it's through the controlled activity, as proposed then I believe that if Ms Dicey's provided justification as to why that should not be there...

THE COURT: JUDGE BORTHWICK

Q. No that's a matter for the Court. Okay but...

A. Yes, sorry your Honour.

Q. No, that's okay.

A. And – is just ready to signal for Mr Maw not we're not going to advance further, I think, this line of questioning.

5 **MR MAW:**

No, I'll move on to the next bullet point.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. Right I've moved over to page 12. Now again, you are referring here to the restricted discretionary path and you note here, again "support the additional evidence and proposals of Ms Dicey and the comments of Ms Perkins". Now as I read their evidence they were recommending a discretionary activity as opposed to a restricted discretionary activity so what is it you had in mind when you penned this paragraph?

15 **WITNESS REFERRED TO PAGE 26 OF MS DICEY'S 19 MARCH EVIDENCE**

A. As per the page 26 of Ms Dicey's, 19th of March evidence –

Q. Yes.

A. – discretionary.

1155

20 Q. So your bullet point should be amended to refer to a discretionary path as opposed to a restricted discretionary path?

A. Sorry, which bullet point?

Q. So I'm in bullet point, the first bullet point on page 12 in the first line?

A. That was in regard to the controlled activity 31.A, yes sorry that is a typo.
25 I think the original 10 3.1A had provided for restricted discretionary and Ms Dicey had expanded that to discretionary, so the first bullet point was in supporting the restricted discretionary existing rule and then supporting the additional discretionary proposal by Ms Dicey on 19th of March.

30 Q. Right, so you're supporting two additional rules, the restricted discretionary pathway, now is that the Council's version of that?

A. 14th of March version, not the Council's original version as notified.

Q. Right, you understand the Council Planner has expressed some concerns as to the breadth of that restricted discretionary activity?

A. In what – as per the 14th of March version?

Q. Yes. That was the, now let me be, no the 14th of March version is the Council version. Now I'm really confused. Which version precisely are you referring to?

5 A. I don't know, there's so many versions. I'm – which aspects of – sorry, was I allowed to ask Mr Maw a question?

THE COURT: JUDGE BORTHWICK

Sure.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Well, we'll see.

10 A. Would be nice to turn the tables. Sorry, Mr Maw, which elements did Mr de Pelsemaker, sorry for the mispronunciation of your name Tom –

Q. Right, let's put it this way, when you say, we support Rule 10A3.1A providing for a restricted discretionary path –

A. Yes.

15 Q. – although we query whether it goes far enough to account for all faulty or incomplete data, which version of Rule 10A3.1A were you referring to?

A. The – I supported the restricted discretionary 14th of March version with the addition of the discretionary proposal by Ms Dicey.

THE COURT: JUDGE BORTHWICK

20 Q. But that was amended by the planners wasn't it? And that's the point that you're getting at?

MR MAW:

Yes.

25 **THE COURT: JUDGE BORTHWICK**

A. Oh sorry, sorry your Honour, it's the 8th of April version that I've got in my hand.

Q. Yes, yes, okay good, 8th of April.

A. I've just realised, sorry there's literally so many versions.

Q. No worries. I know. I know. You can take it from me I do know how many versions are out there. Anyway you support 8th of April 2021 which is the planner's version?

A. Yes, sorry.

5 Q. Plus a discretionary activity rule which Ms Perkins and Ms Dicey also support, that's understood and then I think as noted by Mr Maw, Mr de Pelsemaker has some concerns about that and the Court also has questions where it is – it will be trying to understand the recommendation more fully and to again test or test the ambit of the implications of the
10 recommendation –

A. Right, no it –

Q. – and maybe close out some gaps around that as well.

A. And no, and I fully support the Court's work in that regard moving forward.

Q. Okay.

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

Q. Okay so that's the first part of that bullet point, the second part was the support of the discretionary activity and we've already discussed that discretionary activity pathway and you defer to the evidence of Ms Dicey and Ms Perkins in relation to that discretionary activity proposal?

20 A. Yes and it is, the 14th of March, I have referred a lot to the 14th of March version, but I think the 8th of April was on the document that I've got, so I think it's clear where the planners have amended it that if I am supporting it's where the planners are moving versus the original 14th of March version.

25 **THE COURT: JUDGE BORTHWICK**

Q. So are we to understand all references in your opening statement dated the 19th of April to be references to the 8th of April JWS from the planners

-

A. Yes, sorry your Honour, yes.

30 Q. – which -

A. I don't think it's changed hugely apart from a schedule –

Q. No to be fair, it's actually based on the 14th of March but it takes it forward a little bit –

A. Yes, yes.

Q. Okay. No, we'll make a note of that.

5 A. Apologies for that.

CROSS-EXAMINATION CONTINUES: MR MAW

10 Q. Right, onto the second bullet point on page 12, here you say, "We support Rule 10A3.2 providing for an alternative consenting path where the controlled activity conditions cannot be met, but where it can be demonstrated that a longer consent duration is appropriate." Now which version of Rule 10.A3.2 are you referring to there?

A. That would be 8th of April version.

Q. Okay so this is the non-complying activity in the planners' joint witness statement?

15 A. Yes.

Q. So you say that you should jump straight from the controlled activity to the non-complying activity?

20 A. No I think I've already discussed the discretionary and restricted discretionary pathways, this is just confirming that I support there being an alternative pathway as per 10.3.2. That was really, that bullet point is really just to support the additional work we understand is being progressed in far as how to work through how the alternative pathways or if the alternative pathways may best usefully be provided, it was a bullet point to support that work.

25 Q. So the cascade or the framework that leads to that position, that's not really what you were aiming at here, simply flagging that the non-complying activity door needs to be ajar for a longer term permit, is that –

A. Yes.

30 Q. Do you see that application seeking a longer term should be non-complying?

A. Yes.

Q. So when you think about the restricted discretionary activity and the discretionary activity put forward by a number of the planning witnesses

who you've relied upon, you or Federated Farmers remain of the view that those pathways should only be for six year permits?

5 A. For the restricted discretionary? As long as there isn't a potential through one of those avenues for a longer term as discussed previously, then for the reasons we went through in about half an hour ago, I believe there should be an alternative pathway where longer consent can be obtained, longer consent duration.

10 Q. Now those earlier proposals as I recall enabled longer term consent durations, I just want to be really clear in understanding whether Federated Farmers is of the view that it's the non-complying activity that is the activity classification that applies if longer than six years is sought or something else?

15 A. I think Ms Dicey had talked through a potential for restricted discretionary or discretionary to also have a longer term as part of her planning solution and we support that as per the previous bullet points.

Q. So when I read this bullet point I should perhaps notate it as it's saying this is really a bullet point in support of some further work to be done, is that –

A. Correct, yes.

20 Q. Now the next bullet point relates to Schedule 10A4 and I'm assuming that I should direct my questions to Dr Hume in relation to that topic?

A. Yes that should keep him entertained. Yes that will be good, thank you Mr Maw.

THE COURT: JUDGE BORTHWICK

25 No need to entertain the Court.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. And finally, well your final bullet point relates to the priorities and there was a discussion earlier today and you're leaving that for others with further direct knowledge?

30 A. Yes I just flag that it is a real issue and it's a complex issue and I – the solution will be complex but I have full faith in being represented – the views of farmers being represented by those experts who can have those

discussions and your Honour did potentially extend an invitation for us to maybe –

THE COURT: JUDGE BORTHWICK

Q. Well you've actually made a submission on it haven't you? Priorities?

5 A. Yes.

Q. And one of the affidavits that we – affidavits, brief of evidence –

A. Yes.

Q. – that we've accepted I think from Mr de Pelsemaker, was as to who's made a submission and I thought Federated Farmers –

10 A. Yes.

Q. – were in there, Director General is in there, OWRUG and also a unrepresented party or submitter is in there, so surprisingly few people –

A. Yes.

1205

15 Q. – for the potential reach of this issue.

A. Right.

Q. Yes, but you're in there.

A. Yes, okay.

Q. Yes and you need to get to me very, very quickly if you wish to engage
20 legal counsel on that issue because it is complex.

A. Okay, thank you your Honour.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. The final topic that I want to explore with you is one that you have
25 addressed in paragraph 21 of your opening statement and this relates to
an understanding in a theme that came through in your evidence-in-chief
in relation to Federated Farmers or perhaps your understanding of the as
you say "the need to consider efforts or need to be affects-based targeted
and balanced with economic and social costs" so a concept of balancing
of well-beings. Now this theme came through in your evidence-in-chief
30 and it came through in the context of your evidence dealing with part 2 of
the RMA and in particular, paragraphs 13 and 14 of your evidence-in-chief
and there at paragraph 113, you noted that, again and I think that this is

the source of these words: “However, these efforts need to be truly affects-based targeted and balanced with economic and social costs in order to achieve sustainable management.” Is it your understanding that in the context of the court’s consideration of a plan change that it can still seek to balance those competing considerations?

5

A. It is my position stating that the council approaches a range of issues under part 2 in section 5, but we feel well-being is not just for the Otago Regional Council, well-being of rural communities and impacted land owners is often neglected and hasn’t – isn’t given due consideration when looking at the overall well-beings at issue. So our – the evidence in position we’ve put through strongly is that we flag that rural well-being is taking a hit over and over and over again across a number of regulations and proposals, and that we were flagging that plan change, 7 didn’t really appear to give due regard to the impacts on rural water users and communities, and that we were flagging this; this was a big concern to us because it just as like hit after hit at the moment in a rural community.

10

15

Q. Are you aware that there was a significant change in relation to the interpretation in the application of part 2 of the Resource Management Act in relation to planning considerations through litigation which is referred to as the “King Salmon Litigation”?

20

A. Yes, I am.

Q. And in relation to that litigation it made very clear that recourse was not to be had to part 2 of the Resource Management Act unless there were situations of invalidity, incomplete coverage or uncertainty of meaning?

25

A. In my evidence, I considered that Plan Change 7 fell within one of those scenarios where I don’t believe full consideration and the appropriate approach to the plan change by not considering rural well-being, therefore, put Plan Change 7 in a situation and where it had to go back to look at those well-beings again. Part 2 was relevant because in our view quoting – I have to find the exact point in my evidence, that Plan Change 7 fell outside that King Salmon scenario and the overall well-being and Part 2 considerations hadn’t been factored in when this was put together, and, therefore, it was appropriate during the court process to consider well-being.

30

Q. The question is not one of whether Plan Change 7 covers the field, it's one of whether the documents each step up the food chain cover the field and I'm struggling to understand the link that you were referring to in this part of your evidence in terms of there being a gap, such that the court could consider part 2?

5

A. Well in Otago it's very difficult because there are so many regional policies/statements in play, so we have three, I think the most recent of which the Minister or Professor Skelton has decided it was not fit for purpose and, therefore, has to be completely re-done. A matter of registration -

10

Q. So put all of the regional policy statements to one side, they weren't prepared under the new MPS 2020, so in a sense they don't give effect to that. So we go up the food chain to the national policy statement for Fresh Water Management 2020?

15 1210

A. Which at the time this plan change was put together was not in effect.

Q. Do you accept that the national policy statement for fresh water management 2020 covers the field in relation to the allocation of fresh water resources?

20

A. I believe council has to make sure they are still consistent with the national policy statement for 2020 but given that it was drafted prior to the release of that document, that the work to – up till that point needs to be considered and in my view, plan change 7 as notified did not address well-being satisfactory enough to – so, then it be confident that part 2 considerations had been given, made by council.

25

Q. So the questions not one about whether plan change 7 covers the field. It clearly does not address all of the matters under the national policy statement, but the question is, well do you accept that if the national policy statement for fresh water management 2020 does cover the field, then there should be no further recourse to part 2 of the Act?

30

A. For the national policy statement, yes, but for plan change 7 specifically, I believe that there does need, do – there does need to be recourse to the overall broad judgment and well-being.

Q. And you accept that the overall broad judgment approach was found to be inconsistent with the application of the Resource Management Act by the Supreme Court?

5 A. Yes. In the scenario that the case had a subsequent case which is in my evidence, that refers to the put together with those considerations in mind, so I believe in any plan change in Otago, the well-being of Otago rural communities and water users, it's relevant, regardless of what the higher or the document states.

Q. So, you've referred to Davidson the Court of Appeal decision?

10 A. Yes.

Q. In Davidson? And Davidson was a case relating to an application for a resource consent?

15 A. Yes, oh, but I would also be surprised if when the higher order documents were drafted, the Government had in mind not fully considering the well-being of rural communities and water users at the time a detailed planned change further down the line is being considered.

Q. And when an application for a resource consent is considered, there's not an obligation to give effect to superior documents?

20 A. Yes, but I'm not talking about giving effect to. I'm talking about just considering well-being.

THE COURT: JUDGE BORTHWICK TO MR MAW

25 Q. Yeah, are we, are we on – we're moving between resource consent applications and plan changes so we just have to be careful, counsel, as to which platform are we standing on? I understand your evidence to be that the plan change, at least the plan change notified, may have failed in your opinion because of incomplete coverage (inaudible 12:12:52) three tests of Davidson, incomplete coverage and what's the other two?

A. Invalidity and –

30 Q. Invalidity.

A. – uncertainty of meaning.

Q. And uncertainty.

A. Yes.

Q. It failed for one of those three tests. That being the case, you could go back up.

MS REILLY:

5 Correct, Your Honour.

THE COURT: JUDGE BORTHWICK

Q. Either to a superior document or ultimately Part 2 of the Act.

A. Yes.

10 Q. And that's what your evidence is and that you understand the difference between –

A. Yes, I do.

Q. – balancing out you know which can, Supreme Court can see, same as said, should not be done, but they're different issues.

15 A. Yes, but –

Q. As I understand your evidence?

A. Yes.

Q. Yep, okay.

A. Sorry, Your Honour, that's – as you've described.

20 Q. Good, so I understand where the witness is coming from and so the question is, is there any validity et cetera, et cetera.

MR MAW:

Yes, and the question –

25

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. And, yes.

A. And the question and I'm – it's a matter for, potentially, for legal submission about the application.

30 Q. Mmm.

A. But given the witness is based significant portions on the evidence on both the balancing approach and resorting to part 2, I thought I might usefully explore to understand whether that was the basis on once the evidence had been put forward.

Q. I'm – yeah, I understand that, but we're just – we, yeah, we just need to keep in mind that there are two different ways of thinking if you like, balancing versus you know the, the failure of one of the three tests identified.

5 A. Yes.

Q. In King Salmon, so the different concepts.

A. Right.

Q. Mmm.

A. And, well it's – I'll keep going a little further and just see where we land.

10 Q. Mmm.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So in relation to the three areas where you can further up the food chain in terms of planning documents, is it your understanding that you have recourse to the next document up? You don't just go straight to part 2?

15 A. I was simply flagging that when Otago Regional Council's putting together it's plan changes irrespective of where in the hierarchy or where of the order of documents that come through, that the well-being of the people impacted needs to be considered. Now, whether that's a strict legal argument or whether it's a moral argument or whether it's just a good process argument, in our view well-being is consistently or too often overlooked and we're asking that section 5 of the RMA provides for this. We consider that when the national policy statements were put in mind, I'm sure the government had in mind that the impacts on communities and water users would at least or resource users would at least be given regard, and I would assume that would have flowed through when Council is putting a regional policy statement or regional water plan in place that they would have had in mind the residents of Otago at the time they put their plans together.

1215

30 Q. So when you think about the National Policy Statement for Freshwater Management, it needs to give effect to Part 2?

A. Yes.

Q. And when you think about this issue in terms of rural wellbeing, do you accept that that issue was dealt with in that national policy statement and is given colour and expression in policy 15?

5 A. I think our position on the National Policy Statement has been made clear, so whether I accept that's what it says or whether we accept that's what it does are two different things.

Q. I don't think I quite understand that. So your policy, your position on the NPSFM?

10 A. Our position nationally is that we have concerns around wellbeing not being given due regard. We flagged concerns through our submission process to the National Policy Statement that it was something again that was overlooked, so that remains our position, that wellbeing needs to be given greater consideration, whether it be a national policy statement or when a council is putting together its lower order documents. Particularly given the government has such a strong focus around wellbeing, we just ask that that be extended to rural communities and rural resource users. Rural-proofing, I think the government refers it to, and we don't believe that necessarily happens as well as it should.

Q. So when you look at policy 15 of the NPSFM.

20 A. Are you looking at – sorry Mr Maw, on my evidence or in actual... I haven't got the copy of the document with me but I have referred to it in my evidence, sorry I just have to find where I've quoted that particular policy. Yes. "Communities are unable to provide for their social, economic and cultural wellbeing in a way that is consistent with this national policy statement."

25 Q. You accept that social wellbeing is picked up in recognition of social, economic and cultural wellbeing?

A. Yes, and our position is that Plan Change 7 doesn't give effect to that, as notified.

30 Q. And when you read policy 15, it needs to be read in conjunction with each of the other policies?

A. Yes.

Q. And the objective?

A. Yes.

Q. And in your evidence you haven't explored any of those other policies, have you?

5 A. No, because I believe the conclusion was that it wasn't the place to give effect to every single policy in the National Policy Statement, as that was for the full Land and Water Regional Plan to do, not this particular plan change, so I did not explore the full extent of the National Policy Statement on the basis that this was to be consistent with it and not to land the council in a position where it couldn't give full effect to the National Policy Statement but that it did not at this point in time need to
10 give effect to every single policy and objective and provision within the National Policy Statement.

Q. Thank you, Ms Reilly. No further questions.

CROSS-EXAMINATION: MS GILES – NIL

THE COURT: JUDGE BORTHWICK

15 All right. Now, before we move on to the Court's questions ordinarily you would be, if you have a lawyer representing you, the lawyer would, you know, test any, or would ask you questions where, wherein you can clarify any statement that you have made, particularly if the line of questioning was such maybe that you were unable to give a full answer or the answer that you did wasn't fully
20 representative of what you really wanted to say, so you don't have a lawyer so I'm just – before we get to my, our questions, I am just asking you is there any clarification or any matter that you wanted to go back over just to ensure that the Court did understand what you were saying; that is not to open it up for a full advocacy of your position, because we have read your evidence.

25

MS REILLY

Just to reiterate that 8th of April was the document with the, that updated the 14th of March.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

30 Q. I just had the one question and it relates to a matter that you suggested Dr Hume could answer questions on, but I'm really asking you because

you're the representative of Federated Farmers and he's an expert witness.

A. Okay yes, no.

5 Q. And it may be that your view might be the same as his, might not be, so given that you've read the transcript, I have been -

A. Sorry in advance, I have to say I have not read the full 2000 pages, I have with time constraints looked through the pertinent documents or discussions that I felt I needed to cover.

10 Q. Sure. I understand that, but you have referred for example to Beef and Lamb evidence.

A. Yes, yes.

15 Q. And other people's evidence, and I think some of the questions I did ask were related to that, but we, I won't assume any foreknowledge. I'll just ask my question. And it's in relation to the recommendation that came from the technical people on the taking – well, sorry, I shouldn't say the technical people, some witnesses, not all witnesses, because I recognise that the council's planner wasn't on board with the striking out of that strict what you refer to on page 10 in your second bulletpoint as the strict period 1 July 2015 to 30 June 2020.

20 A. Yes.

25 Q. And so, I have a couple of questions. I have the ability for people to go back before 2015. Now it's possible that if you go a long way back from 2015 more water might be taken for more inefficient irrigation uses, such as wild flooding and border dyking, which we've had quite a bit of evidence about. Would that be the case, in your experience?

A. If you were to go back historically, yes.

30 Q. Yes. Yes. So, just in terms of what this plan change is trying to do in terms of basically getting rid of paper allocation and trying to tailor it much more efficiently to this concept of more like current use it's been called; historical use but it's within a defined window.

A. Yes. I understood that the planners in their joint witness statement caucusing had grappled with that, so I read the final answer and went, that looks excellent to me, lock that in, but I had not realised there was still some descent, so I apologise for that. I thought that final version

recommended was where the joint witness statement had landed. I appreciate -

Q. - oh, I don't understand that to be the case because after I started asking my questions Mr Maw put to several witnesses that that wasn't the case for the Council witness.

5

A. Okay.

Q. So, I haven't actually gone back to check that. But yes my understanding would be that not all witnesses, planning witnesses are on board with that.

A. Right, okay. Sorry, I'd read that the joint witness statement was overall in supported by those present. I appreciate the concern you've raised,

10

but I support the where the joint witnesses landed and I wouldn't be able to think on the spot of an alternative that I could place that would address the concern you have raised around people going back too historically. I would assume that would be something that would not be, that going right

15

back to the days of floor irrigation would be something that certainly Federated Farmers would support as using your water basis; that it would be something more current but that it just provided for an overall rate of take limit that more accurately, didn't lock people in or add to difficulty, but because I read the joint witness statement as being agreed I hadn't put too much more thought on that, sorry.

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Q. All right. So, look thank you that's a helpful clarification, going back from 2015 –

A. Yes.

25

Q. – but of course of the end there's a suggestion of taking out –

A. Okay.

Q. – the 30 June 2020 which, I think 30 June is the end of the water year and so then a suggestion that people could carry on basically, ramp up their activity –

30

A. Right.

Q. – perhaps and then get the advantage of that under the controlled activity.

A. Well my understanding of most water use in Otago from a rural perspective is that it's largely through communities and water sharing groups and people, if someone in the community was to ramp up their

water use purely to try and doctor in a higher take down the line would be looked at very negatively by those in the community who would maybe lower down the waterway or around that and they have their own take affected so, given the community approach to water in Otago and this not being an area I'm particularly, personally involved in, my response would be that I would have thought that that would be something as a water sharing group or community would be frowned upon if everyone suddenly ramped up their water use just to get a higher take down the line. So while a potential, I guess it's one of those ones I'm looking at from what I think would happen in reality in a community in Otago and without being involved in these detailed water community matters I would leave that to be whether there be a starting year of 2015 whether that was appropriate or not. I would certainly leave to the planners who have had that previous caucusing and know where the discussion landed and what the rationale was for, I'll say Tom, so I don't misinterpret his name again, Tom's concerns on that point were how they could be addressed and whether a starting point is that what you're suggesting of 2015 potentially with the additional wording. For me it was round that for years which water meter data is available, was important just because the water regulations came in, for not everyone at the same time and again, I'm speaking beyond my expertise –

Q. Sure.

A. – this is something that goes detailed to that I don't typically work with in a day-to-day basis so -

25 Q. All right.

A. Sorry, yes.

Q. But it's helpful for you to be asking, well –

A. Yes, just that I -

Q. - putting the proposition that you're not sure about the –

30 A. If I had -

Q. - staggering of the water metering requirements.

A. Yes, sorry Commissioner. If it was me to put my fork in a camp, I would put my fork in the camp with the planners who landed on that consensus but would be open of course to further discussion on whether there

needed to be starting year, if that's something the planners were going to work through in their next caucusing. Then certainly we have no objection to that being a matter discussed.

5 Q. So that's the starting year what about a defined finished year on a principle basis?

A. Well if we're taking, this plan being in place until – for a four-year or six-year, I'm not sure whether – I know Otago Regional Council's already had to seek extensions to its earlier committed timeframes on plan changes. I know that there's going to be a shortage of planners, a shortage of
10 experts. The 2023 date that council has mind may be optimistic. Personally, I believe the 2024 date across the country is optimistic because we're going to have a shortage of planners and experts. That said, that's the date in the national policy statement. I would not consider that in that four-year period from 2020 to whatever future point we're
15 going to get into. I don't see a whole lot of rural water users ramping up to get higher takes because they would impact those in the community. Or I would certainly like to think that would be the case – that other water users would be impacted.

Q. Right. Thank you.

20 **THE COURT: JUDGE BORTHWICK**

Q. So, I've got an interest in the same question around the community water approach or water sharing groups. Now discussion thus far with the Commissioner has been around ramping, my questions are particularly concerned with ramping, if they may be more concerned with where we
25 might go with deemed permits. And so you noted two approaches and I'm just testing with you whether they were two approaches in terms of non-regulatory management of water which seems to be the go in this part of the world, through the community –

A. Yes.

30 Q. – or through water sharing groups. Are there two different methods there or is it (inaudible 12:29:46) just the one, the water sharing group?

A. I would be speaking beyond my expertise. I would have thought there was the water sharing agreements but again, I would support them being

a non-regulatory approach as it has worked in the past. It brings the community together, they buy in to matters and there is that sense of “in it together”. As soon as you start writing these things and making them locked into planning provisions it becomes more of a, “I was told to do something versus I want to do something” to support my community and to lead to an overall, better outcome. So we support the non-regulatory approach to water sharing agreements but...

5

Q. And I understand that. And part of exploring water permits and some of the tools which may be in the toolbox or tools that may need to be re-tooled as Ms Irving said to us, which is a nice way of looking at things as well, is water sharing agreements and so we have touched on that and witnesses have said “no” don’t go down a water sharing agreement route because in order to implement a water sharing agreement there must be a minimum flow and other controls and that’s not what this plan change is all about and you know it is – and you’re an example of this, well actually there may be informal water, you know water sharing agreements now which communities, be they very large or very small but communities at least of “deemed permit holders” are (inaudible 12:31:30) to which are minimising the risk of all people going off at the same time that are trying to manage the water resource as between abstractors, so it’s not necessarily an environmental focus, it’s an abstractor use and reliability focus and that being so, is that something that can be brought forward as part of those non-regulatory methods, acknowledging that, are they real or is there still a gap that needs to be filled? Have you got any thoughts about that or is there any member of your team of witnesses who could talk to us about that?

15

20

25

A. I would have to talk with our team of –

Q. Yes.

A. – witnesses. I, yes, I just endorse that they are a really useful community-based current...

30

Q. So we’re trying to get a feel for that –

A. Yes I appreciate that.

Q. – we’re trying to feel our way into what tools are out there at this level of governance if you like, at the regional – plan. And I wrote a minute about

that and I'd said to everybody, "show all your witnesses, not to scare them off but to say look this is the conversation that the Court is having". The Court really wants to have a better idea about what these methods are. What's actually happening with deemed permits, what might be the responses if there is a policy gap and if there is a policy gap, potentially, the effects on users are quite significant, so –

5

A. Yes.

Q. – what are we looking to do to fill it?

A. I would – I don't think I'd be able to provide any further assistance to the Court –

10

Q. Okay.

A. – in that I would really struggle to see how you would have a one answer that would address the significant range of different approaches and it is – I don't think there's any probably, any two catchments that will have exactly the same approach but again I'm speaking beyond my expertise. I'm not involved in those water sharing -

15

Q. But then again I don't know that you have to bespoke responses to every catchment or sub-catchment, trib, or main stem but more yes, I guess what I've raised in the minute was more matters of control and matters of discretion which could arch the entire circumstances, that might ambitious, might be the wrong way to go but really trying to have, bring farmers into the loop. I need to understand what the scale and significance of this problem or priorities is, if in fact it is a problem. It might not be a problem at all but I need to have a better understanding evidentially.

25

A. My understanding was it was a positive for Otago and that people were working together. There'd been you know with a legacy of some issues with Otago Regional Council, the communities have got together and formed their own groups and tried to find solutions and hired their own representatives to try and get an improved, structured approach to things. I would be concerned with that, was put into a planning context but I haven't really turned my mind to that too much.

30

Q. Okay.

A. But I think it's a non-regulatory method that farmers will buy into more if it's something that's farmer driven and farmer and community-based versus something that's put into a plan and I'd – yes I would certainly struggle to see how you'd be able to write that into a matter of control but that's certainly obviously going to be useful.

5

Q. I don't know. And you may very well be right and that was our very early thinkings on that, there may be other voluntary measures which can be brought to bear. I don't know. But, some other thinking that we had was the non, I think at the moment non-regulatory policies – policies signalling a move now to water groups, water sharing groups, which are already in the water plan, did that need to be brought over to continue to drive this work over the next six years until you get a full, you know, a full plan. So I am going to leave you to think about that over lunch.

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1235

15 A. Okay.

Q. And then indicate to us who of your witnesses are best placed to talk to us, because generally speaking it is touched – you know, I can only speak for the evidence to date, because I haven't read for the next three weeks in Dunedin, but the issue of deemed permits is touched on, it's not amplified, and you know people don't go into it in any depth, and yet as I said we're trying to understand the breadth of the issue and its significance, and do we need to do anything.

20

A. I can certainly leave it to our witnesses as to whether they want to raise my, my, certainly my response would be that I believe it's something that would be usefully explored by those consultants who work more regularly with farmer groups, but I have a, an inclination that it should be something that's dealt with through a non-regulatory and farmer-driven and farmer desire to work together as part of the community and it's not something that then becomes overly regulated or to try and attempt –

25

30 Q. Mmm, I get that.

A. But I understand the Court's trying to find a solution.

Q. But what if you've got a rogue farmer doing something else, is the thing that I'm concerned about.

A. In our experience with winter grazing with winter matters, the best policing of these matters -

Q. - is from the community, yeah.

5 A. – comes from the community. And if someone's ramping up water use to try and get themselves in a better position, I would -

Q. - do you know what my –

A. – the farmers in the room would be able to probably answer better but I think the farmers in the community would certainly have more to say about that than -

10 Q. - my concern is not even the ramping behaviour.

A. Okay, yeah

Q. I mean that's one element and we have to think about that. It's actually people with the lesser priority now extracting in a way which hitherto would have been regulated -

15 A. Right.

Q. - by superior priorities, on the same water body. Now, that's my concern.

A. Okay, appreciate that as well.

Q. Okay.

20 A. I don't – well I'll certainly leave it to the witnesses, but I, it's something I, the priorities one I've, I tried to work my way round as to how it could be provided to the Court and I have read the discussions between other parties and I don't think I could come up with anything that would –

Q. That's okay. You don't have to come up with solutions, the Court is trying to understand –

25 A. Yes, no I appreciate that.

Q. – what the breadth of the problem is. Is it a problem that the Court should be responding to, and if so how can we respond to it, there may be other responses.

A. Yep.

30 Q. So just trying to get a better handle on it than what we've got thus far in the evidence because potentially it could be significant. Maybe. Don't know.

A. Sorry, your Honour, is that something that's going to be explored during the field trip where I think those –

Q. No.

A. Okay, sorry.

Q. No, we won't be gathering evidence on a field trip or confirming it.

A. Okay, right. No, fair enough.

5 Q. So anyway, questions for your witnesses after lunch. Now, the other thing that I heard from your evidence today and perhaps the evidence of others, is if there is to be longer term permits then there's potentially two camps or permit holders who might apply. There is that camp of permit holder whose assets would otherwise be stranded through the provisions of this
10 plan change. By that I mean they have already invested, not only made the investment but the, either all or a significant part of the irrigation infrastructure, both the means of conveyance and the method of irrigation has already been constructed. If you can't increase your irrigation area, if you can't increase your volume of take that investment is stranded, it's
15 unable to be used.

A. Yes.

Q. So that's one camp. Dams could possibly be in there, don't know, irrigation definitely sounds like it's going to be in there for some people, but again hasn't been quantified who or how many. So that's one camp
20 and do you agree that's one camp?

A. Yes I do.

Q. Stranded, stranding of the assets as a consequence of PC7. The other camp is those folk who have put into, who have applied to replace deemed permits or water permits, who have yeah, who have applied to
25 do that and the application has been accepted, so that's the other camp where you are also saying there should be a longer permit.

A. Potentially the door open but not necessarily in every situation, but yes, that, sorry an alternative pathway for both camps.

Q. Both camps.

30 A. But particularly the first camp you've described as –

Q. Particularly the first camp, and so that's really what I'm trying, you know, what can we – yeah, so it is more important to resolve that camp than the second camp, or?

A. Well, we represent all members so I would hate to pick winners and losers. It's –

Q. You, everybody's in your camp, I know.

5 A. I'm not going to put my head on the chopping block there and pick who I think should get, but I completely understand what the Court is trying to grapple its way through.

Q. Yes. And that isn't to indicate a view of the Court. The Court is just trying to –

A. Yes, completely appreciate that.

10 Q. – understand how, yeah, understand how many people might come through the doors and there's at least two doors.

A. Yes.

Q. Two doorways, and we're looking at that as well.

A. No, I do appreciate that. Thank you, your Honour.

15 **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. It's really for my benefit in particular, you know, we've heard evidence and submissions from a range of industry groups, Federated Farmers, Beef and Lamb, HortNZ and a sort of an over-group OWRUG. Can you give some advice or information about how they might interact with each other, do they interact or?

20

A. Typically, you would hope that they would be a strong interaction. I think in this particular plan change because of the speed in which it came about there wasn't the ability, and it's come about, the submissions period came about during the COVID lockdown where there wasn't allowed to be public gatherings, etc, so in this particular plan change there hasn't been the ability for all of those groups to work together. For the Regional Policy Statement, we are endeavouring to get every rural representative around the table so we can avoid this type of situation happening again where everyone's paying for separate experts and separate counsel and quite a different approach taken by different parties. We've trying to endeavour that, I mean the farmers at the end of the day are paying Beef and Lamb levies, they're paying their catchment groups, they're paying hopefully Federated Farmers memberships, they're paying rates that support the

25

30

majority of stuff and here they're paying taxes to enable the Court and everyone else to function, and so farmers at the end of the day are paying for nearly everyone in this room, so we're kind of hoping that we can get to a point where there's enough time we can start working together and part of the frustration around Plan Change 7 is that it was an expedited process which didn't allow for that good front-on, frontloading of consultation, and it's something that we're concerned about as to when fast-tracking is deemed to be a good idea and will save time and money that's it really left for the Court to be dealing with a very wide range of views and positions, and ideally they would be more refined before they were placed before the Court just to make the Court's job a bit easier, but also to make our farmers' lives who are paying for everything a more stronger one position, which is why I have endeavoured to make sure when I'm making comment I'm supporting those in the primary sector or considering the viewpoint of those in the primary sector who have put a lot of work into this plan change.

Q. So, farmers, individual farmers belong to different industry groups that are here being heard under this plan?

A. Yeah, farmers are paying towards a lot of different, and that's something that the sector is going to have to grapple with as we move into a different more intense fast-tracking environment that we all have limited resources, we're all struggling to try and keep up with everything that's going on and how do we do that better will be a core drive for the primary sector.

Q. Okay, and your organisation, Federated Farmers, do you have any idea what proportion of, I'll put farmers in inverted commas you represent in Otago?

A. Um, I would have to ask our territory manager. Hopefully it's a reasonably high percentage, and it's something that we have to continue to try and work out how we best serve those farmer by being involved in processes where we can provide support but also being aware the national regulation is a strong focus for our limited resources, and keeping up with the wide range of stuff that is now, when I started in this field eight years ago it was a very, very different environment of what we're dealing with, and we were all still trying to do the same thing but there's just a lot more

processes and they were a whole lot more intense and that's something that is going to need to be grappled with, particularly through Resource Management Act reform as to how we approach these things better.

Q. Okay, oh well thank you for that background, it's quite helpful.

5 FURTHER QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. Hold the line, there was something I wanted to ask you. Sorry. You know, you talk of, and you've talked about social wellbeing and that's acknowledged and I think you say that not well enough in policy 15 of the NPS, but in your view should have also been taken into account in the
 10 draft version, oh prior to notifying PC7. One of the things that, you know, one of the things that I understood, that I'm grappling with is the, yes we're moving into a period of considerable uncertainty and that is true around the country, but is it consistent with social wellbeing to grant applications for new water, new water that is water above the historical use or
 15 increased irrigation area, where in six years' time there is a review of that consent, which albeit that it cannot impact on the viability of a proposal, may render the taking use less reliable and that in and of itself is going to impact in terms of current levels of stress and anxiety being suffered in the farming community?

20 1245

A. Yes, well I think for the first part of that point, it's the existing farmers have already invested a lot of time and energy and I think that Dawn and David, thanks, to provide some really good evidence in this regard as to what the repercussions of them as individuals were. Moving into the future,
 25 there's so many things that farmers are currently weighing up, they're not going to go into this blind and invest wholesale and in fact biodiversity national policy statement if it does come out in June or July may further impact what proposals are, so I think people are going into it or will certainly be as of now going into any investment eyes wide open, they're
 30 – the change is flagged and certainly industry and catchment groups and everyone else is aware of that, but it's just making sure that particularly those who have to date invested a lot of time and energy into these

matters get to see the benefit like they would've if this process had not happened at the timing it did.

Q. Yes, no, I understand what you're saying, but you probably miss what I'm saying –

5 A. Oh sorry.

Q. It's not, one of the outcomes or one of the purposes which Mr de Pelsemaker talks about in evidence is about discouraging further investment in irrigation infrastructure and I'm putting to you, is that not consistent with a recognition of social wellbeing where in the future the reliability of the take may be impacted by a plan to come?

10

A. To a degree for those future applications, it's more the applications to date but also –

Q. Why would that also not apply in terms of the applications to date? So the applications to date, assuming they are granted, just say the proposition is that they're granted but in six years' time when farmers are well down the road to improving, investing in and improving irrigation infrastructure, both means of conveyances as well as the application of water, then something changes in a land and water plan to come which renders that take less reliable?

15

20 A. To a degree there would be social wellbeing considerations in that but I think the – there is also a strong existing social wellbeing issue for those farmers as of today, because I believe that the social wellbeing into the future will be addressed by the plan changes that come through and the direction that we head as a country and a range of other things, but it's the social wellbeing of people today and communities today.

25

Q. So your evidence is that their wellbeing, they'll be better off getting replacement consents which are predica- for those, that this applies to, it's not everyone which are predicated on irrigation infrastructure upgrade?

30 A. I wasn't proposing to make decisions on every consent application. For the controlled pathway of six years, I think that is still appropriate, it's – when I'm talking about an alternative pathway, that's not for the majority, that would be for a minority to have a longer term consent, flagging that

–

Q. Who is your minority with a longer term consent, so Stranded Assets, one group?

A. Yes, yes.

5 Q. Yes I think we can, we don't know how many in that group, but anyway, not talking about them, talking about persons who have applied for a replacement consent. Are there not hundreds in that group?

A. For those who have to date prepared applications to –

Q. Yes.

A. – have renewals –

10 Q. Yes.

A. – based on the old, the existing plan? Yes but again if they've got that level of evidence behind their application –

15 Q. Yes and just pause, so their proposition is, it's granted for a longer term, okay? But come six years' time, if that consent is reviewed as you propose and the taking use become lesser – less reliable, as a consequence of minimum flows and all of the other things which may be placed on that consent, does that not also have an impact on the social wellbeing of the individual, also the communities?

20 A. Potentially if it wasn't flagged long in advance that we were in a changing world and that things are going to change, but if everyone's aware of where we're heading and what the plan review processes that are coming are in play and they have a cool in condition on their consent that says, this is coming, be mindful, then someone can make a decision based on what their business needs are, then they're, that to me is their ability to provide for their wellbeing won't be as impacted as by the scenario that they get six years down the track and trying to find a way of saying it, it is addressed by them having the ability to have all information at their disposal and provide the level of information that satisfies whatever limb they go down of consenting.

30 1250

Q. And it's nothing to do with consenting I'm putting to you. The question that I'm trying to test is the social, mental wellbeing of an individual and also the broader community that they're a part. Grant them long term consents, in six years' time, if the Council reviews that consent and new

conditions are placed over that consent which impact their reliability supply which then demands that they go down the on-farm storage or upgrade to infrastructure, pathway or any number of pathways to ensure that they are able to continue to take and use water. Doesn't that scenario create considerable impact on the individual or is it your evidence while that's their risk, they're on risk now and they, and if they invest then they know that that's the consequence or a consequence?

5

A. I think an investment will be to – sorry, your Honour, an investment will be taken very seriously and would have to be and certainly would be flagged as being something that would need to be taken very seriously into the future.

10

Q. Yes.

A. So yes I'm – due diligence etc, people working through their investments and where they're heading, as a individual matter the social wellbeing we're talking through particularly with the Plan Change 7 and how it came about was the impact that was almost, I wouldn't say disregarded, but wasn't given due consideration that this is a plan change that will have an impact on those affected and what that might look like and why it's important for rural communities to be consulted with and to work through and so that these type of rich conversations can be had earlier on in the process versus around a courtroom so that we can try and find solutions that give effect to the higher order documents.

15

20

Q. Okay. All right, well thank you and any arising as a consequence of the Court's questions?

25 **QUESTIONS ARISING – NIL**

THE COURT: JUDGE BORTHWICK TO MS REILLY

Q. All right, well thank you very much.

A. Thank you very much your Honour.

Q. One of the minutes, that minute on the deemed permit, they asked you and everybody else, advocate and lawyers to hand out to their witnesses, make sure your witnesses have read it, so you kind of, so they know where we're coming from?

30

A. Okay.

Q. They probably know far better than us about the issue of deemed permits, but I wanted them to sort of understand what it was that the Court was trying to grapple with and why the Court might be asking them questions, so that was one direction that I made and if you haven't done it, you should do it over lunch.

A. Well no, sorry your Honour, it was more that our witnesses today, our farmer witnesses are here to talk primarily about wellbeing and impacts on just to provide that other, the arg- the positions we didn't have through normal consultation to get so they are providing information through that lens, so –

Q. Yes I just thought –

A. Yes.

Q. – if any one of them held a deemed permit they might be able to assist us?

A. They can.

Q. If any one of them were members of water sharing groups, which groups are informal, you know and prefer to keep it that way –

A. Yes.

Q. – and I do understand what you're saying about that, they might be able to assist us, because at the moment we don't have a lot of evidence, factual evidence from people who are – who hold these permits, what is the significant, yes, the scale of the issue, the potential scale of the issue and significance to them, and we need it.

A. Yes.

Q. So we're asking everybody.

A. (Inaudible 12:53:55) Yes thank you.

Q. But if they're not well placed to say, you should say so, but just the warning is we have yet to hear a lot of evidence about it.

A. Okay, yes.

Q. Okay, all right, thank you.

A. Thank you your Honour, thank you Commissioners.

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK

So we'll adjourn through to two.

COURT ADJOURNS: 12.54 PM

5

COURT RESUMES: 2.01 PM**THE COURT:**

Before we come to your witness Ms Reilly, just a question, I guess everybody in the room, we've had an application filed today, seeking leave for supplementary evidence to be filed by Dr Tony Davoren and that was filed
 5 without leave being sought on Friday and I understand from Madam Registrar that the evidence hasn't been circulated and I haven't read it although my colleagues have read it. It could be – it certainly is evidence to do with the schedule 10A for methodology. It may or may not acknowledge also the JWS
 10 and that's – and if it doesn't that's potentially problematic. How do you want me to deal with this? So it's a bit odd that they haven't circulated the evidence. Sorry, I had at least assumed that much but I'm told by Ms (inaudible 14:01:53) that that's not correct.

THE COURT: JUDGE BORTHWICK TO MR MAW

- 15 A. I do have copy of it.
 Q. Good.
 A. I received it through one of the counsel's witnesses who had provided some comments on it so I'm pretty sure it's the same document that I read last night. A supplementary brief of evidence –
 20 Q. Yes.
 A. – about the schedule.
 Q. Yes, 16th – dated 16th of April.
 A. Yes.
 Q. I mean people should not be filing evidence without first seeking leave of
 25 the Court, so that's why I haven't looked at it because it came in late, Friday.
 A. Yes. Yes, I couldn't find it anywhere in the usual places but it was in my Inbox for different reasons.
 Q. So it hasn't been served on you?
 30 A. Ms Mehlhopt might be able to explain just how we have a version of it.
 Q. Yes.

THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT

A. Your Honour I understand that when the experts have been discussing amendments to the schedule over the last week, in response to provisions that were circulated by Mr Wilson. Dr Davoren responded, saying he had
5 dealt with that in a supplementary brief of evidence and then I understand that counsel did provide us with a copy of that evidence.

Q. Do you think everybody else has it who might be interested in the schedule, or you don't know?

A. I don't know who was on the circulation list –

10 Q. Okay.

A. – but I can check and confirm that, if that would be of assistance.

Q. If you could ask Mr Reid whether he has served on all other parties together with his application for leave and ascertain what folks' position is on the same thing but I didn't think that we'd get this via an updated
15 supplementary brief of evidence. I thought, if there was agreement or disagreement the matter would simply sheet home to go off and to further expert conferencing. Mm, was my understanding.

A. Yes and I don't know that it was necessarily, I'm not sure about the basis for filing that evidence –

20 Q. No.

A. – for that party, just that is how we –

Q. Got it.

A. – received copy of it.

Q. Mm. Okay.

25 A. It was in that context.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. All right, with that in mind, Mr Maw what's your thinking around this? I mean there has been some testing of those provisions by the Court when I say "provisions", not schedule for – the schedule but the controlled
30 activity RDA Rules because there are some amendments made there, highlighting where further evidence is required. And as I said, I'll release a minute about that, still on track to doing that today particularly if we finish early. Beyond we've stayed out of the schedule.

- A. Yes, two thoughts occur. The first and perhaps a reflection of having read the document, I was left a little unclear about what it was and the version of the schedule being attached it was – simply looked like an entirely new thing. It wasn't a tracked change version to the schedule and I haven't yet done the comparative analysis between what's been put forward and it is that – or where it differs. I mean I had understood that in so far as there were still live issues associated with the methodology, there might be some further conferencing in relation to points that hadn't been finalised.
- 5
- 10 Q. Mm, well, that's right. And I say that was the case on Friday because I released a minute about that.
- A. Mm, so it seems a little premature to then see that which has been filed.
- Q. Mm. How do you want to proceed to you want to, I mean did you have questions for Dr Davoren anyway tomorrow?
- 15 A. Nothing written on my piece of paper. I had highlighted in the version, I mean I quickly skimmed through it just in case we were to make it to Mr Davoren today.
- Q. Mm.
- A. And I would have had some questions about the content of the schedule if he was giving fresh evidence on a schedule that's substantially different from the version that is included in the joint witness statement.
- 20
- Q. Mm.
- A. So yes, I would have had questions, in short.
- Q. Mm and Fish and – for Forest and Bird are not asking questions. They were down for questions, is that right?
- 25

LEGAL DISCUSSION – AVAILABILITY OF FOREST AND BIRD (14:06:30)

THE COURT: JUDGE BORTHWICK TO MR MAW

- Q. So just you down for questions. And so you're saying that if he wants to pursue a different version, you'd have questions?
- 30 A. Yes and – because it wasn't a tracked version I couldn't easily tell just how different it was to the 8 April version.
- Q. Yes, okay.

A. Was tonight's homework. I mean it's a page and a half long versus, I'm not sure what the, yes I suspect it's quite different just looking at the length of it.

5 Q. Yes. Well it does look different. Okay so that does actually look quite different and the significance of the differences, I don't know but why you'd have a – why the witness had wanted to part from joint witness statement at this stage, I don't know either. How do you want to handle it?

A. Well an application for leave hasn't been filed.

10 Q. Well it has now because it wasn't on Friday and so we've got that. It's four paragraphs and I'm assuming you've got that too? Not a – yes you've got that. I'm just told Dr Davoren's a witness. So, his evidence is up-to-date as possible and helpful to the Court, he has filed supplementary statement which he, discusses the outcome of conferencing as it pertains
15 to parties. Therefore parties, I guess which is parties, Mr Reid represents, seek leave to file the supplementary evidence. That is outcome of conferencing. It kind of suggests that your people are in behind on this? Whereas we don't know that that's the case, well I don't know if that's the case.

20 A. Well based on comments that I've seen expressing concerns about that which is put forward, I would respectfully suggest that's not the case.

Q. Okay so, is the way to handle that to say, "we'll hear from Mr Reid tomorrow" but that leave, given that the subject matter of the schedule are live matters, informally being conferenced, as between experts with
25 the direction that it go into formal expert conferencing, if not completed on Wednesday. The preliminary thinking is that the supplementary evidence not be filed. Leave declined.

A. Yes. Yes, I think that's where we reach...

30 Q. Yes, do you want to just note that up in a draft direction and I'll confirm it and send it out. Dr Davoren will be here anyway tomorrow. You'd still have questions for him, if he was – in terms of the JWS today?

A. I would have pursued with him the line of questions that I've been putting –

Q. Yes.

A. – in terms of where there is a difference in terms of the date range etc.

Q. Date ranges.

1410

A. So I would of –

5 Q. Yes.

A. – been pursuing those topics.

Q. That's fine.

A. And insofar as there were other major departures. If leave was granted, I would explore those, but I wonder whether that's just premature at this stage pending some further conferencing.

10

Q. Yes, so we need to hear from Mr Reid, but what I'll do is I'll give a preliminary indication back via an email to be released by the registry indicating what I've just indicated and Ms Cho is drafting that and I'll have a look at in the afternoon break and confirm that, and then we'll send that out and then Mr Reid will know where we all stand on that. Yep, okay.

15

Thank you.

MR MAW CALLS**LIONEL JOHN HUME (AFFIRMED)****THE COURT: JUDGE BORTHWICK**

5 I will actually draft you the direction and just hand it up to you in a moment, okay?

EXAMINATION: MR MAW

Q. Do you confirm that your full name is Lionel John Hume?

A. Yes.

10 Q. And you are employed as a senior policy advisor by Federated Farmers based in Canterbury?

A. Yes.

Q. And you've prepared a statement of evidence-in-chief dated 5 February 2021?

15 A. Yes, I did.

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

A. No.

Q. Your qualifications and experience are set out in that statement of evidence?

20 A. Yes.

Q. And you have participated in joint witness conferencing?

A. Yes.

Q. And in particular you participated in the conferencing in relation to the primary sector on schedule 10A 4?

25 A. Yeah, I participated in 10A 4 and then I was involved in the briefing of the following caucus groups.

Q. So you're a signatory to the primary sector joint witness statement?

A. Yes.

Q. But you're not a signatory to any of the other statements?

30 A. No.

Q. Do you confirm that the evidence that you've given is true and correct to the best of your knowledge and belief?

A. Yes. I do.

Q. Now, I understand that you've prepared a summary statement of evidence and I'd invite you now to read your summary for the Court.

5 A. Okay, thank you. "Rule 10.A.3.1 which is controlled activity status sets rates and volumes of take for resource consents to replace deemed permits or existing water permits which expire prior to 31st December 2025. Rates and volumes of take are to be calculated in accordance with the methods in schedule 10A 4. Rates or volumes of take that do not comply with the conditions of Rule 10.10A.3.1 including the methods in schedule in 10A 4, have non-complying activity status. That's in the notified version of plan change 7. My evidence statement is about the effect, is essentially about the effective efficient and sustainable allocation of water consistent with the plan change 7 objective to transition towards the long-term sustainable management of surface water resources in the Otago region. In my view, the best way to achieve sustainable management of surface water in the Otago region or anywhere else for that matter, for the purpose of irrigation, is to allocate sufficient water to effectively grow the crop that the irrigator wishes to grow and to ensure that the crop can be grown reliably over time. Reliability needs to be at least 90 per cent, ie, the water supply needs to be sufficiently reliable to provide the full allocation in nine years out of 10. This is particularly crucial for high value crops. Allocation needs to be based on crop need and that need must be reliably met. The methodology proposed in schedule 10A4 is problematic because it is based on the previous use of water over a relatively short unrepresentative timeframe. Further, it has been clearly demonstrated that the use of this methodology will probably leave irrigators water-short in a significant proportion of years, and in this regard I refer to the evidence statement of Mr Ian McIndoe, and will hamper the efficient and effective use of water for irrigation. There is well-established and reliable methodology for estimating crop water needs for specific crops under specific climatic conditions and with particular soil water-holding properties, and this is contained in the FAO irrigation and drainage paper number 56. Similar modelling methodology has been used in New Zealand to estimate crop water needs for specific climatic conditions and soil water-holding properties while also building in

reliability and efficiency criteria. One example which I also referred to in my initial evidence statement is Method 2 of Schedule 10 in Canterbury's Land and Water Regional Plan. This methodology appears to be working well and gaining widespread acceptance among irrigators. Similar methodology has been used by Aqualink Research Limited to prepare a set of guidelines for irrigation water requirements for the Otago Region and this is entitled Guidelines for Reasonable Irrigation Water Requirements in the Otago Region. It was prepared by Aqualink Research for Otago Regional Council and dated 24th of the 7th 2017. As it stands, the methodology in schedule 10A4 so Plan Change 7 is likely to leave irrigators short of water in a significant number of years. It is my view that amendments need to be made to Plan Change 7 that I believe are already in process, including as a result of matters agreed in the primary sector joint witness statement, firstly the methodology in Schedule 10A4 should be regarded as a strictly interim measure, whereby water users may obtain permit using a relatively cost-effective consenting path; secondly, Schedule 10A4 needs to be made more workable including by the use of daily, monthly and annual maxima, instead of averages. There is also a strong argument for using only annual data and that daily and monthly allocations are not necessary. Given the potential for unintended adverse consequences resulting from the use of a Schedule 10A4 methodology, I believe there needs to be an alternative consenting path to enable access to alternative allocation methodology such as that in the Aqualink guidelines referred to previously. The newly restricted discretionary pathway would provide this. Even though Plan Change 7 is an interim planning framework, I believe the opportunity should be taken to most effectively work towards the Plan Change 7 objective, namely to transition toward the long term sustainable management of surface water resources in the Otago Region.

1415

EXAMINATION CONTINUES: MR MAW

Q. Thank you for your summary. (Does the Court have any questions in relation to the summary or are you happy for me to proceed with my questions?)

5 **THE COURT ADDRESSES MR MAW – HAPPY TO PROCEED (14:19:15)**

CROSS-EXAMINATION: MR MAW

Q. I do have some questions. The first of which, I'd be assisted if you could help me understand the scope of your expertise in relation to the preparing of the schedule and sort of where the bounds of your expertise lie given that you have referred to the expert, for example, expertise of Mr McIndoe in relation to Aqualink, etc. Do you have a working knowledge of the likes of the Aqualink model?

10 A. I know what it does, I don't understand the intimate inner workings of it. I, I primarily approach these issues from a plant and soil science perspective, so yeah I've got an understanding of plants' water needs and how they arise, and I'm aware of some of the work that's been done around modelling plant water requirements.

Q. When you think about Schedule 10A4, what do you understand its purpose to be?

20 A. Yeah, my understanding is that it's an interim methodology to try and hold the line while Otago Regional Council develops a more comprehensive plan including presumably limit-setting processes and that sort of thing. in a way, to my mind it seems to be a little bit back-to-front. I would have thought the limit-setting side of things should be done first, really.

25 Q. In a perfect world that is probably the case, but we live in an imperfect world without those limits in place, at least insofar as the Otago Region is concerned. When you think about Schedule 10A4 and you think about the key outcomes that it's seeking to achieve, do you share the view expressed by Mr Wilson and Mr Leslie in relation to those three outcomes, and those outcomes are recorded in the joint witness statement, paragraph 1?

30

A. Well, they really are what they are, they relate to Plan Change 7 and you know vari- people might have opinions on whether those, those key outcomes are a good idea or not but they are what they are.

5 Q. So when we think about what Schedule 10A4 is seeking to achieve, it's seeking to achieve these three outcomes?

A. I'm not sure that it effectively does achieve those three outcomes.

10 Q. Well, let's work through them then. So the first one, to ensure that applicants are not allocated a higher instantaneous rate of take or volume of water than their existing water permit. So what's the, is that why you have an issue with it?

A. Yeah, I don't have an issue with that one.

Q. Okay. which of the three is it that you do have an issue with?

15 A. I think B, to ensure that applicants are allocated water at a rate and at a volume that reflects their past actual water use, on the basis that my understanding is that the range of years selected over which the records will be included doesn't, isn't particularly representative of potential water demand. For example, I don't think those years contain a one-in-ten dry year, for example.

20 Q. So, you have in your mind that date restriction, the, I think it was a five year date restriction in mind when you are passing, when you are giving that opinion?

A. Yes.

25 Q. And are you familiar with the changes that have been made or recommended by the planners in response to the content of the joint witness statements?

A. Yes. To the effect that any water data can be, any metering data can be used.

30 Q. Now I do have some questions with you about whether that should be a future-looking set of data, but assuming that the earlier date restriction, the 2015 date was to fall away, would that address your concerns as to whether or not the schedule is reflecting actual historic water use?

A. Not entirely because as you are aware the water metering regulations really only started to take effect in 2012 and then only for takes over 20 litres per second, and then the lower smaller takes came in

in 2014 and 2016, so if people were - unless people who had installed water meters for some reason other than complying with the regulation, then there could very well be incomplete, very incomplete data prior to those dates.

5 1425

Q. Do you accept the proposition that one of the outcomes that Schedule 10A4 and indeed Plan Change 7 are seeking to achieve is that applicants be reallocated their historical rate of take and volume of water?

A. Could you repeat that question please?

10 Q. Do you accept as a general proposition that Schedule 10A4 and Plan Change 7 seek to reallocate to water permit holders, water rate and water at a rate and volume reflective of their historical use?

A. Yes.

15 Q. What Plan Change 7 and Schedule 10A4 is not seeking to do, is to allocate water based on the reasonable need for water, that's a different concept isn't it?

A. It is.

20 Q. And insofar as the calculation of reasonable use or reasonable need, that may result in an allocation that is different or not reflective of historical use?

A. It wouldn't necessarily reflect historical use, for example, we went down the route of using the Aqualinc methodology, it could be either greater than or less than historical use because the Aqualinc methodology builds in 80% application efficiency which some methods of application would struggle to achieve.

25

Q. And so if one of the outcomes of Plan Change 7 is to reflect historical use, then great care would need to be taken in referring to models that are framed up based on reasonable use?

30 A. Yes that's true. I guess probably the concern we've got is that things could go the other way given that it's very likely that people could end up being water short using the historical use method rather than getting actually what they need.

Q. Now when you say that users might end up water short, is that because there's simply insufficient resource available or because the allocation

under the Schedule reflecting historical maxima doesn't reflect their needs?

A. I would say the latter. Their needs are not reflected potentially by the methodology.

5 Q. Now you've participated in joint witness conferencing?

A. Yes.

10 Q. Do you, well I'll flip that round, where have you expressed your concerns with the shift towards the use of maxima in the schedule? Do you maintain a view that the use of maxima for both rate of take daily, monthly and annual volume is not appropriate in the context of the schedule?

A. The use of maxima?

15 Q. Yes, so the notified version had the average – some averaging of maxima and the joint witnesses I understood had recognised that that created some difficulties and may not be reflective of historical use and thus a shift to maxima was recommended and picked up by the planners?

A. Yes I supported that.

Q. And does that address your concern in relation to whether Schedule 10A4 is accurately able then to reflect historical use?

20 A. To some extent. It gets around that issue to some extent. It also gets around the issue of another issue, which is the issue of missing data which was a issue obviously if one is taking averages.

1430

25 Q. When I read your evidence-in-chief and as I listen to your summary given this afternoon, I'm left a little unclear as to whether or not you are supporting the use of schedule 10A4 or whether you are recommending that the Court move away from the use of schedule 10A4 and shift towards a reasonable-use type calculation. What is your opinion in relation to the use of schedule 10A4 as recommended by the planners, picking up on the technical conferencing?

30 A. I think in an ideal world, reasonable-use allocation is the most logical and useful way to go. Given the aims of schedule 10A4, I think if we use maxima and do the other things that the joint witness statement agreed upon, I think schedule 10A4 becomes much more usable and certainly I would be happy for it to be used as the – in the activity status, it is. As

long as there was a reasonably accessible alternative path for those for whom the schedule didn't work.

Q. Now when you think about that and your words for those "for whom the schedule" doesn't work out, what do you have in mind, what's the gap that is potentially left?

5

A. I guess the obvious answer to that is where the period of water meter data, the consent holder has access to doesn't include a sufficient number of years to include a, say a one in 10 dry year. So they don't truly have a measure of water use in a year when they really needed to use water the most.

10

Q. And so in relation to that gap, how do you recommend that it is filled?

A. Well if such a gap can be demonstrating then people have access to a restricted discretionary activity pathway.

Q. In your mind is it important that that restricted discretionary activity pathway continues to achieve an outcome of reflecting historical use?

15

A. If the applicant was concerned that so the restricted discretionary pathway wasn't going to reflect their historical use, in other words if they had an irrigation system that they knew wasn't going to be able to deliver on the volume that they would be allocated via a reasonable-use methodology then they would probably stick to the schedule 10A4 pathway, I would suggest.

20

THE COURT: JUDGE BORTHWICK

Q. Can you say that again.

A. Okay, so the question was, may you should repeat the question sir.

25

Q. He can't remember. I was concentrating on the last year. Can you anyway, what were you trying to say?

A. I think we were – sorry your Honour.

Q. No, what were you trying to say. Go ahead.

A. I think we were talking about what happens in this scenario if someone enters the restricted discretionary pathway and doesn't – ends up with a number that's smaller than their historical use.

30

Q. So there's two scenarios which are being conflated. Which is what I was busily writing a note and then I didn't hear your answer. You go two

- scenarios possibly being conflated, so the RDA pathway at the moment is being used where you do not have, where for whatever reason the data is inadequate, whatever that means. You know there's gaps in the data, whatever, inadequate data. The other scenario is and this is the scenario
- 5 you're proposing that you can go down the RDA route if the historical data does not include a one in 10-year drought but then you've already told me it doesn't. So therefore everybody will be going down an RDA route seeking an allocation based on for example, the Aqualinc reasonable-use methodology. Correct?
- 10 A. Yes.
- Q. Yes. So that's, I think where you stand? That's so, two diff– do you understand there's two different purposes for which you are now – you've put two different purposes for the RDA pathway?
- A. I guess some of my thinking behind that and it's not quite answering the
- 15 question, I don't think but my philosophy for I guess advocating – well proposing the benefit of reasonable-use, is that that's where we probably ultimately want to get to in terms of the objective of sustainable water management. So why stop people getting there? But if people have been using it and I also support the notion within plan change 7 that people
- 20 shouldn't immediately be dropped down from their current use because they – possibly there's a number of people out there that that would seriously do damage to.
- Q. Sorry, if they go to reasonable use on the Aqualinc methodology?
- A. Yes, if...
- 25 Q. Yes, every bodies on a border dyke or –
- A. Yes anyone that's on a border dyke's going to struggle to –
- Q. – every bodies wild flooding is going to be caught out. Yes.
- A. – achieve 80% application efficiency.
- Q. And wild flooding.
- 30 A. Yes.
- Q. So, there's two –
- A. Yes.
- Q. – so we got 23% of permit holders are going to be disadvantaged under an Aqualinc methodology. Correct?

A. Yes.

Q. Yes.

A. I'm not sure what the percentage is but...

5 Q. Oh, I got that from somebody's evidence in the primary sector, who was it? It was the economic, Mr Burke for Lamb and Beef.

THE COURT: JUDGE BORTHWICK TO MR MAW

A. I think Dr Chrystal had the percentages –

Q. Did she?

A. – on her evidence.

10 Q. Oh okay, well you might be right. Somebody did and it –

A. Yes 15 and 8%

Q. – was like astonishing. That we were so high here but anyway that's you know, but we are. So why are we recommending this as a method?

THE COURT: JUDGE BORTHWICK

15 A. Why are suggesting?

Q. Mm.

A. Well it's – it's been suggested as an alternative method.

Q. Mm.

20 A. So for those that for whatever reason, their data doesn't accurately reflect their use or their need then there is an alternative and it's a sensible alternative. It's an alternative which is good for a variety of reasons. It gives people what they need if they've got an efficient system. It leads to efficient and effective use of water but if people are using methodologies which would struggle to achieve 80% application efficiency for example
25 then there's an alternative that serves them well too, provided they've got some data that they can use to demonstrate their historical use.

CROSS-EXAMINATION CONTINUES: MR MAW

30 Q. Might use of, for example the Aqualinc guideline methodology result in water being allocated beyond the limits of historical use and perhaps if you could hold a scenario in your mind when you think about that where you have a say, a lower priority water abstractor who simply hasn't had

access to reliable supply of water, when you run the Aqualinc calculation it may calculate much higher daily, monthly and annual volumes compared to that which they historically been able to take?

- 5 A. I guess that's theoretically possible but I'm not sure whether that's a practical problem because if a person hasn't had – has not used their, you know a reasonable amount of water simply because they haven't had access to it, they will probably continue to not have access to it. Water isn't suddenly going to magic itself into availability simply because someone goes through a restricted discretionary pathway and gets a consent based on reasonable use.
- 10

1440

Q. Would your answer be predicated on then the need to ensure that the current manner by which water is taken across a catchment continues?

A. (no audible answer 14:40:21)

- 15 Q. I wonder whether I might give you another scenario to think about where you have –

THE COURT: JUDGE BORTHWICK

Q. Sorry, I didn't actually hear your answer to that question.

A. I didn't answer that question.

- 20 Q. Oh you didn't did you want to?

A. Yes, let, let – could you repeat it, please Mr Maw?

CROSS-EXAMINATION CONTINUES: MR MAW

- 25 Q. If you have the highest priority holder abstracting water at the bottom of a catchment, the lowest priority order or holder was taking water from the top of the catchment, from a physical perspective the water is flowing past the point of intake, so the exercise of the priorities may be having an impact on how much water is available.

A. So the person at the end of the line may, or with the lowest priority, may not get sufficient. Is that...?

THE COURT: JUDGE BORTHWICK

Q. No. The yeah, so as I understand the proposition, the person with the highest priority is at the mouth of the river.

A. Mmm.

5 Q. And the person with the lowest priority is at the top of the river, or at the top of the trib, it doesn't really matter. If the person at the top of the trib with the lowest order priority now gets an allocation based on reasonable use that is potentially going to, based on a one-in-ten year dry, that is potentially going to increase the amount of water which otherwise they have been taking because they have been subject to the person at the bottom of the catchment exercising rights of priority and telling them to get off the supply, when, you know, when the flows in the river are trending down. If all that goes and now at the top of the river they've got a higher allocation or even actually existing allocation, but for the purposes of the argument a higher allocation, does that not, would that not impact on the potentially impact on the flows available lower on, lower down the catchment, I think is where you are going with this. And it probably depends on the irrigation infrastructure and its ability to take more, but what's your response to that?

10

15

20 A. Does it make any difference?

Q. Your allocation. If your allocation – yeah –

A. Yeah, yeah, their paper allocation may be more than they've been taking.

Q. No, no. I think we've, yeah, probably – I don't know whether we're going to – I understand, I understand what you are saying though I suspect it's probably dependent on the irrigation infrastructure at the top of the catchment and whether it could take more if it's allocated more.

25

A. Yes.

Q. But it might. Mmm.

CROSS-EXAMINATION CONTINUES: MR MAW

30 A. In short, the potential, my question is the potential for that situation to exist, if Aqualinc is the method used to calculate monthly, and monthly, daily and annual volumes.

THE COURT: JUDGE BORTHWICK

Q. Do you understand the priority system or not really?

A. Well, I understand it exists. I don't understand the intimate workings of it.

Q. Oh, neither – we haven't heard much about that ourselves so we are just
5 using our imagination. Okay, all right.

A. But does it really matter though?

Q. Why, so why do you say that?

A. We're only allocating people the amount of water that they need using
your Aqualinc methodology, if it's...

10 CROSS-EXAMINATION CONTINUES: MR MAW

Q. But the situation might exist that the amount of water that somebody
needs exceeds that which historically they've had access to.

A. Mmm. Not because of what they're consented to take but because
they've been physically constrained by the amount of water that's left.

15 That's available to them?

Q. Yes, which may be a reflection of for example the priority system.

A. Yes.

Q. And insofar then as the Aqualinc model is referred to, then significant care
would need to be taken if reflecting historical use was the outcome to be
20 achieved, the Aqualinc model was not reflecting something greater than
historical use.

A. I don't think there's an issue if there's enough data to accurately reflect
historical use. The sort of situation that we were concerned about is if
this, if the data that's available doesn't accurately reflect historical use, in
25 which case you are not going to know whether it's greater or less than the
Aqualinc methodology would deliver. Then yeah, in those circumstances
where we can't accurately estimate historical use then the fallback
position is Aqualinc methodology or something akin to it.

THE COURT: JUDGE BORTHWICK

30 Q. I don't think so, because you're wanting taken volumes based on a 90%
reliability, as opposed to reflecting historical use. Again, the, it's not the
same.

A. Which may be based on less reliability.

Q. Yes. yes.

A. It's a, yeah.

Q. So that's you know, because I think earlier to another witness I had said,
5 Well if there are problems with the data, could that not be tested under
the RDA by employing methods such as Aqualinc to verify whether the
data was actually accurately reflecting historical use, or not at all, and so
that the two pieces of information could come together and be taken into
account in terms of setting the allocation, but I was told that wouldn't work
10 for border dykes and wild flooding, so that's fine, that's off the table. But
also, Aqualinc does assume reliability of supply as well, which if you
employ that it may not reflect your historical use. So there could be a shift
from your historical use to something else.

A. Mmm. That's not ap problem for the environment though, is it, because
15 if people, if people did get, and an Aqualinc model could be applied to a
different reliability too, but even if, even if a volume was allocated based
on 90% reliability, it's not going to res- and that number was greater than
historical use, over the years it's not going to mean more water taken
because the reliability is the reliability. If they haven't been able to get
20 reliable supply in the past they're probably not going to be able to get
reliability still, so. people, water users, will probably end up not taking any
more water, I would argue.

Q. I don't know. that depends. Doesn't that depend on, for those people
with deemed permits, deemed permits could be regarded as a type of
25 flow-sharing arrangement as between abstractors. Do you agree with
that?

A. Yes.

Q. Yes. So reliability being determined by the arrangements within that
flow-sharing group of people who hold priorities in relation to each other,
30 correct?

A. Yes.

Q. Yeah, so reliability is not – to that extent reliability is contingent on things
other than the flow in the river, it's based on demand by other users. Is
that not so?

A. Yes, partly, although that in turn is dependent on flow in the river.

Q. Mmm. I didn't think Aqualinc methodology had any environmental benefit. Its benefit is to calculate what is the reasonable use or reasonable demand for a particular farm. correct?

5 A. No, it's a method once, on top of a limit-setting process.

Q. Which we don't have.

A. Which we don't have. Yeah.

Q. Okay.

A. But it does, it does guard against people using water inefficiently, there's
10 efficiency built into it.

Q. To that extent there's an environmental benefit.

A. And the assumption that the environmental stuff will have already been
done, and then an Aqualinc or an Aqualinc-like methodology is used on
top of that to ensure that people get the water they need, not more than
15 they need, and that they use it efficiently.

Q. So that not being the case, then what. Anyway, I'll hand it over to you,
Mr Maw.

CROSS-EXAMINATION CONTINUES: MR MAW

Q. So that not being the case...

20 A. I, well, but that's not the case for either Schedule 10A4 or for the Aqualinc
methodology and I would argue that the Aqualinc methodology is just as
good if not better environmental-wise and it does ensure that people don't
take more than they need if they use the water efficiently, so people get
allocated the amount their crop needs and in order to tap into that amount
25 they've got to use it efficiently. If they don't use it efficiently well they don't
get as much as their crop needs in a growing season.

1450

Q. I did have one more question, whilst we're in the middle of this, under
your approach would land use change or is land use predicated on a
30 certain year? So, for example, if my crop is, no if I'm growing sheep and
beef now under your method would the reasonable use be based on
sheep and beef or could I say using the same irrigation systems and

there's no additional outlay, I now want to grow dairy beef or beef or something which is more, something which is different, yes?

A. Well all of those options use pasture and that's the – so I guess that's the crop you're growing, with the water you might feed it to different animals further down the track, but if you're assuming the same sort of intensity for your beef or your dairy or whatever –

5

Q. I don't know what I'm assuming, that's the thing. How would you apply the methodology?

A. Oh well you –

10

Q. Would you say there can be absolutely no land use change?

A. Well the crop would –

Q. On a certain year?

A. The crop you would be talking about would be pasture but the, there would be changes if you wanted to get into some kind of horticulture or grapes.

15

THE COURT: COMMISSIONER EDMONDS

Q. So if somebody says, well I'm going to get into grapes or whatever it is that may mean that you need more water in terms of the change from pasture to, I don't know whether grapes need more water or not but you will do?

20

A. They probably need less.

Q. Less, probably, so it's a bad example, I was thinking that, what might need more water than just pasture?

THE COURT: JUDGE BORTHWICK

25 Crops.

THE COURT: COMMISSIONER EDMONDS

Q. Well keep getting having cherries but I was hoping for another example?

A. Yes I don't know anything about cherries.

THE COURT: JUDGE BORTHWICK

30 Q. Fodder for intensive winter grazing. Could that need more water?

THE COURT: COMMISSIONER EDMONDS

Q. Something like that? Would that be in that category?

A. Yes I guess that's maybe a better question for Council to answer, I'm not quite sure what they do around land use.

5 Q. Well perhaps, right perhaps it doesn't matter what it might mean, but assume whatever you want to change to –

A. But yes using an –

Q. – is going to require more water?

A. Using a methodology like Aqualinc, is the Council requires – if the Council
10 has a land use attached to a water consent then –

THE COURT: JUDGE BORTHWICK

But it doesn't, so let's not assume that.

THE COURT: COMMISSIONER EDMONDS

Q. It doesn't usually.

15 A. No, no, no, well that's my understanding.

Q. So I suppose my question is that I've been around quite a long time and I remember under the old District Schemes, people wanted to subdivide their rural land for various reasons, whether it be growing carnations or whatever it was, really what they wanted was a lifestyle block and it didn't
20 really matter what the Council tried to do to try and make sure that that transpired, it actually didn't in many cases and so I'm just wondering how, somebody comes along and they say, "I definitely need more water because I'm going to do X", how would you ever make sure that that transpired, I mean how would you ever tie this reasonable use concept to
25 what's happening on the ground?

A. Yes I guess that's up to Council and how it manages it's consents but I would suggest that's really a different topic in a way and that's got to do with how Council yes manages their consenting processes. In a way if you've got an amount of water allocated to pasture, sure, other crops will
30 have different requirements at different times, but all plants need to use water and all plants are exposed to losing water because they need to maintain gas exchange to grow, some plants, some crops will use less

water perhaps because they've got very little leaf area when they planted a lot more further on in the season, whereas pasture tends to be more constant in its demand for water and its demand to, yes, it's requirement to take up carbon.

- 5 Q. But the Aqualinc method does make distinctions by crop types doesn't it?
 A. Yes it can, yes, well if the Council went down the route of saying we're going to allocate you the right amount of water for a very specific crop, be it cherries or grapes or pasture or whatever else, then yes that could be done.

10 **THE COURT: JUDGE BORTHWICK**

Q. So has anyone in your team tested to see what would be the implications of an RDA rule which allows exclusive calculation of the take in volume using Aqualinc, so not tied to historical use of water because I think you've now untied it in your mind?

15 A. mmm.

Q. That's correct isn't it? You've untied it, that's the problem?

A. Yes, yes.

Q. Okay. Yes. Whereas others have tied it, yes.

A. In a way that makes sense because if people who've had a deemed
 20 permit or some other permit that expires before 2025, as long as they don't change their land use, then it's rational I would suggest to assume that their need for water is going to continue to be roughly the same.

Q. So then that's an important qualification provided that the permit holder has not changed their land use?

25 A. Mmm.

Q. Then it may be calculated in accordance with the Aqualinc methodology, is that what you're saying?

A. Yes that sounds reasonable to me.

THE COURT: COMMISSIONER EDMONDS

30 Q. So is that accepting then of one of the other things on the controlled activity and I think it's also in the restricted discretionary activity, is a requirement that to go down either of those pathways you have to stick

within the area of land that you are irrigating, the total area of land you are irrigating between, can't actually remember the years off hand.

MR MAW:

5 September 2017 to March 20- or June 2020.

THE COURT: COMMISSIONER EDMONDS

A. I would suggest that for the controlled activity pathway it probably doesn't matter because you're running on historical use and if they can demonstrate historical use, then if they want to change their land use, they get no more than the historical use, so if they go to something that requires more water, then they're going to be able to irrigate less land area, so probably no harm done. Whereas if they are going to use the Aqualinc methodology based on a particular crop, then it is important, they could choose a crop that was – they could theoretically choose a crop that was more water demanding I guess and be allocated more water.

10

15

THE COURT: JUDGE BORTHWICK

Q. Sorry, so you're saying the RDA route, it does matter? You should be limited to the –

20 A. Yes I think so –

Q. – same irrigation area?

A. – to kind of link it, to link it back to the Schedule 10A4 methodology which links allocation to historical use, so if we run the argument that because of record keeping or record availability, representative historical use can't be demonstrated, therefore, there's a risk, a risk of a discretionary pathway enabling some methodology like Aqualinc which is -

25

Q. Oh. Oh sorry –

A. I –

THE COURT: JUDGE BORTHWICK

30 No a different, no I think we're doing it again (inaudible 14:58:53).

THE COURT: COMMISSIONER EDMONDS

Well I'm still, I'm misunderstanding what this witness is suggesting for controlled activity. The early notes I took I didn't understand it then and I still don't understand it now, so Mr Maw, do you want to –

5

MR MAW:

Shall I have a go?

THE COURT: COMMISSIONER EDMONDS TO MR MAW

Q. Would you please?

10 CROSS-EXAMINATION CONTINUES: MR MAW

Q. So I get the question that perhaps we collectively are grappling with, is whether you are recommending an unbundling from historic use to – with reasonable use for the purposes of the controlled activity and/or something different for the restricted discretionary activity, so I wonder whether we could go back to the controlled activity -

15

A. Yes.

Q. - and I want to understand what your evidence is in relation to the methodology that should be used for the controlled activity?

A. Well for the controlled activity where the joint witness statement got to was that with the amendments that were going to be made to it, presumably, that was fine for, yes, it's historical activity for that consenting pathway.

20

THE COURT: JUDGE BORTHWICK

Q. Historical use?

25

A. Yes.

1500

THE COURT: COMMISSIONER EDMONDS

30 Q. (Inaudible 15:00:12) date range?

A. Well over whatever date range the person's got data for, so the proposal was that it wouldn't be constrained to, you know, a five year segment but use whatever reliable data the, the water user had.

5 Q. So what years are, what might we be talking about then? What are the possibilities?

A. Well that's something I simply don't know. I don't know where people's water records go to. The water meter regulations started to come in, in 2012 but there's no doubt people that have got records before that, that were doing water meeting for – metering for water management reasons.
10 Yeah, I don't know is really the answer to that question.

Q. Yes, so even back at 2012, there was a lot more bore dyking involved flooding going on, wasn't there?

A. Yeah, I presume so. I don't have numbers for that in my head.

15 Q. So, are you accepting then of all the potential implications of going back then, even if – though you don't know what the picture might look like?

A. Well if the aim is to reflect historical use, then that's what it is.

THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS

20 Q. I think we're probably straying out of his expertise. I think that really is a planning question.

A. I guess I'm partly trying to understand the basis –

Q. Yeah.

A. – on which the witness is, in the conferencing process, not necessarily the planning witnesses have –

25 Q. I'm not sure.

A. – in deciding on the fact that it should be maximum not, the maximum, not the averaged maximum over a defined period of time. What they've based all of that on. That's what I'm unclear about in terms of the potential timeframes and whether it might mean that you actually you might get a
30 very high figure as opposed to if you're looking in the last five years where you might get a lower maximum that that's all.

DR HUME:

The rationale of the part of the planners that were part of the primary sector caucus, namely Simon Wilson, his rationale was that council didn't want to disadvantage people who didn't necessarily have the most efficient irrigation system, out people who might be doing border dykes, I'm doing, I'm thinking does wild flooding anymore, but yes, certainly people that had probably out-dated methodology you'd call it, respectfully, yeah, the – the notion was that we shouldn't, that council didn't want to disadvantage those people and that's perfectly reasonable, therefore, historical use was simply that. Historical use without getting a headache over whether it was historical use that was greater than the reasonable use that you'd get from –

THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS

- Q. No, yes, so I, it's –
- 15 A. Yeah, no, it's okay. I got, think (inaudible 15:03:35) –
- Q. I'm not quite sure that we will – I know where you want to go and –
- A. It does still, yeah.
- Q. – (inaudible 15:03:44) going to be released in a minute.
- A. Yeah.
- 20 Q. And it's probably better to manage (inaudible 15:03:47) -
- A. I think that we will have to leave it that way, yeah.

THE COURT: JUDGE BORTHWICK

- Q. Although I was interested in the RDA question -

25

UNIDENTIFIED SPEAKER:

Yes I was going –

THE COURT: JUDGE BORTHWICK

- Q. - so controlled historical use, you mean historical land use, correct?
- 30 A. Yep.
- Q. And second, to use whatever data you've got?
- A. Yeah, so historical water use.
- Q. And, RDA? Historical water use?

A. Yep.

Q. Okay. RDA?

A. No, in – for RDR, RDA, rather.

Q. RD, yeah.

5 A. Then reasonable use.

Q. Reasonable use. I'm not sure that's what that sentence says.

MR MAW TO THE COURT: JUDGE BORTHWICK

Q. No, that's –

10 A. But that, that could be the issue that's at large and whether people are on the same page or not, it – we don't know what page they're on because they haven't given us much information.

Q. No.

15 A. Yes, the challenge reading the evidence-in-chief and then again the summary today, it seems to be that there's a, perhaps a misunderstanding as to what the RDA pathway is doing.

Q. Yep.

A. In terms of reference to the other methods within the RDA.

Q. Yep.

20 A. It's in paragraph (a) which is the matter that Mr de Pelsemaeker has highlighted that he's concerned about.

Q. Mmm.

A. Insofar as that that may result in volumes of water being allocated over and above historic use.

25 Q. Mmm.

CROSS-EXAMINATION CONTINUES: MR MAW

30 Q. And the questioning perhaps is highlighted and identified that there perhaps might be a different understanding in the witness has, and correct me if I've misunderstood but my understanding is that you're saying that the RDA pathway can be used as an alternative platform or pathway based on reasonable and efficient use as opposed to historical use?

A. And it would reasonable and efficient use based on the existing land use.

THE COURT: JUDGE BORTHWICK

And based on the existing area?

5 **THE COURT: COMMISSIONER EDMONDS**

Irrigated area?

THE COURT: JUDGE BORTHWICK

Q. Yeah, based on the existing irrigated area.

10 A. Yeah, yeah, I think so.

Q. Okay, why do you think so?

A. Because that reflects historically what the water's been used for.

Q. Okay, now that might make a difference.

A. So the notion is that people should be allocated the right amount of water
15 to grow the crop that they're irrigating, so if they had a –

CROSS-EXAMINATION CONTINUES: MR MAW

Q. But the issues still may arise in that that methodology doesn't reflect
actual availability of water and thus may result in a higher volume being
allocated compared to historical use?

20

THE COURT: JUDGE BORTHWICK

Q. You mean historic availability?

A. But, yeah, that gives, I think we covered this slightly before also. Yeah, if
people were allocated a reasonable annual volume based on existing
25 land use, and it was greater than historical use because of lack availability
historically, that lack of –

Q. Sorry, is that down – people are allocated reasonable than fish – volume
based on land use, and?

A. And if that was greater than historic use because of lack of water
30 availability historically, well I would suggest that that lack of availability is
going to continue on and while they might be allocated more, they're
certainly not going to be using the...

CROSS-EXAMINATION CONTINUES: MR MAW

Q. Because you say they wouldn't have access to the more, whatever the more looked like?

5 A. Yeah, but if they've got a particular land use, they've obviously been able to carry out that land use, so they must have been getting enough water to do what they've been doing, otherwise they wouldn't be doing it, so maybe we're chasing our own tails here a bit, I don't know.

THE COURT: JUDGE BORTHWICK

10 Not at all. I should say that for the purpose of your evidence, the two controls based on historic land use, based on existing area, pretty fundamental. Yep. Not chasing your tail at all. Yeah. Okay.

CROSS-EXAMINATION CONTINUES: MR MAW

15 Q. When you've been thinking about the use of other models, you have referred in your, both your evidence-in-chief and your summary, you've referenced schedule 10 of the Canterbury land and water regional plan?

A. Yes.

20 Q. Now that methodology has been used in circumstances where the underlying planning framework includes a full flown allocation regime for the limit setting process has occurred? And that's quite a different situation to the situation presented in the Otago region presently?

A. Mmm, yes.

25 Q. And again simply moving to that type of methodology in the absence of understanding the allocation and flow regime which ought to proceed it's application results in a situation where the methodology is not responding to environmental issues in relation to resource allocation?

1510

30 A. Yes, I guess that's true but I don't think that helps us when we're considering either Schedule 10A methodology or reasonable use methodology. In fact, I would argue that reasonable use is probably a better option environmentally if there are no limits set, no environmental limits set, simply because you are requiring a greater level of efficiency of water use and therefore probably less water use.

Q. Is that predicated on all users within a catchment then being required to achieve reasonable use?

A. I'm sorry, I didn't quite understand the question.

5 Q. Is that answer predicated on all users within say a catchment being required to take only those amounts reflective of reasonable use?

A. Well, I guess any impact would be greater the more people went down that route.

10 Q. One of the challenges here is that under the controlled activity pathway that those inefficient users can continue to use inefficiently over the next six year period, but the restricted discretionary pathway that you are seeking or suggesting might be opened up are reflective of reasonable use might then provide a further platform where other users may end up being allocated water at higher volumes than that which reflects their historic use.

15 A. Mmm.

Q. And so the benefits of shifting to efficient use may not accrue in this situation.

20 A. Depends, yeah I think we partly had this argument before. If the amount of water allocated was greater than historic use, and historic use was constrained because of lack of availability of water, then the same lack of availability of water I would suggest would continue on regardless of which consenting pathway people have been through. The physical constraints are the physical constraints, and no plan provisions are going to change that.

25 **THE COURT: JUDGE BORTHWICK**

Q. What are physical constraints?

A. Well, the amount of water that's available to take. People can't take what's not there.

30 Q. Could that constraint be an irrigation infrastructure constraint which can be remedied by change assistance?

A. Mmm.

Q. Yes?

A. Yeah, yeah people could overcome them, but...yeah if you, unless you change your land use or your irrigated area then sure you may take water and use it more efficiently, but well in fact if people upgraded an irrigation system without changing their land use or without changing their irrigated area then there is going to be more water left in the surface water body, I would suggest. And in fact people often rely on changing land use or expanding irrigated area in order to do an upgrade of an irrigation system.

5

Q. Mhm.

A. And that's another point that needs to be considered, really, is do we want to stop people from upgrading to a more efficient irrigation system?

10

Q. So one of those interesting thoughts, so one of the things we could ask experts to do is to actually test the, you know, test this question of is there a change in volume, if you hold the irrigation area and hold the land use, is there a change in volume under a reasonable and efficient use pathway, so that's a pathway, it's quite a different pathway for testing historic use under the RDA where there's a data issue using the Aqualinc methodology as one of, you know, to verify what that volume might be, so that's a different purpose, if you like. So you have got now two purposes, mmm. But you know, but we could ask the questions and have the tests done, because at the moment we're just flying a little blind, as to you know.

15

20

A. - it's theoretical.

Q. - is there more water used, not more water used. Yeah.

A. And that's one of the challenges and I don't mean this critically of recommending a change of methodology without necessarily understanding what the implications of that –

25

Q. Implications are?

A. – are and trying to understand –

Q. We've got very little by way of that, but again that's reflecting the complexity of the subject matter, and you know, time available for everybody to get their heads around it and demonstrate what they, demonstrate the implementation of the methodology using agreed scenarios. And then of course the question is whether the agreed scenarios are in fact wide enough to have –

30

A. Representative.

Q. Yeah. All right.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. I had I thought two other questions for you which Ms Reilly pointed in your direction, so let me just refresh my memory as to what they were. The first relates to the date range in terms of water years that should be used, and I want to explore with you the cut-off of 30 June 2020 which remains the position of the council's planning witness. And my reading of the joint witness statement is that you are of the view there should be no restriction
10 in terms of the 30 June 2020 date and that all future data should be used. Have I understood that correctly?

A. Yes, that's my recollection.

15 Q. Do you accept that with the shift to maxima as opposed to average maxima, that the ability to influence the data set is easier in terms of one-off abstraction events?

A. Presumably people whose consents who have deemed permits for example, which expire this year, are going to have to make a consent application this year, presumably, so there's very limited time to do that anyway, I would have thought.

20 Q. So what about those applicants for consents that don't expire until 2025?

A. Mm.

Q. That's perhaps that situation where the greatest risk arises. So do you accept that there is a risk?

A. Yeah, there is a theoretical risk.

25 Q. And insofar as there is a theoretical risk, who should bear that risk, the environment or the abstractor?

A. Well I guess it's the council's task to mitigate that risk, remove that risk if it perceives there is a risk.

30 Q. And insofar as the council perceives there to be a risk, if it mitigates that risk or addresses that risk by retaining the date of 30 June 2020, you could understand that being an appropriate response?

A. I can understand it being a response. I'd need to give a bit more thought about to whether it's an appropriate one or not.

Q. That may be a matter on which some further conferencing may assist in terms of understanding the potential risk profile.

A. Yes.

5 Q. And just to round that out, my understanding is there may not have been sufficient time in the conferencing to really explore the consequences of shifting or removing those date restrictions.

A. Mmm. Yeah, I do remember it being discussed but it wasn't discussed at length.

10 Q. And I'm sure the earlier date might also be explored when Commissioner Edmonds asks you some questions as well. We have covered the second matter on which I have scribbled your name beside. Thank you. No further questions.

RE-EXAMINATION: MS REILLY ON OWN BEHALF- NIL

15 **THE COURT: JUDGE BORTHWICK AND COMMISSIONER BUNTING DISCUSS – NO FURTHER QUESTIONS**

THE COURT: JUDGE BORTHWICK

20 Q. So what we were just talking about is that in the JWS for planners, the planners have linked the RDA rule with the matter of discretion being within the limits of historical use, look at other methods, one of which I guess could have been Aqualinc but that's you know, something to come. What you are talking about is not ground truthing historical use through other methods such as Aqualinc, you are talking about an entirely new RDA route based solely on reasonable and efficient land use which is tied back to historic land use and historic area under irrigation, so assuming
25 no increase in the irrigation area, is that correct?

A. Yes.

30 Q. Yes, so it's a different route. Route B, the RDA I think. Yeah. The advantage if you take your route is that users will get 90% reliability of supply but the other advantage and correct me if I'm wrong is that for some irrigators, certainly not all irrigators, but some, that may support and irrigation upgrade?

A. Yes.

Q. Yes. But not all and others will require an expansion in the irrigation area and change in land use to be, to generate more income to pay off the debt for the irrigation upgrade. So there's only some people who could take
5 advantage of that?

A. Yes, that's right.

Q. Yep. Okay. And then -

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

Q. So under the present wording of the controlled activity pathway which is
10 based on historical metering, that would not include your alternative that would stand on its own as one pathway, is that your understanding?

A. Yes, yes.

Q. Okay. Thank you.

QUESTIONS ARISING – NIL

15 THE COURT: JUDGE BORTHWICK

Q. I should really say, you want a final opportunity; normally you would have a lawyer you would say who might re-examine you just to make sure that you've said everything that you wanted to say and nothing's been missed out or run over by questions by cross-examining lawyers. Is there
20 anything else that you want to say?

A. No, I don't think there is.

THE COURT ADDRESSES COUNSEL – CONFIRMS NO QUESTIONS ARISING (15:24:38)

25 MS REILLY ADDRESSES THE COURT RE FURTHER WITNESSES:

We have Mr Phillip Hunt, and Lorena McDiamid, both farmer witnesses, and your Honour I have talked with the farmer witnesses as to what matters they may cover that address some of the questions posed earlier and they will talk within all matters within their understanding around water sharing agreements
30 etc, as it relates to them, but we understand the detailed information that will

come to the Court will be from those specific users in May when the Court hears from individual farmer deemed permit holders who are part of water sharing agreements, so they will touch on some matters where it is within their knowledge today but we understand May will be where the majority of those farmer water users will present before you.

THE COURT: JUDGE BORTHWICK TO MS REILLY

Q. And so, your witnesses can talk to their own experience of either deemed permits or water sharing agreements?

A. If they have any, yes.

10 Q. If they have any. 'Cos if they don't, not to worry, because –

A. No.

Q. We'll find a farmer

A. You will, I know there will be some coming before you in May, so that answer will be provided to you then.

15 **THE COURT ADDRESSES COUNSEL - APPROPRIATE TIME (15:26:08)**

COURT ADJOURNS: 3:26 PM

COURT RESUMES: 3.46 PM

MR MAW CALLS

PHILLIP WILLIAM HUNT (AFFIRMED)

- 5 Q. Do you confirm that your full name is Phillip William Hunt?
A. Yes that's correct.
- Q. And you are appearing today representing Federated Farmers of New Zealand Otago province?
A. Correct.
- 10 Q. And also giving or sharing your experiences as an Otago farmer?
A. That's correct.
- Q. And you've prepared a statement of evidence-in-chief dated 5 February 2021?
A. Yes.
- 15 Q. Are there any corrections you wish to make to that statement?
A. No.
- Q. Do you confirm that your statement of evidence is true and correct to the best of your knowledge and belief?
A. I do.
- 20 Q. Now I understand that you have prepared a summary statement and a copy of that has been handed out to the Court and to the parties. Do you simply wish to read that summary statement or at least give a summary?
A. I will read it thank you.
- Q. Okay if you could proceed with that.
- 25 A. Thank you.

WITNESS READS SUMMARY OF EVIDENCE

- 30 A. My name is Phil Hunt and I would like to thank the Court for coming to Cromwell to allow me to share my views and experiences. As stated in my statement of evidence I have been part of and involved in the rural Otago community for a couple of decades. We have no irrigation on any of our land with the exception of six hectares being part of the Lake Hawea storage dam scheme developed when Lake Hawea was raised to provide storage for the Clutha hydroelectric schemes. Since lodging my

evidence, Lizzie and I have made the decision to exit our farming businesses. Part of the reason for this decision was the uncertainty that farmers are having to endure is when move from a production focus that was a push from Central Government since the '80s to an environmental focus that we were be asked for today. Not since the times of Rogernomics has rural New Zealand faced such an upheaval and change of focus and direction. Like the times of the early '80s we are seeing banks tighten credit because of uncertainty and future direction. When plan changes from local government can be notified without consultation and can be introduced with immediate legal effect I am not surprised that banks are a little nervous. I am also not surprised that farming families are extremely worried. From my statement you can see that Lizzie and I have had distinguished farming careers. We entered some competitions to benchmark ourselves and our farming practices against our peers. We did well in trying to keep the balance between production and the environment but that was 10 years ago. If we were to enter the same competitions now, we would not have a chance because as with everything else, the bar in agriculture performance and environmental management has increased to a level that we just cannot cope with. Why is that? As the owners of the family farm we are stock managers, agronomists, bookkeepers, payroll specialists, mechanics, vet assistants, micro economic and nutritionists to name a few. The pace of change over the last 10 years in each of these fields is amazing. And I'm not surprised that one of the properties that we have recently leased as a corporate farming model. This in my view will be an unintended consequence of increased uncertainty that PC7 is a terrific example of. Is corporatisation a bad thing? Not necessarily. They will have intimate knowledge of the rules and regulations. However corporate farmers are more profit motivated in my opinion than farms that have had an emotional attachment to the land as it is where they and their forebears have lived and worked. To my mind this will have a better environmental outcome than profit motivated corporates. To use my Rogernomics example, New Zealand as a society has done generally well economically since the '80s. However socially and environmentally we have not done so well

and successive governments since the '80s have reinforced the production at all costs message until very recently. The Central Otago District was particularly hard hit by the policy changes of the '80s and it could be argued that although Cromwell recovered earlier due to its ability to service the tourism meccas of Queenstown and Wanaka, the rest of the district has only seen social recovery in the past decade on the back of regional tourism. Plan change 7 with its short-term view and immediate effect will hit this area particularly hard. In normal times this could push businesses to land-use change but these times are not normal so that is not an option either. The unintended consequences that without water or tourism due to COVID, farm sales will occur and family businesses being taken up by corporate. Why are we here today pleading for some farms to be able to continue farming? I will land ball fairly and squarely in the ORC's court. As an organisation and in my personal capacity, we, Federated Farmers Otago consistently urged the ORC to put much greater effort into implementing their water plan and working with plan users on building awareness and understandings around timeframes and other regulatory expectations. I remember on several occasions, being told by the then-chairman of council to be careful of what we wish for. What we are debating today is certainly nothing I wish for or even thought possible. Whenever I previously raised issues with the ORC in relation to approaches and provisions within the Otago Water Plan, they consistently defended its integrity and maintained it was more than meeting national regulatory requirements and obligations. The response from ORC was continued stonewalling, delays, staff changes and resignations and a lack of commitment to implementing its plans. The staff changes and resignations in particular were a serious impediment to continuity in the process of implementation. This in my view is a result of politics and not the desire of rural Otago not wanting to do the right thing. Plan change 6A, the rural plan was settled around 2014, 6B urban was supposed to be next. However politically, it was easier to do nothing, not even start monitoring compliance, let alone introduce a water plan that may upset urban voters. And it's my belief that all water users in Otago would have met the October 2021 deadline or later if Professor Skelton's

advice had been followed. To lodge their applications apart from those that were prepared to let theirs lapse. I have no knowledge of the amount of money that would have been spent to-date in preparing these applications on consultants and legal fees but I am sure we would be

5 talking many millions, for no purpose now. Well maybe some or most of the material gain for the original applications can be used for plan change 7 but then in six years' time it will have to be done all again at considerable cost. Personally I believe that things should be done once and done right. Spending money on legal fees and consultants does little to enhance the

10 environment. In many social circles that I enter, irrigation is an emotive and bad word. To many it means solely the change of land use from sheep to dairy. I often find these conversations occur more when the speakers have a glass of Central Otago pinot in their hands. Pinot noir or gris or Riesling, chardonnay, cherries, apricots, apples, peaches etc would not occur without irrigation in Central Otago. Nor would aquila recharge or river supplementation occur in times of drought. Climate change resilience will be decreased dramatically, flooding occur more often and rural fires harder to control. All the benefits of irrigation require farmer investment which requires long-term stability and planning. Plan

15 change 7 does not provide this. In my time as president of Otago Federated Farmers we had a widespread major drought with agriculture and rural communities Minister Damien O'Connor announcing the classification of the medium scale adverse event. In conjunction with rural support we had a series of meetings throughout Otago. We did not hold

20 these in Central Otago for two reasons. Firstly, they had irrigation and although water levels were low and irrigation was severely restricted, farmers were managing their own allocations as well as supplementing streams to enable fish survival. Secondly, Central Otago farmers were used to the dry conditions occurring and it wasn't that unusual. Where

25 we did concentrate our efforts, was in areas that were traditionally dry. For example South Otago. Here the insidious effects of drought were taking a high mental toll on the district's farmers. I use this as an example of how the investment made in irrigation has long-term benefits to the health and well-being of communities, not just individual farm businesses.

Impacts on businesses flow on to families and to employees and communities and to the wider region and economy. On Friday the Otago Federated Farmers' executive met with Labour MPs, Ingrid Leary and Rachel Brooking. One focus of our discussions was, "How do we strengthen our rural communities?" Plan Change 7 in my view has the complete opposite effect to strengthening. Thank you for your time today, being in Cromwell and hearing my views."

1557

Q. Thank you if you could please remain for any questions from the Court. I have no further question or any questions for this witness.

THE COURT: JUDGE BORTHWICK

Q. So you would have heard the Court has a lot of interest in deemed permits, have you got any experience of deemed permits at your property?

15 A. Not in deemed persons, but in allocation we have.

Q. Yes, do you want to tell us about that?

A. As a shareholder, the –

Q. Oh –

A. – of the Hawea Irrigation Company, we have six years which allows to have two hours of water every fortnight. It's a wee bit different because we are coming from, it's managed by Contact and it's coming from Lake Hawea. However, in times of low lake levels, water allocations become less and so, therefore, the flow is less and so, therefore, you don't get to irrigate the whole of your area as you normally would.

25 Q. So they put you in Contact which are on a restricted take or –

A. No it's a lower flow because the water isn't there, so when there's a high lake level you get a syphon effect which gives you a greater amount of water than the lower level when Contact starts the pumps and starts pumping. So that's all we have to go on.

30 Q. All right, and what about water sharing groups?

A. So –

Q. Flow sharing groups?

- A. – we're on a roster which is set up within the company and so within that roster we get our two hours per share and then that comes at any time of the day or night so, the roster's put out and say it's our turn to pick up the water at let's say 11 o'clock at night, we then get it through to 11 o'clock the following morning. So at this point our irrigation system, being six hectares, it hasn't been economically feasible for us to put more upgraded system and so we use borderdyke irrigation still and that is a manual system, so every two hours we get out of bed and put it – drop a gate and then go back to bed.
- 5
- 10 Q. Yes, I was going to say, how does that work?
- A. And then and –
- Q. So it's just a gate that –
- A. It's just a gate that we put into to flow the set of borders, so it's simple, low cost, put in the 60s and is still although not efficient, it is still a good use of the capital that they put it in.
- 15
- Q. Okay. All right. So you're describing there how you share in water which, what presumably is going down a race supplying different properties –
- A. That's right.
- Q. – of the same initial take out of Lake Hawea, okay, and that's slightly different from a water sharing group or do you think it's the same thing in your own mind?
- 20
- A. Well I think that the concept it's probably the same –
- Q. Yes.
- A. – in that you have an allocation and you can pick it up for us to increase the efficiency of our – we would have to put say a centre pivot on or K-line etc which would mean that we'd have to build a dam to store the water so that we could have constant pumping out of the dam. I would argue it may use water more efficiently, but in the overall scheme of things I don't know whether that is more efficient than just what we're doing.
- 25
- 30 Q. And why do you say that?
- A. Just because by the time, it's like double handling, so you have to build a dam, then you have to buy a pump, then you have to feed the pump, you have to have the infrastructure for putting K-line or centre pivot in, for six hectares that just doesn't seem to be that efficient.

Q. All right. And so the relationship that you have is with Contact Energy or, which has, or is it with all of the other schemes – or other properties?

A. It's with the Hawea Irrigation Company.

Q. Yes, okay.

5 A. Which was – used to be – belonged to the Government, to the Crown –

Q. Oh.

A. – and it was sold in, let me think, must've been the early 90s to – for a dollar and I was one of the founding directors of that. I think I put the second dollar in the kitty to buy it from the Crown.

10 Q. They overcharged you then.

A. And that's what we paid for it.

Q. And so you take water off the Hawea Irrigation Company, you're a shareholder in that company and that company itself holds the water rights or does it have a contractual relationship with Contact?

15 A. A contractual relationship with Contact.

Q. And Contact's got a water right to allow it –

A. Yes.

Q. – to take water and supply –

A. Yes.

20 Q. – to the Hawea Irrigation Company?

A. That's my understanding yes.

Q. And in terms of negotiating, water for your six hectares, how did that work? I suppose you're an original shareholder so it probably worked quite easily in terms of always being there and needing water?

25 A. No because the shares were allocated when the company was formed (inaudible 16:03:03) and so for every hectare of land that you had under irrigation, you got one share and so, therefore, we're actually at the bottom of the line –

Q. Yes.

30 A. – and so that's why it's on a roster system, so when your turn is up, you get to use the water, but other than that, you can't take any and woe betide you if you do because if you take water out of turn, then it cuts somebody else off and it's pretty apparent and the community, it's more, I mean it's for some people it's their life blood, they rely on irrigation. For

our property it's not, however, if you go to get the water and it's not there because someone else has taken it out of turn, people do get reasonably annoyed and they sort it out within the community.

5 Q. And you know that other people are taking it out of turn just from a visual inspection or from some – a data logger?

A. Well you can see whether you've got a flow or not.

Q. Yes.

A. And if you don't have a flow, then you, you go and find out why.

10 Q. So when somebody's – so the upstream farm when that's taken in its own turn from you, there is literally no flow coming down and past your gate?

A. No.

Q. So it's dry?

A. Yes.

Q. Oh, okay.

15 A. So it's a man made race there. Where it reaches the stream that runs throughout is only when it's by-washed, if no-one wants the water, say if it's late in the season and it's – the water's still flowing and it's been running and no-one wants it, then it's just by-washed into the creek –

Q. Right.

20 A. – which flows into the Hawea River and then into the Clutha.

Q. And have you got any experience, particularly in the capacity as president of Otago – of the Federated Farmers branch in Otago of the exercise of deemed permits at all or not?

25 A. No, I prefer to leave that to people that were directly involved with deemed permits.

Q. Yes. I'm interested to hear whether those that hold deemed permits have any experience of others taking water at a time when they were told to cease or restrict their take, but –

30 A. I guess the only experience that I can give was in the year of the drought that I alluded to in my summary and we would be having weekly phone calls with the Regional Council and water users and I think that as the pressure went on, people were more and more conscious not to take water out of turn because they knew that the people in their community were relying on it as much as there and it's sort of self-regulating in that

it, there's only a small pot of water there, the water was being restricted as there were some farm irrigation dams that were putting water not just onto their paddocks, but also supplementing streams that were – would have otherwise gone dry.

5 Q. Yes.

A. And some of those were dams I believe that were winter storage dams, so they collected water only during the winter months and then they would help supplement, so they definitely had environmental benefits by being there.

10 Q. Mmm. And so one of the things testing the Court, I mean, is this question of deemed permits and those rights, priorities are finally expiring on the 1st of October and broader questions of, well can they continue under a – do they continue to be rolled over under section 124 until such time as your application for resource consent is considered and decided and
15 whether or not and regardless of the answer to that, if you get a replacement water permit, what then if there's no regime system, policy in place for those deemed permits, to replace those deemed permits, now it should've been a minimum flow and allocation regime under a water plan, but we haven't got that so there's a gap if you like, a potential gap
20 in policy, so what do you do or what – should we be doing anything to continue to signal these non-regulatory informal but in your experience, effective management by community to regulate water between themselves, particularly with deemed permits during times of shortage, should we say something, put some policy signals in, as the regional plan
25 currently has policy signals about getting into water sharing groups, it's been – that's been encouraged through policy but not picked up in a rule and a plan. Should we be doing the same in PC7 or is there no need because already the community's organising itself or communities, say multiple communities out there, or, but they're organising themselves this
30 way.

A. Yes, my experience is, if you give farmers ownership of their own destiny and then they will take that on board and they will run it very efficiently themselves, however, if you legislate, then they will start to look for ways round –

Q. So what does legis-

A. And I think that it's basic human nature.

Q. Yes. No, no, I understand that. What does legislation look like? What's the step too far, if we – if we should be doing something here, what would be the step too far?

5 A. I think, it's probably getting out of my realm but I think the way that it has worked has been where there's been an allocation given on a stream or a bed or a trib, and then the farmers can actually then work to make sure that the allocation isn't breached and they work together to make that happen.

10 Q. Yes and for some permit holders they've already had minimum flows and recession flows and so forth, they'll be carried forward, it's actually in – we're talking about people who are standing in a gap, there is no allocation, there is no minimum flow. There was a rights of priority that did exist –

15 A. Yes.

1610

Q. - and were exercised. We haven't got a full understanding, we've got a very incomplete understanding as to the extent that they were exercised but we're told that they were.

20 A. Yeah, I believe that farmers are fully aware that change is coming.

Q. Mmm.

A. And I believe that they know that the priority system is gone, and they accept that. I, as I've said, I believe that they were ready for the 21st of October the one that it was important for.

25 Q. Yes. Mmm.

A. And they would have had plans in place and applications lodged until let's say 12 months ago when all the rules were changed, and so that may have taken a fair bit of pressure off the farmers, the consultants and their lawyers to actually get those plans in there. But I would be reasonably sure there would be a good number of plans that are sitting out there that are very close to being lodged if required.

30 Q. You mean, when you say plans, do you mean...

A. Applications, sorry.

Q. Applications for resource consent.

A. Yes.

Q. So, so hopefully those in relation to deemed permits are in now, but there might be some stragglers out there, and then of course what people do in relation to water permits which are not deemed permits is up to them in terms of you know when they're expiring, so it's probably not the gap that I'm speaking about. All right, okay, anyway, message is: Have a light hand in terms of regulation and encourage community organisation because that can be effective, and I hear that, and then the question for the Court is is a policy gap being created by the expiry of the deemed permits absent a properly, a proper, you know, fully informed plan which has allocations and minimum flows in place. Is there a gap that we need to respond to, and then what might that look like? Okay. That would... anything else you want to add?

A. I just think, unlike most other regions in the country, Otago through Plan Change 6A has had an effects-based focus and I guess if you run that through to water takes as well that if you put that effects-based rather than regulation-based approach then you're going to be, as you say, go lightly on regulation, so long as the effect on the environment is known and adhered to.

Q. I think that's part of the problem though, is actually being able to predict effects.

A. I guess minimum flows is where I'm going with there, so you set your minimum flows and that is what, you know, farmers have to work to.

Q. Yes, I understand that.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

Q. Just a couple of questions about, you said you've got a contract for supply from Contact, the operator of the electricity –

A. The Hawea Irrigation Scheme.

Q. Yes, but are there many of these contracts in place?

A. I don't believe so, there may be one out of Roxburgh but I've got no idea

Q. So as far as you are concerned, there's probably only one?

A. No, I'm sure there was more, I thought, I'm sure the Crown was selling off a lot of irrigation companies at that time.

Q. Okay. And do you they have a term?

5 A. No, not that I'm aware of.

Q. And does the ORC have any role in the way in which –

A. I'm sure the ORC monitor them, but again it's probably been 30-odd years since I was a director so I can't recall.

Q. So you are not familiar with –

10 A. Not familiar, no.

Q. – whether they might have a role now.

A. Yeah, well I'm sure that they, it is a water take so ORC will have a role in monitoring that take through Contact.

Q. Okay.

15 **QUESTIONS ARISING – NIL**

WITNESS EXCUSED

**MR MAW (FOR FEDERATED FARMERS' REPRESENTATIVE) CALLS
ROWENA JOAN MCDIARMID (AFFIRMED)**

Q. Do you confirm that your full name is Rowena Joan McDiarmid?

A. I do.

5 Q. And you have prepared a statement of evidence in chief dated 5 February 2021?

A. Yes, that's right.

Q. And you are giving your evidence today in the context of representing Federated Farmers?

10 A. Yes, that's correct.

Q. And you are sharing your personal experience as a farmer within the region as well?

A. That's correct.

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

15 A. I did wonder if I should mention that I am a member of the Manuherikia catchment group. At the time I wrote my evidence I'd only been to two meetings, so felt that I was a bit of a fraud if I said that I was part of something but yeah I am on that group.

Q. Subject to that addition, do you confirm that your statement of evidence
20 in chief is true and correct to the best of your knowledge and belief?

A. Yes that's right.

Q. Now, have you prepared a summary of your evidence ?

A. Yes, yeah I have.

Q. And have you got some copies to hand out?

25 A. No, I don't.

Q. Or do you want to read in a summary?

A. I'll just read in summary, if that's okay.

Q. Okay, if you could provide that summary and then remain for questions.

30 A. Okay. Good Afternoon. Thank you for giving me the opportunity to speak to my evidence today. My name is Rowena Joan McDiarmid. I farm with my husband Karl, and our 2 boys on Gorge Creek Flats which has been in the McDiarmid family for nearly 70 years. Today I am here to represent myself. The opinions and perspectives I express are my own. I have been asked by Federated Farmers of New Zealand to provide evidence

and perspective based on my personal experience and understanding in relation to the Otago Regional Council Proposed Plan Change 7 (PC7), with a focus on Rural wellbeing. As I've said in my evidence, the PC7 process has pushed a lot of rural people out of their comfort zone, and I am no different. I have always wanted to be a farmer. I enjoy the outdoors; I love working with animals. I enjoy contributing for the greater good and advocating for the people of the New Zealand sheep and beef sector. I am a proud New Zealand meat and fibre producer. I feel privileged to belong to a family with a history of sheep and beef farming in Central Otago. We are people of the land. It's in our blood, it's under our skin. My husband doesn't call a house his home. His home is the land. We live and breathe it. When I'm out and about, I'm so aware that we are caretakers, not landowners and that the opportunity we have is so precious. I have picked out a couple of themes from my evidence to talk to today. When thinking about rural wellbeing, and what farmers need for a successful future, I think about security, trust, confidence and planning. I first started being involved with beef and lamb with our Central Otago farming for profit group in about 2012. Farming for Profit is an industry good group that comes up with three topics for field days to be held in the area each year. When I first started, farmers were happy to host people on farm and discuss their developments, genetics, differences and setbacks. Now it is quite a different story. We had a winterfeed day planned to be held next month, however the hosts have pulled out because they are concerned about having people on farm and opening themselves up to potential judgement. This as an example of how things have changed for the sheep and beef industry, especially here in Central Otago. This is the second year in a row that we have struggled finding a property to take the Farming For Profit group for a winter grazing event. We are struggling to find anyone that would be willing to let us use a paddock for a winter grazing day, for fear of scrutiny. It is typically known in our industry that farmers learn the most from the practical experiences of other farmers. This is impacting the ability of farmers to learn from others, an important process in disseminating information and therefore the uptake of good management practices. Typically, rural

people are introverts, we lead isolated lives, and are used to being self-sufficient. On-farm field days provide a day out off-farm, an opportunity to socialise with like-minded people, and an opportunity to learn new things. What I am trying to convey with this example, is that our people are scared, there is no trust or confidence. Our people are withdrawing and disengaging at a time when we most need each other and we need to encourage enthusiasm to be proactive and solution-focused to face the new challenges that are before us. As I mentioned in paragraph 20 of my evidence, our people are struggling to comprehend the enormity and complexity of effects the combination of Essential Fresh Water, National Policy for Indigenous Biodiversity and new Climate Change policy will have on their farming businesses.

Sitting down at the dining table with Jaimee and Chris Pemberton the other night, Jaimee referred to feeling overwhelmed when thinking about the effect policy might have, when coupled with current compliance requirements on their future.

As I mentioned in my evidence, Karl and I are in an equity partnership with Chris and Jaimee at 51 Loop Road, Becks. Gorge Creek Flats LTD brought 51 Loop Road back in 2014. We were looking for something different, and a challenge. Kane's Block (as it was known) was in need of some TLC. It had wild flood (contour) irrigation, and the 169ha was in eight paddocks. When we started ploughing, there were no seagulls following the tractor. The soil had no earthworms. It was anaerobic and needed care and input. We put in three centre pivots with VRI (variable rate irrigation) and subdivided the farm into 33 paddocks. It became a beef finishing block. 51 Loop Road was the jewel in our crown. We had a lot of pride for what we had achieved, how we had created a productive oasis. As I mentioned in my evidence, I had a health issue in late 2017. Nothing sharpens one's perspective on priorities like a health scare. Kari and I decided to downsize, that maybe we had overextended ourselves in our business with Kane's Block, so we decided to put in on the market and this was early 2018. It took us two years to find an interested party. Uncertainty around water put off a lot of people. Chris and Jaimee had been introduced to the property early on in the piece. People had warned

them off the property, given that the water (even though it was managed by Omakau Irrigation Company) was out of Dunstan Creek, reflecting to the uncertainty of minimum flows and policy change. Their bank's advice was that the property was high risk; it had great potential, but when
5 looking five years ahead, with policy changes, there was potential for the land to devalue. After looking around the area for some time, they came back to us, and the equity partnership was born.

Chris and Jaimee feel more confident about the property because we are with them as a team, we are committed to each other, and we will help
10 each other through future challenges. Our IQ-year Strategic plan for Clynelish Ltd, (our joint equity partnership) is for Chris and Jaimee to have full ownership, and for Karl and to exit. I wanted to use the Clynelish story as an example of security. As mentioned, paragraph 25, PC7 and a six-year consent for status quo leaves us in a state of limbo. There is no
15 security, trust or confidence in the area currently, banks are uneasy. The average mortgage term is 20 to 30 years. How can a farming business plan for the future when they can't look past six years with any certainty? The Regional Plan effectively feeds into our business plans. This is where we give it practical effect. For us (the farming community) to be
20 confident to spend money on future improvements like effective irrigation, fencing of water ways, native riparian planting, our businesses need certainty from that plan, more than just six years. We also need confidence that water is not going to arbitrarily be taken from us without proper assessment of the needs of the creeks and rivers and all
25 concerned need an understanding the of reliability of supply. My 12-year-old son asked me the other night, what did I think his future in farming might be? This affects all of us. There is genuine fear in the community that a six-year consent through PC7 is going to set a precedent for the future. A future where the process of renewing short term consents wilt
30 get more expensive, and we will lose more water each time. The original framework for PC7 has given the farming community very little confidence that the Regional Council values us and our contributions. It has made the farming and rural people of Otago feel like a minority group. It has also been a very divisive process. It feels like we (all parties concerned)

5 have been pitted against one and other. We have lost the cohesive strategy that I think we once had with the Regional Council. I am seeking more transparency from the Otago Regional Council and ask that they start engaging with and listening to the rural community. I ask that if PC7 goes through that it be simple and as risk free as possible. If this is not a solution, then I ask that it be declined and allow current applications to proceed as a step in the right direction. Thank you for your time and hearing my concerns.

1626

10 **CROSS-EXAMINATION: MR MAW**

Q. I'm just interested to understand the irrigation in relation to each of the two properties that you've spoken about today, and also in your evidence-in-chief and starting with the Gorge Creek Flats, so as I read your evidence there, there's 200 hectares of spray irrigation?

15 A. That's right.

Q. And in relation to the area, when was that 200 hectares of irrigation established?

A. The seasons of '02/'03 and '05/'06.

20 Q. And so in relation to the area of land under irrigation, you would be able to highlight on a map for me precisely where that irrigated land is?

A. Yes, I can.

25 Q. And in fact do you know precisely the area of irrigation in terms of the 200 hectares, one of the matters of control in plan change 7 that's being considered at present relates to the land under irrigation not extending beyond the period of time between September 2017 and March 2020 and so if I asked for you to show me on a map the area of land that you had under irrigation in relation to the Gorge Creek Flats property, you could easily do that?

30 A. I can show you, yep, which areas we have with infrastructure in. What happens for us is that we only have enough water to really irrigate 150 hectares through the peak of the season, so that's when in the dry, so what we irrigated, what area we irrigated over that particular time is

possibly up for question, but I can show you that, yeah, what we have infrastructure for, if that makes any sense.

5 Q. So if you think about the exercise of shading on a map, the maximum area of land irrigated between those two dates, and it's about a three year window, would that pick up the full extent of that 200 hectares even if you're just irrigated into the shoulder seasons on some of it?

A. Yep.

Q. And in relation to irrigable area and the Gorge Creek Flats farm, are you required or do you run oversee of modelling?

10 A. I have done an overseer model, yep.

Q. And in relation to your overseer modelling, are you required to input the irrigable area into that model as well?

A. Yes.

15 Q. And so in order or one way of demonstrating the area that you might have had under irrigation might be to go back and look at the overseer modelling that had been undertaken over that period of time?

A. Possibly, yep.

20 Q. A similar set of questions in relation to the Clynelish property, so as I understand your evidence, 100 hectares of pivot irrigation and 40 hectares of K Line?

A. That's right, yeah.

Q. And what was that irrigation established?

A. 2014, '15.

25 Q. So again, in relation to understanding the maximum irrigable area between September 2017 and March 2020, you could show on a map that area as well?

A. Yep, yep.

Q. And in relation to the overseer modelling, again, overseer modelling done in relation to that property?

30 A. I have not done overseer on that property. There is a motion though.

Q. Right, so the exercise if I asked you to show me the irrigable area, it would be one of showing on a map the extent of coverage in terms of the infrastructure?

A. Yes.

Q. And that would be a relatively straight forward exercise?

A. Yep.

Q. Thank you. No further questions.

5 1630

QUESTIONS ARISING – NIL

QUESTIONS FROM THE COURT – NIL

THE COURT: JUDGE BORTHWICK TO MS MCDIARMID

10 Q. I don't have any questions – I you know but I take your point because it's
been made many times now. If there has to be a plan change 7 then
whatever that plan change is, it has to be the simplest – focus plan change
as we can make it. It shouldn't be all things to all people which perhaps
– might be a bit ungenerous but that looked like to be the notified plan
15 and the regional council step back from that quite considerably. So I can
take that on board and I'll keep that in mind, just what to do about the
uncertainty that you know you're in and everyone is in is beyond my ability
to manage. Unfortunately it is what it is, with the culmination of national
environment statements – national policy statements, now and future
20 ones to come on biodiversity, all arriving at the same time and with them
on top of that climate change. But if we can keep the process simple, we
will. All right but thank you very much for your evidence.

A. Thank you.

WITNESS EXCUSED

25

THE COURT: JUDGE BORTHWICK TO MS REILLY

Q. So your two other witnesses come in Dunedin, yes. Okay.

A. So yes the other two will be in May along with the farmer witnesses, if that's okay.

5 Q. That's fine, okay. All right.

A. Thank you very much your Honour.

THE COURT: JUDGE BORTHWICK TO MR REID

Q. I see Mr Reid; you're sitting in the back of the courtroom wanting to –

10 A. Yes your Honour.

Q. – wanting to do what?

A. Your Honour just talk to your briefly, I mean my presentation is scheduled for tomorrow morning.

Q. Mm.

15 A. And so it's already to go but there's this issue about Dr Davoren's supplementary brief. Sorry.

Q. Yes well he didn't seek prior leave, he just filed it.

A. Yes I – yes.

20 Q. And what's more it's been filed, it's not track changed. It makes it very difficult for Court and the ORC to examine what are the differences between what it was that Dr Davoren signed up to in the conference and where he's now going because he seems to be departing from the joint witness statement.

A. Well that's not the intention at all, no.

25 Q. Okay.

A. No the intention was to very much simplify his evidence so he had been critical in his evidence-in-chief of the schedule for various reasons – technical reasons largely. And he had been advocating for an approach based on allocation on a demand basis, nine out of 10 years. And so –
30 but through the caucusing process he has modified his view, allayed his concerns and so the intention of the brief is to very much support the outcome of the primary industry caucusing and so that's the intention of it. It's really meant to be intended – very much a simplification...

Q. Okay. Seemed to me to be potentially not, I haven't – because we haven't got a track change version, just eyeballing the two documents it looked, that there were changes –

A. Well it's not...

5 Q. – to the rate of take which had been agreed at the conference and then he was putting up a new method for daily, monthly, annual volumes with the suggestion in your application that that was all agreed as between the experts. Well I don't know that and Mr Maw was – had been advised by his witnesses that's not necessarily the case. Is that right Mr Maw?

10

MR MAW:

Yes.

THE COURT: JUDGE BORTHWICK TO MR REID

15 Q. Right, okay so we have all things, a lot of things are still in play.

A. Yes.

Q. Well not all things but a lot of things are still in play with schedule.

A. Yes.

20 Q. We have unfacilitated conferencing now taking place and Mr Maw has been told to update the Court as to whether or not that has finished in agreement as between the witnesses, if not it's going to expert conferencing and that will be facilitated by now-Commissioner Ross Dunlop, he's joined the ranks again.

A. Yes.

25 Q. And so that was what the plan was.

A. Okay, yes. Well.

Q. Yes, sorry, I haven't read what he said.

A. No.

30 Q. I've just read the attachment and went, "oh that looks like big changes to me". Yes.

1635

A. Well it's the attachment is a document that largely, is largely the attachment that was appended to the outcome of the planners'

conference, but what had happened in the planners' conference is they'd only got so far, this is my understanding of it and so -

5 Q. Yes that's right and so now they, well I think the technical experts had only got so far, they hadn't actually covered the annual, no the daily, annual, monthly volumes and needed to, they had gone as far as actually picking up on the rate of take is my understanding with work to be done. So it's not a planner's it was the technical person's issue feeding into the planners' conference. Well what would I know? I mean the JWS doesn't tell me much –

10 A. No, no.

Q. – but what I am clear is that –

A. Well I, yes –

Q. I mean I don't know whether Dr Davoren's now departing from the joint witness statement and that is something that I do want to know?

15 A. And that's not the intention at all, so –

Q. Okay.

A. Yes the intention is to very much support it and just explain the reasons why the outcome of the joint or the primary sector conferencing, why that allays his concerns, so that's the intention of it and so the focus of our presentation is very much about supporting that and –

20

Q. Well I tell you what, I'm not going to look at a thing –

A. Okay.

Q. – until it is track changed and then I can look at it. Presenting it in a way where I have to do the tracking to understand what the differences are –

25

A. Yes your Honour.

Q. – between documents is unsatisfactory because then that puts the burden of work on me, so you can file it hopefully before, I was going to say before five, but that's unrealistic, file it and we'll take a look at it tomorrow?

A. File the tracked changes?

30

Q. A tracked change, but I mean even, yes as I said, I haven't sat down and read everything that he had to say because it should not have been filed without my leave, but for the little part that I had read, again a bit, probably a bit like in common with Federated Farmers looks to be pursuing an RDA

rule which is based on reliability of supply, not based actually on what the planners agreement says?

A. Well that's not the case, that is not the case with respect to his modified position. That was certainly the position that he took in his original evidence-in-chief, yes, it was a reliability of supply position and –

5

Q. So he's no longer pursuing the 90% reliability (inaudible 16:37:36)?

A. No that was my point your Honour is that he – that is the position that he'd originally taken and he now does not pursue that any longer –

Q. Oh okay, well that's great –

10

A. – and so that's why the change is of significance and why –

THE COURT: JUDGE BORTHWICK

That is actually totally different.

THE COURT: COMMISSIONER EDMONDS TO MR REID

Sorry, but it's different.

15

MR REID:

So I'm not sure what you're –

THE COURT: COMMISSIONER EDMONDS

Q. I'm comparing it with the tracked change version that –

20

A. This is the –

Q. – came with the planners JWS and I'm looking at 10A.4 –

A. Yes.

Q. – and even without going through all the detail, I'm looking at step 4 that was inserted at that conference, quite a large step 4 -

25

A. Yes, yes (inaudible 16:38:21) –

Q. – and Dr Davoren's version has a very small 4.

A. Well I think the way to perhaps deal with that, so Dr Davoren's very clear that the intended outcomes of the conference were acceptable to him and resolved his concerns, it may be that he can make those points in his supplementary brief without reference to the schedule and just leave the schedule to one side until it's gone through the fine end of the process.

30

THE COURT: JUDGE BORTHWICK

Q. Look, that might be preferable, seeing as it's all under discussion -

A. Yes, yes.

Q. – either with facilitated or unfacilitated conferencing –

5 A. Yes.

Q. – it's under discussion –

A. Yes.

Q. We've been careful as has Mr Maw not to press into those conversations because they're as between experts with no interference by lawyers?

10 A. No. Yes.

Q. Yes. So yes, so we have been pressing in there –

A. So I'd be entirely happy –

Q. – we –

A. Yes.

15 Q. – we have been looking at some of the suggested amendments by planners as to the RDA controlled activity rule, that's been of note and looking at the effectiveness of those changes and whether there are some unintended consequences –

A. Yes.

20 Q. – or scenarios which haven't been considered and that's – if –

A. So –

Q. I will get to it, I will –

A. Yes.

Q. – release a series of questions about that today.

25 A. So what might be a solution, if I can suggest it, is that I asked Dr Davoren to delete the schedule that he had – that accompanies his brief but still addressed the brief because it sets out his position really so that the brief, the supplementary brief addresses the reasons why he has modified his position –

30 1640

Q. Okay, right.

A. So I think he needs to do that your Honour.

Q. Yes, no, that seems reasonable, yes.

A. Yes.

Q. Okay, but –

A. But he can do that without reference to –

Q. To the schedule itself –

A. – to the schedule which I can –

5 Q. – which just might actually muddy things –

A. Yes, yes.

Q. – if in fact there's not full agreement as between experts on that?

A. No so I can –

Q. As may have been your understanding, yes?

10 A. I can –

Q. Get him to do that?

A. I think, yes, I can do that.

Q. And I will read that overnight and have a view as to whether or not it should be leave granted.

15 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. If you could do the same Mr Maw and just advise whether you maintain your position in relation to brief only, supplementary brief only?

THE COURT: JUDGE BORTHWICK TO MR REID

Q. All right, that sounds like a potential way forward?

20 A. Thank you Honour. All right, okay that's us, I think, anything?

MR MAW TO THE COURT: JUDGE BORTHWICK

Q. I'm just thinking ahead to tomorrow and the case Mr Reid will put for McArthur Ridge Vineyard, it wasn't immediately apparent to me whether precise changes were sought to Plan Change 7 to accommodate the concerns raised and if so, which witness I might usefully put the questions to about that and I'm really unclear about that, it would assist with my preparation if Mr Reid was able to provide some clarity on that?

25

A. So here you're talking about, as I understand the case for McArthur, is the stranded asset.

30 Q. Yes.

A. It's a stranded asset case, yes?

Q. Yes.

A. And if there's a stranded asset case and that is one of two broad scenarios that we've been asked to look at in terms of creating a pathway through PC7, what might changes look like to the planning provisions, because asides from the schedule which you're involved in, I'm not sure how the plan change provisions assist your client through its particular concern where it's already undertaken the infrastructure development, I'm assuming that's conveyance as well as the systems associated with the distribution, the spraying of the irrigation itself. It's done that, but it has not yet started to irrigate all that land which has been developed, so to an extent it's got stranded assets. Stranded assets has been raised as one area where there may be some relaxation in some way in terms of the provisions of PC7.

15 **MR REID:**

Yes.

THE COURT: JUDGE BORTHWICK TO MR REID

Q. But you don't produce planning evidence and I can't see how this plan helps your client in that –

20 A. No.

Q. – particular scenario.

A. So if I can just describe McArthur Ridge's position in this way, it's McArthur Ridge or the parties that I represent at least are members of UAG and so they fall under the UAG banner generally –

25 Q. OWRUG you mean?

A. OWRUG.

Q. Sorry, yes, I'm thinking.

A. OWRUG. But they are not seeking to reproduce any of the overall OA case –

30 Q. Yes.

A. – but rather to adopt a much more focused –

Q. Yes.

A. – contribution –

Q. Yes.

A. – and that is to suggest ways in which the schedule can be improved, so issues surrounding particularly monthly and annual volumes –

Q. Yes.

5 A. So that's on one hand and then the only other suggested change is to make – is for there to be some accommodation within the controlled activity pathway for their situation which as you say is potentially a stranded asset situation –

Q. But you don't give us the (inaudible 16:44:14) now?

10 A. No, but and so the only –

Q. – this is essential.

A. But yes, well so having gone to the expense of a planner, the only real, the only change that they're seeking is the deletion of the particular limitation in the –

15 Q. Maximum area.

A. In, yes, so the area, so –

Q. Yes and so thinking about that and we've been giving it –

A. Yes.

Q. – a lot of thought –

20 A. Yes.

Q. – if you delete the maximum area –

A. Yes.

Q. – there are other implications of deleting the maximum area, there just is in terms of increasing the irrigable area where the change in land use associated with the change in water quality, so there's a whole bundle of potentially –

25

A. Yes.

Q. – issues around that. Also, deleting the maximum irrigable area doesn't actually speak to the four corners of your particular case –

30 A. No.

Q. – which is stranded assets –

A. No.

Q. So we were rather looking to you, given your work and your experience, considerable skills and experience in the RMA field, to provide a solution

which was for stranded assets, what might that look like if it's not just delete the word "irrigation area"?

A. Well I think the reality for my client is that there's – and my instructions are that it's a – the extent to which any accommodation could be made which would suit their situation short of a non-complying activity application is very limited, so there's not – I mean there's not anything that we've realistically been able to come up with that would address the issue, apart from to preserve the possibility that via the controlled activity pathway and expansion could occur –

10 Q. Yes and I'm asking -

A. - provided they're not using any more water, yes.

Q. - you an expansion for everybody? Or is it just an expansion for the folk that are in that cate- that group called Stranded Assets?

A. Yes.

15 Q. That's so the solution is the deletion of the maximum irrigable area. Missing from that solution is the limiting of it to a particular group of people. The entry condition is –

A. Yes.

20 Q. – I have got my method of conveyance and my irrigation systems constructed.

A. But as your Honour contemplated, this would still be within the context of the controlled activity pathway?

Q. Mmm, mhm.

A. Well I can overnight have a think about it, yes.

25 1647

Q. Think about it, because there are other people who are looking also for the same solution and their solutions have been tested.

A. Yes.

Q. Yes and...

30 A. I can try and come up with something that would work.

Q. Yes think about it.

A. But, yes it's...

Q. One other solution that was tested, that was last week. Was, should there be for those people, only a non-complying activity pathway which does

allow them to increase the irrigation area. So if that select group of stranded assets allows them to use water over that increased area where the assets are already in place, as a non-complying pathway the gate that you need to satisfy is no more than minor effects. That was the tough one, “no more than minor effect” but then it was pointed out, well the first policy ending point 1, closes it down. That gateway. So not only have you have to have no more than minor effects, it wasn’t actually contemplating the expansion of the irrigation area. So think, I don’t know –

5

10 A. Well I mean I can...

Q. – you haven’t opened your case you should think about it.

A. I’ll endeavour, yes I’ll endeavour to come up with some wording as amendment in the first instance to the controlled activity pathway that might do it...

15 Q. Yes, assuming that you’re – yes, well controlled activity, yes. Okay well that’s what you, yes you need to think about it. This is difficult.

A. Yes. So your Honour just to go back to my learned friend Mr Maw’s –

Q. Does that answer your question? You’re wanting to know what?

A. – issue, I’m just wondering whether it’s got there for him or not.

20

THE COURT: JUDGE BORTHWICK TO MR MAW

A. Not really if my question was who is it I should test that wording with.

Q. Well you’d test Mr Reid. Yes, look yes it is difficult because there’s no planning but then I you know. Yes, that is the difficulty with this case – with McArthur’s case it needed a witness. I don’t know. Mr Reid might just pull that rabbit out of that hat and you go wow, I can – your regional planner goes wow, I can work with this.

25

A. Yes I mean, the Court would have gleaned that I’m testing this to try and understand the scale of the problem without opening the door up so wide as to allow everything through.

30

Q. Yes.

A. And so in a sense there is a willingness to better understand the scope of the issue. You’ll have seen from my cross-examination the testing of proposals that have been put up in that regard and perhaps as far as I

could advance matters, is that you will have an opportunity to ask Mr Reid questions of a similar nature but no, it's, yes it's a live issue...

Q. Yes. Well that's good. So you'll – it's – what you are saying is that the Regional Council has not closed out the possibility that there is a route
5 somehow for stranded assets –

A. Yes.

Q. – but you need to be clear what is a stranded asset?

A. Yes.

Q. And what is wishful thinking about some future development which you
10 know there might have been a deposit payed or a loan facility drawn up.

A. Yes.

Q. That's – you know so again, is it here or is it there? Is it McArthur, is it
somewhere over there?

A. Yes and understanding and the questions of Mr Webb, I think it was in
15 relation to the point at which the evidence, so having paid the deposit on the route stock and what had become available. The reason behind those questions is to understand or how might one craft a provision so...

Q. Yes exactly.

A. So that's...

Q. So this is the case, more generally people are putting up proposals and
20 regions testing, testing to see are these just whole – you know a wide opening to all applications for resource consent. Have a long activity status or are there some exceptions that could and should be probably made if they are, what the four corners. Not sure that you get there just
25 by deleting maximum area.

THE COURT: JUDGE BORTHWICK TO MR REID

A. I understand that. I will endeavour to (inaudible 16:51:18) speak to
30 Mr Maw about the – about what might be able to be done and then try to come up with some wording.

Q. I don't think he knows otherwise he would have. I don't – well maybe he
does. Maybe he's getting a clearer picture but yes, so we really are interested and we're hopeful that you would get us somewhere or give us some clues as to what could be looked at.

A. Yes. Thank you your Honour for that indication. Yes.

Q. Very good. So on the basis we're adjourned I will have a look at Dr Davoren's evidence overnight. I will release a minute with questions hopefully overnight with other minutes to come as well. Okay, thank you.

5

COURT ADJOURNS: 4.52 PM

COURT RESUMES ON TUESDAY 20 APRIL 2021 AT 9.30 AM**THE COURT: JUDGE BORTHWICK**

Good morning. Anything arising overnight?

5 (no audible answer 09:31:01)

Good.

THE COURT: JUDGE BORTHWICK TO MR REID

Q. So, we're in your hands Mr Reid.

10 A. Thank you your Honour. So firstly just to signal how I intend to deal with the supplementary material for Mr Davoren.

Q. Yes.

A. So, overnight I took time to reflect on the matter with Mr Davoren, in the light of your Honour's comments from yesterday and we think the best
15 course is to withdraw the statement.

Q. Mhm.

A. But to cover the critical points that he wants to make –

Q. Yes.

A. – just in some supplementary questions.

20 Q. Okay, that's fine, yes.

A. So they're, I think it's – it became apparent trying to edit the document last night, that it was going to be a problematic exercise. So I think that's the best course.

Q. Mm, I tend to agree. I've had a look at it now and Dr Davoren's dealing
25 with more matters than explained in the schedule where we've got with the schedule. He's now taking that forward –

A. Yes.

Q. – for this client and –

A. Yes, I accept that.

30 Q. – that, I mean that certainly needs to be done but possibly not at this stage. Or probably not at this stage whilst those matters are afoot.

A. No.

Q. Yes.

A. Well we can come to it your Honour –

Q. Yes.

A. – but the critical thing from his perspective is that he's moved on from the notion that any allocation should be based on a nine and 10 year demand scenario and he's comfortable with an alternative scenario based on
5 historic use but he needs to explain that.

Q. Yes. I'll tell you what I was really interested in, both from Dr Davoren's first brief (inaudible 09:32:40) on the brief that I'm now to put out of my mind, having read it was how this actually works with the client scheme where you know, the scheme's run by raceman.

10 A. Yes.

Q. Yes and I was quite interested to see how the methodology's employed there or again that could be left for expert conferencing with a – well you know as part of one of many scenarios where –

A. Yes.

15 Q. – the matter will roll out so dep– I don't mind where that is done but I was interested to see how it works with schemes such as this.

A. Yes.

Q. Okay.

Thank you your Honour. So, I have some submissions your Honour which I
20 had intended to provide to the Court in advance of today but I needed to revise them somewhat last night after the discussion that had occurred.

0934

WITNESS READS OPENING SUBMISSIONS

25 1 So, "these submissions are made on behalf of Strath Clyde Water Limited, McArthur Ridge Vineyard Limited and Mount Dunstan Estates Limited.

30 2 These parties are all associated with the vineyard development at McArthur Ridge, which is referred to in these submissions and by the three parties' witnesses as McArthur Ridge vineyard development.

35 3 Each party made separate submissions opposing PC7. The reason for their opposition was inter alia concerns that the outcome of PC, as notified: may have led to a consenting on terms that could have resulted in an uncertain and inadequate supply of water to the vineyard development. This in turn may have led to economic impacts on the current operations and planned further development. Additionally the McArthur Ridge parties, in particular MRVL was concerned that it might be precluded from completing the development

of the vineyard and the necessary additional irrigation, pursuant to long held plans.

4 The McArthur Ridge parties are members of OWRUG and raise
5 similar matters to OWRUG in their written submissions on PC7.
However, the McArthur Ridge parties are now not opposing PC7 in its
entirety. Rather, in my written submissions, and in the evidence filed
and presented today, the McArthur Ridge parties are seeking technical
10 amendments to the controlled activity rule, and in particular Schedule
IOA4.

5 These amendments primarily relate to the mechanism for
determining rates of take and new daily, monthly, and annual volumes.
15 Additionally, the McArthur Ridge parties seek amendments to the
controlled activity rule to allow increased irrigation area in very limited
circumstances. The overall purpose is to advance amendments to PC7
and Schedule IOA4 that will result in an acceptable outcome for the
McArthur Ridge parties and others in their position.

20 6 The evidence today is directed at explaining the McArthur Ridge
vineyard development, the importance of water use” within “the
McArthur Ridge development and the viticulture industry more
generally.

25 7 In his evidence-in-chief, Dr Davoren discusses the potential
consequences of the application of Schedule IOA4, as notified, for the
availability of water to the vineyard. Dr Davoren favoured a demand
based mechanism for determining monthly and annual volumes (nine
30 out of 10 years). Since evidence-in-chief for McArthur Ridge was filed,
Dr Davoren has further reflected on changes to the controlled activity
mechanism. He favours amending the Schedule as proposed in the
joint witness statement produced following the primary sector
conference. Dr Davoren intends to address this in supplementary
35 questions.

8 I note that for some other submitters who had initially opposed
PC7 in its entirety” the “issue of scope has been raised. I will address
the scope issue for the amendments McArthur Ridge is seeking later
40 in these submissions.

9 The McArthur Ridge vineyard development is located in Central Otago,
near Alexandra. It was established in 2002 to produce high quality pinot
noir grapes.

45 10 The vineyard has a planted area of 183 hectares, with a further
54 hectares, serviced for additional development. I will come back to
the relevance of this unplanted area later in these submissions.

11 The land within the vineyard development is owned by several entities, but is run” by “two vineyards, Mount Dunstan Estates and McArthur Ridge Vineyard.

5 12 The water used across the vineyard development is managed collectively via SCWL”, Strath Clyde. “SCWL is not a permit holder. It obtains water on behalf of shareholders from the Manuherikia Irrigation Cooperative Society Ltd, sourced under deemed permits held by the Society.

10 13 Producing high quality crops in Central Otago is demanding. The climate is harsh. The region is arid, with many vineyards receiving only half the” annual “rainfall of vineyards in Marlborough during the growing season. Frosts are frequent and can cause catastrophic damage to crops unless frost mitigation methods are successfully implemented. At the McArthur Ridge vineyard development, using water for frost fighting is the only effective frost mitigation method. Water use for frost fighting has a particular duration and seasonal profile which is different to water use for irrigation.

20 14 For these reasons, having a reliable and adequate supply of water for irrigation throughout the growing season, and an adequate supply of frost fighting water during frost-prone shoulder seasons, is critical to” vineyard “operation. If the outcome of PC7 was an inadequate or unreliable supply of water, or a supply of water in volumes that were inadequate to allow for frost fighting peaks, the impact on business in terms of lost production could be very significant.

25 15 The effects of any compromised supply of water would extend beyond the business itself. The vineyard is an employer; it provides viticulture services to other vineyards in the area; and it is a significant consumer of local and New Zealand sourced products and services.”

35 Turning to the Controlled Activity Rule and Schedule

35 16 “The purpose of PC7 is to provide a cost-effective, interim planning framework to facilitate an efficient assessment of resource consent applications to replace deemed permits for take and use of water, in particular via the controlled activity pathway. This is to allow for an efficient and timely transition to a new land and freshwater management regime.

40 17 ORC has confirmed that” this “is a process” based “plan change. The intention is to provide a holding measure, allowing existing activities to continue for a short period.

45 18 Dr Davoren has completed a detailed technical analysis of the outcomes of PC7 for the McArthur Ridge vineyard development under Schedule IOA4, as notified; relying on data from SCWL. It is recognised that this is a notional exercise, because SCWL is only one

water user in the Manuherikia Irrigation Scheme and is not” a “permit holder. However, as Dr Davoren says, the analysis is applicable to all irrigators with an allocation from the Scheme and to the Manuherikia Irrigation Co-operative Society Limited itself.

5

19 The application of the Schedule to the SCWL operation would severely restrict water availability for” both “irrigation and frost fighting in drier and / or more frost-prone years.

10

20 As notified, Schedule IOA4 contains key methodology flaws and unnecessary limitations on the selection of data. These are discussed by Dr Davoren in his evidence-in-chief. For clarity, I touch on” two “key matters in these submissions:

15

20.1 First there’s “the five year period of data;” and

20.2 The difficulties with averaging.

20

21 In addition to these technical and methodological issues with” the Schedule “there is one outstanding issue with the controlled activity rule itself which I” will “address. Rule IOA3.1. I(iii) restricts access to the controlled activity pathway to circumstances where the total area under irrigation has not increased over the maximum area irrigated between September 2017 and March 2020. This rule would represent a significant and unnecessary limitation on McArthur Ridge development.

25

The Five Year Period of Data

22 The Schedule IOA4 methodology relies on a five-year data set for
 5 calculating water use. 2012 to 2017 in the notified version and 2015 to
 2020 in subsequent iterations. For SCWL these years are low or very
 low irrigation demand seasons, so the selection of these years would
 not be a fair representation of” historic “water use and would result in a
 supply of water that was unreliable.

10 23 Dr Davoren recommends that the maximum available data set”
 is “used. He cautions however that there is no guarantee that” the
 “historical data available to an applicant will include high demand”
 seasons. “However, for SCWL there are high demand years available”
 on “the record.

15

Issues with Averaging

24 A further issue with Schedule IOA4, as notified is the reliance on
 20 average values to calculate the rate of take and daily, monthly and
 annual volumes. The water use profile for a vineyard is different to
 other primary industry uses.

25 In the viticulture industry the application of water for irrigation is
 25 meticulously planned and managed. Applying the right amount of
 water to the vines at the right time is” crucial. “If insufficient water is
 applied this” will “result in stunted growth and reduced grape yields.
 However, overwatering results in quality problems with the grapes.
 Mr Rasmussen, Dr Jordan and Dr Davoren all discuss the methods
 that can be adopted to ensure water is used efficiently.

30

26 During frost-prone seasons (spring and autumn), the biggest use
 of water on the McArthur Ridge vineyards is often frost fighting. Frost
 fighting requires a high volume of water to be applied at one time, and
 35 often over a long period. The timing of frost events is unpredictable,
 and a run of cold weather can result in spikes in volumetric demand at
 times of low demand from other uses.

27 Seasonal and yearly demand for water can fluctuate significantly,
 depending on the requirements for irrigation and frost fighting in the
 40 particular year. Dr Davoren's evidence is that it is not statistically
 sound to apply an average to these fluctuating demands, as Schedule
 IOA4, as notified does. Again, these issues are exacerbated” by “the
 short (five-year) and unrepresentative data set used for averaging in
 the notified version of the Schedule.

45

28 Using an average value also fails to provide for situations where
 the irrigated area has changed during the relevant period. If the
 irrigated area” was “increased in the relevant period, then” the “actual

use prior to the expansion may not” be reflected in “the current requirements for water.

5 29 For example, in the case of the McArthur Ridge vineyard development 8.2 hectares of vines were planted in 2020, bringing” a total planted area to 183 hectare. However,” irrigation “use” for “the periods prior to 2020 would have only reflected requirements for the 174.8 hectares planted at the time.

10 Changes in the Irrigable Area

30 The controlled activity pathway as notified is restricted to applications that demonstrate that the total land area under irrigation does not exceed that irrigated in the 2017 - 2018 irrigation season.

15

31 Following submissions, the ORC proposed an amendment to the period in the rule to "the maximum area irrigated in the period 1 September 2017 to 18 March 2020". This provides some relief for irrigators who increased their irrigated area between 2018 and 2020. However, it does not address the issue where irrigation infrastructure is already in place, but was not used prior to 18 March 2020 or where costs have already been incurred in relation to investment irrigation infrastructure.

20

25 32 The Council's proposal to provide an alternative discretionary activity pathway for persons in this category has been abandoned, for the reasons discussed in Mr de Pelsemaeker's Supplementary Evidence of 14 March 2021.

30 33 At paragraph 14(d) of” Mr de Pelsemaeker's Supplementary Evidence he “indicates it is unclear whether the matter he had tried to address through the restricted discretionary activity pathway is widespread or rather theoretical. He indicated that in his view, it would be up to the parties to demonstrate whether this is a real issue.

35

34 In my submission, the McArthur Ridge vineyard is a relevant example of the difficulties created by the area restriction. Decisions about the design capacity for dams, pumping equipment and piping network on the vineyard were made as the vineyard was established in 2002. The infrastructure necessary to provide water to the planned full development of 237 hectares was installed between 2002 and 2004.

40

45 35 A total of 183 hectares has been planted and irrigated to-date, but a further 54 hectares of development, utilising the existing infrastructure, was planned for the future.

36 Attached to these submissions are proposed amendments to
 Policy 10.A2 and Rule IOA3.1 which seek to address the issue the
 McArthur Ridge parties face. The amendments expand on “the
 controlled activity pathway where additional irrigation area is planned
 5 and has been committed to by way of existing infrastructure. The
 amendments set a high threshold as to what constitutes an existing
 commitment.” An existing “commitment involving the completion of all
 horizontal piped infrastructure necessary for the planned irrigation is
 required.

10

THE COURT: JUDGE BORTHWICK TO MR REID:

A. So, and that proposal, your Honour is attached as the appendix at the
 back of the submissions.

Q. Right. So, that’s thinking overnight.

15 A. It is your Honour. Yes.

Q. Okay, no that’s really helpful. Okay.

WITNESS CONTINUES READING OPENING SUBMISSIONS

20 37 So, “the amendment would exclude parties still in the planning
 stage of a proposed development. The pathway would only be
 available to those with heavy infrastructure already complete.

25 38 The amendment recognises that the horizontal piped
 infrastructure is one element of an irrigation development that is not
 generally able to be staged.

THE COURT: JUDGE BORTHWICK TO MR REID:

Q. Meaning what? I mean Dr Davoren can talk to that –

30 A. He can.

Q. – but meaning that – that normally comes at the end of a development
 roll out or something else?

A. Yes well typically, my understanding is that, it doesn’t any sense to stage
 your piping network. You really do that in one go because it has to be
 35 certain size. The whole network has to –

Q. Of sized, yes.

A. – be of a certain size. Then the parameters – the diameters of the pipes
 and so on and then it’s very hard to add on to a buried –

Q. Mm.

A. – horizontal infrastructure. So what developers tend to do is, they do all of the horizontal infrastructure at one go and then – but then the remainder of it which is the surface infrastructure so the actual planting and the if it's pivots, pivots or in this case the infrastructure for the vines.

5 Q. Mm.

A. That comes later.

Q. Mhm.

A. But a very large part of the cost goes on the underground piping network.

Q. All right.

10 A. And behind the piping network as I understand it, you have to have made decisions about size of dams, size of pumps, everything else. That everything sort of flows from the establishment of the piped network.

Q. Okay, thank you.

A. So, turning to relief sought and scope.

15

WITNESS CONTINUES READING OPENING SUBMISSIONS

20 39 Issues of scope have arisen in relation to some of the relief sought by parties to these proceedings. I have reviewed the legal submissions of counsel for the Otago Regional Council in relation to scope and agree in general with the principles summarised in paragraphs 17 to 24 of those "submissions."

25 40 In my submission, the "key principle is that a decision-maker is not limited solely to the relief specifically sought in" the "submissions. The relevant relief does not need to be expressly sought in the original submission. Rather, the question is whether the submission, as a whole, fairly and reasonably" rises "some relief, expressly or by implication, about" the "identified issue."

30

41 This principle is usefully set out in the Environment Court's decision in Campbell with reference to the High Court's decision in Countdown Properties.

35 THE COURT: JUDGE BORTHWICK TO MR REID:

A. Does your Honour wish me to read that?

Q. No I can read that to myself. If you could just give us a couple of minutes.

A. Yes.

Q. Do you want me to keep reading till the end of the beginning of paragraph 42?

A. Yes, it's all quote through until paragraph 42.

Q. Yes, okay.

5 A. Yes.

Q. All right. Yes. Continue reading from 42.

A. From 42.

WITNESS CONTINUES READING OPENING SUBMISSIONS

10

42 SCWL, Mount Dunstan Estates Ltd and McArthur Ridge Vineyards Ltd all made submissions on PC7. These submissions were in each case drafted by a lay representative of the party themselves rather than by a professional advisor. Each of the submissions
15 opposed PC7. In summary the following issues with the Plan Change were identified:

20

(a) The Plan Change does not recognise recent water use because it only looks at average data from the 2012 to 2017 irrigation seasons;

(b) Development undertaken in the" 18 / 19 and 19 / 20 "season is excluded from consideration under the Plan Change framework;

25

(c) The Plan Change does not recognise or provide for different types of water users and their efficiency of water use;

30

(d) The methodologies in PC7 will result in a reduction in actual allocations, with no environmental basis for this approach;

(e) The Plan Change takes a blanket approach to all of the expiring water permits, rather than applying a catchment specific approach,

35

(f) The work done to date by" the "water user groups to collect catchment specific data has been ignored;

40

(g) Having a certain, long term supply of water is crucial. The issuing of short term consents will stifle economic development.

43 So, "points (e) to (g) have been pursued by other parties" at "this hearing, in particular by OWRUG" and "are no longer pursued by SCWL...

THE COURT: JUDGE BORTHWICK TO MR REID:

Q. So, that's points (e), (f) and (g)? Or just (e) and (g)?

A. So (e) to (g).

Q. (e) to (g), okay. Mhm.

5

WITNESS READS OPENING SUBMISSIONS

... The focus of these parties is on issues (a) to (d). Specifically, the promotion of amendments to PC7 in particular the "Schedule, so" that "the Plan Change achieves its purpose of providing an interim holding position whereby existing activities can continue with a reliable and adequate supply of water. In particular, this involves:

10

43.1 Adopting the following changes to" the "Schedule identified in the Primary Sector expert witness" conference:

15

(i) The change to" the calculated "rate of take and daily, monthly and annual volumes relying on" the "maximum values rather than averages;" and

20

(ii) "The change to use" of "every full year (1 "July to" 30 "June the following year) of available verified water meter data, not data for the limited five-year periods as included in the notified version of PC7, or the updated version of 14 March 2021.

25

43.2 And finally, "The adjustment of the area limitation in Policy IOA2.1 and Rule IOA3.1.

30

THE COURT: JUDGE BORTHWICK TO MR REID:

A. So, those are the three crucial changes and I acknowledge that none of the three submissions specifically requested the changes to PC7 that are set out in paragraph 43, above, under a heading, "Relief Sought". Rather the issues are raised and discussed in the general narrative of the submission. However the amendments as set out above in submissions squarely address specific issues raised in the submissions. And my submission therefore, the amendments sought, are reasonably and fairly within the submissions filed in terms of *Campbell*. However should there be any dispute about that I have reviewed the other submissions on PC7, it is my submission that there is a clear jurisdiction for the amendments,

35

40

supported by the McArthur Ridge parties can be found in the submission of Manuherikia Care Irrigation Cooperative Society Ltd and the submission by Landpro. And I've set out the relevant extract from the Manuherikia Care submission at [49] which I can wait for your Honour, Court to read.

5

1001

THE COURT: JUDGE BORTHWICK

Q. And at ...

10

A. Yes, and then at 48 the issue of the limit on the irrigation area is discussed.

Q. Mhm.

15

A. And then at 49, I just note that the LandPro submission also discusses these issues in detail at, paragraphs 50 to 60 of their submission. So turning to the evidence to be called for the parties I represent, there are four witnesses: Norman Elder who will provide an overview of the McArthur Ridge Vineyard Development and the role of SCWL and their importance of local district and national economy, John Rasmussen who discusses their Mount Dunstan Estates business and why it is crucial for the business to have a reliable supply of water; Dr David Jordan providing expert evidence in relation to the wine industry in New Zealand in Central Otago and how water is used in the viticulture industry and specifically on the vineyards at McArthur Ridge Development, and Dr Tony Davoren providing expert evidence in relation to hydrogology and the implications of Schedule 10A4 to the SCWL group. So of those witnesses, Mr Elder will go first. Mr Rasmussen is largely sole charge on his vineyard and he's in the middle of harvest, so I've arranged for him to come straight after lunch.

20

25

THE COURT: JUDGE BORTHWICK TO MR MAW

30

Q. All right. Well firstly has Mr Maw got any questions for him. That might be good to know.

A. It depends on whether Mr elder can answer some questions about the infrastructure. It may well be that I don't. Very limited questions from me

and my questions are really about understanding the current setup and the infrastructure that has been put in historically. And it may well be that Mr Elder can answer those questions such that I don't need to pursue them with Mr Rasmussen.

5 Q. Mhm.

A. So, I wonder whether we might see where we get to.

Q. That's fine. That's fine. And the questions that I have are questions around the exercise of the deemed permit albeit that this company doesn't hold that permit, it's held by another, and then just pressing into the relationship with Manuherikia Irrigation Company, how does that work, you know at a broad overview helicopter level, so I can get a better understanding of the relationship between farmers and the irrigation supply company.

10

THE COURT: JUDGE BORTHWICK TO MR REID

15 Q. I'm quite interested in exposure to deemed permits expiring in October, whether there is any exposure or any consequence to your reliability of supply at McArthur Ridge. I don't know whether that witness is the best witness to ask those questions. How would be?

A. Well Mr Elder can cover some of that and Mr Davoren actually has a working knowledge of some of that as well, Dr Davoren. So the arrangement with these parties is that Mr Elder is the chairman of the whole group or the water Strath Clyde group which is the water management entity, and then Mr Rasmussen is the Mt Dunstan Estates principal so he doesn't have, and that's a much smaller entity than the McArthur Ridge Vineyard Limited group itself, so he won't be able to answer many questions about the nature of the infrastructure on McArthur Ridge, because he is a much smaller part of it. So to the extent that, just to referring to my learned friend Mr Maw's questions, query as to who would be best to answer questions, I think the answer is it's Mr Elder to the extent he can, filled in by Dr Davoren's working knowledge, but in any event I am happy to see where we get to. Mr Rasmussen is available and is scheduled to come.

20

25

30

Q. All right, very good.

A. So the first witness that I call is –

Q. Sorry, the Commissioner has got questions.

THE COURT: COMMISSIONER EDMONDS

Well I just wonder which, who we could ask about the drafting of this provision
5 because I do have some questions about it.

THE COURT: JUDGE BORTHWICK

Well we don't have a plan in front, yet.

THE COURT: COMMISSIONER EDMONDS

I know, but somebody drafted it.

10 **THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS**

Q. Yeah. No. Do you have questions around the horizontal infrastructure or do you have questions about the effectiveness of the provision?

A. Well, the first question I have is about the policy and whether it has already committed to -

15 Q. Oh yeah, what does that mean, yeah.

A. - as intended to be -yeah what does that mean and is that -

Q. - inground or –

A. - is that different from what then is proffered. And then I have a similar question in relation to the rule and so I am just rather unclear about what
20 the drafting might mean and I don't actually know who I can ask these questions of.

Q. No. That's the problem with not, I'm wondering if that's the problem with not having the planner, a planner here that we can ask questions.

THE COURT: JUDGE BORTHWICK TO MR REID

25 Q. But you've drafted this.

A. Yes I've drafted it.

THE COURT: COMMISSIONER EDMONDS

And is it broader than in fact, the effect of this drafting actually broader than the problem that he's put in front of us?

THE COURT: JUDGE BORTHWICK TO MR REID

5 Q. So the Court is interested in the topic of stranded assets. And your, and this is your response to that topic.

A. Yes.

Q. And there may be drafting issues and the question is who then do we ask questions of clarification now; it could be that these are, that in fact it is appropriate to ask you because the policy reflects the ambit of alternative relief, if I can put it that way, which McArthur must pursue in order for its assets not to be stranded, so we could as you questions, but I guess my thinking and I haven't talked to my commissioners about that, is if this thing has merits we might send, this is a subtopic off to that expert conferencing which is already, fingers crossed, happening, to happen informally but if the schedule's not landed, then formally with Commissioner Dunlop. So this might be another mini topic that we send, but inviting actually planners with a wider brief.

10

15

A. Yes.

20 Q. Than simply those involved in the schedule; planners who have also got an interest in the stranded assets questions. So that's where we could perhaps land it, if it's got merit's, yeah.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Mr Maw?

25 A. Well, my friend was kind enough to share the thinking late last night and I can say that the Council planner has had a chance to review provisions albeit briefly, and he certainly has some questions and topics that he would like to explore with the right person. The challenge here of course is there is no planner representing -

30 1010

Q. No.

- A. – this interest. It's helpful – the starting point is it's helpful, it's a live issue and it's an issue that as I signalled yesterday, the council is interested in exploring to see if there's a solution available, that doesn't open the door too wide. I would have thought that conferencing would assist noting that other planners have also attempted to solve the problem and that wording certainly has some flaws in it as far as I'm concerned. So, where to from here? It may well be that McArthur Ridge might find a representative or a plan who might be able to assist with that small task in te– it's not a small task, it's a complex task but the issue over the drafting because it strikes me that here is an actual example with the investment, the infrastructure and the ground, having that view represented in the room's important. I mean the alternative is that Mr de Pelsemaeker has sat and listened, has seen the wording here, understands the factual situation and he can hold that in mind as the drafting discussion occurs.
- 15 Q. The other example being Mr Webb's file.
 A. Mr Webb, correct.
 Q. Yes and it strikes me that he also has horizontal (inaudible 10:11:33) the ground as well.
 A. Yes.
- 20 Q. Yes. All right. Webb being a party to HortNZ?
 A. Yes.
 Q. Yes so, in case you were interested...

THE COURT: JUDGE BORTHWICK TO MR REID

- 25 A. Sorry Mr Webb, who was he, your Honour?
 Q. He's a cherry farmer? An orchardist anyway and HortNZ was pursuing an RDA for the same purpose. I think, was it an RDA? Or that somebody...
- 30 **MR MAW:**
 Yes, it was.

THE COURT: JUDGE BORTHWICK TO MR REID

- Q. Yes. For the same purpose, stranded assets but the wording perhaps had implications which had not been thought of and was teased out during cross-examination. So, this is another route into the problem. So, if and we haven't discussed it, we've only just seen it but if it's got merit, that might be a small topic that we could because we're not opening up you know the major topics for conferencing at all.
- 5
- A. No.
- Q. You know the major topics being, should applications filed to-date be processed as on their merits, either under the regional water plan, but it's now operative or some draft, of version of this plan? So we're not opening up that question, that's for the Court to decide and if that has merits then we'll release an interim decision and probably again refer back to expert conferencing but these are small but crucial topics which could, I think be referred to expert conferencing. So, with that in mind, we're going to ask you a couple of questions I think -
- 10
- 15
- A. Yes.
- Q. - so that we understand where you're coming from or the meaning of words and you'll have to consider if it is referred, putting a planner into that process.
- 20
- A. Yes.
- Q. Somebody who can represent your clients' interests around those words. So the first – so just looking at your proposed policy –
- A. Yes.
- 25
- Q. – amendment. What does the words or phrase, “already committed to” mean? Does it add anything to the balance of the sentence?
- A. No it's only intended to be people that have established all necessary horizontal pipes for the additional irrigated area. It's not – it doesn't anything to those subsequent words. So it could potentially come out.
- 30
- Q. Yes, so it might look like “or where, all necessary or horizontal pipes for the four, delete the word *the*, additional irrigation area had been installed”. So that might –
- A. Yes.
- Q. – be another way around it. So the words are...

A. It would be a useful simplification I think, on reflection.

Q. Yes. Okay. So the phrase doesn't mean anything. Doesn't add anything. And a simplification could be, but it needs to be thought about further, so commencing after the – where you commenced in your tracked words, “or where, all necessary horizontal pipes for additional irrigated area have already been installed”?

A. Yes.

Q. Yes. Okay.

A. I think that would be a good simplification of it.

10 Q. All right.

A. Yes.

Q. Okay and that seems to follow quite neatly in the Rule. Commissioner to you have any questions?

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL

15

THE COURT: COMMISSIONER BUNTING TO MR REID

Q. The use of the term “horizontal pipes” when they put the local distribution system in, maybe there'd be horizontal pipes there as well? I don't understand this, how it all works but there may be more horizontal pipes to come.

20

A. That might be a useful question to ask Dr Davoren –

Q. Yes.

A. – because – I mean what I tried to do with the Rule is just reflect what I understood to be both the situation –

25

Q. Yes,

A. – that was on the ground at McArthur Ridge but also what typically happens with these types of developments so and that understanding came from his factual experience of how these developments do work.

Q. We can ask him.

30

A. Yes.

THE COURT: COMMISSIONER EDMONDS

No, I think that didn't help –

THE COURT: JUDGE BORTHWICK

That helped.

5 **THE COURT: COMMISSIONER EDMONDS**

– helped with the policy.

THE COURT: JUDGE BORTHWICK

Good?

10

THE COURT: COMMISSIONER EDMONDS

Yes.

THE COURT: JUDGE BORTHWICK

15 And the Rule?

THE COURT: COMMISSIONER EDMONDS

The Rule doesn't look too bad but if we're going to send it off for someone to look at –

20

THE COURT: JUDGE BORTHWICK

Yes we'll send it off so as long as we...

THE COURT: COMMISSIONER EDMONDS

25 – for a group to look at they can tease our whether or not there's any issues.

THE COURT: JUDGE BORTHWICK

Do you? And so nobody has any objection in principle to sending this as a sub-topic off to the planning conference which seems to be growing little bit?

30 (no audible 10:16:57).

Okay.

THE COURT: COMMISSIONER BUNTING TO MR MAW

Q. You're looking a bit...

A. No I'm quite –

Q. You're good?

A. – quite comfortable with that.

Q. Okay. Very good.

5

MR REID CALLS

NORMAN JAMES ELDER (SWORN)

Q. Your full name is Norman James Elder?

A. Yes.

10 Q. And you're a lawyer and you've been in practice since 1982?

A. Yes.

Q. And you're a partner of AWS Legal?

A. Yes.

15 Q. And you were appointed in October 2020 as an independent chairperson for the Strath Clyde Water Limited?

A. Yes.

Q. And Mr Elder you have prepared a brief of evidence which is dated 3 February 2021?

A. Yes.

20 Q. And do you confirm to your – to the best of your knowledge and belief that the contents of that brief of evidence are true and correct?

A. Yes I do.

Q. Now as part of that statement of evidence you have completed a summary, is that correct?

25 A. Yes.

Q. And that's in paragraphs 9 to 12? So could you please read that summary of the Court's benefit?

WITNESS READS SUMMARY OF EVIDENCE

30 A. Strath Clyde Water Limited is a company established to own and manage the water supply infrastructure utilised by vineyards in the McArthur Ridge Viticulture Development. Strath Clyde Water Limited draws water from the Manuherikia irrigation scheme for use on the vineyards which contain a current planted area of approximately 183 hectares and a further 54

hectares serviced for additional development. The vineyards are important contributors to the local and wider economies. The vineyards provide employment to a number of people, purchase New Zealand sourced equipment and plants, utilise local grape processors to manufacture their own brand wine, provide viticultural services to other vineyards in the area, sell grapes to New Zealand wine producers, predominantly for the export market. If the outcome of plan change 7 process is an unreliable or insufficient water allocation for the Strath Clyde Water Limited Vineyards, the viability of current operations will be uncertain, future grape vine planting for which infrastructure was installed many years ago would not be viable. Current initiatives for which planning is underway, including a new winery and development of a 40-hectare wetland may not be able to proceed.

1020

15 **CROSS-EXAMINATION: MR MAW**

Q. Good morning. I wonder whether you can help me understand the situation in relation to the existing infrastructure that has been established on the broader – I was going to call it the McArthur Ridge property, but I appreciate there are a range of properties. I'm interested in the irrigation infrastructure that was originally installed back, I think, in the 2002 to 2004 period of time. Are you able to assist me with that topic?

A. To my limited knowledge, yes. The water is taken from the Manuherikia scheme. It's pumped up onto the McArthur Ridge vineyards.

Q. I wonder whether we might, just as we go through this exercise, you had amended a map or a plan. There was a better map somewhere.

A. That map doesn't necessarily describe where the pipelines and things are. Dr Davoren may have a better map than I have.

Q. Mr Rasmussen's evidence, that had a plan – I wonder whether the witness might be shown a copy of the plan attached to Mr Rasmussen's evidence. It might assist with just explaining – yeah, that's the one – just precisely where you're speaking about.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Which page are we on for that?

A. Page number 3.

CROSS-EXAMINATION CONTINUES: MR MAW

5 Q. Mr Rasmussen, page 3.

WITNESS REFERRED TO PLAN

A. So the water leaves the Manuherikia catchment and pumped up through pipes up into the various ponding network, and then from the ponding network, it's fed into large pumps, which then pump the water to the
10 various underground pipes that lead to the infrastructure for the disbursement of water.

Q. So with reference to figure 1 on page 3, I see there some arrows, "MICSL race", so that's the point at which the turnout from the irrigation race is located?

15 A. To the best of my knowledge, yes.

Q. And then the water flows from that point, so looking at this map, the turnoff is located at that point. Where does it then go next?

A. It goes into the – stored in the ponds.

Q. Right, so there are three ponds on the property. Is the water gravity fed to one or other of those ponds, or is it pumped, or how precisely does it
20 work?

A. To my knowledge, I think it's pumped to most of the ponds, particularly the top pond, and then it goes from there to the pumps.

Q. So when you say the top pond, are you referring to the pond labelled
25 "main pond"?

A. Main pond at the top of the Springvale Road.

Q. And in terms of the pumping infrastructure, and tell me if you're not familiar, precisely, with the detail, I might put that to somebody else.

A. I have seen the pumps and the large pipes that go into the ground, but
30 where it goes after that, I think Dr Davoren would be better to describe that.

Q. Right.

A. I understand this court will also be doing a site visit and will get a better understanding and appreciation of that network.

5 Q. So there are some pumps as far as you are aware somewhere down where these arrows “MICS L race”, right-hand side, and then a series of pipes, as you understand it, to one or other of the ponds. Do you have any understanding as to the size and capacity of the pipes, or is that straying beyond?

A. I think that is beyond my knowledge.

10 Q. Right, so the water gets from the race to the ponds presumably through some pipes and then distributed from the ponds through another series of pipes.

A. Pipes, and then to the pumps.

Q. So where are the pumps located? Are they beside the pond?

A. The pumps are further up the road, towards the main pond.

15 Q. Just from a geographical perspective, the top pond, as you described it, that's the pond with the highest elevation?

A. Yes.

Q. Yes, and does all water cycle up to the top pond before it goes through, then the distribution system?

20 A. That was my understanding.

Q. So from that main pond, then there are some further pipes, there are some pumps at that point or somewhere along the road, I think you said.

A. Not far from the pond, there are large pump sheds, and then those pumps disburse the water through the various other pipes to the various vineyards.

25 Q. So in terms of the infrastructure that's already in the ground, that series of pipes services, obviously, all of the existing established vineyards.

A. That is correct, yeah.

30 Q. And then in terms of what provision has been made to undeveloped blocks, so here's a portion of land yet to be planted or fully developed, can you describe for the Court the piped infrastructure in relation to those properties? What is in place?

A. There's a further 54 hectares to be developed and planted. My understanding is the main pipes that take the water to those property is

in the ground, and then what remains is the sprinkler system on top of the ground, so the major infrastructure is underground now.

Q. So I wonder, do you know, with reference to this map, where the undeveloped 54 hectares, I think it was, is it dotted around or is it –

5 A. Look, I'm sorry, I could not answer that. I think Dr Davoren would be better to answer that question, but I think there is an area, I'm not sure if that's the shaded area I'm looking at, where the further vineyards can be planted.

10 Q. Okay, so in terms of your knowledge, you understand there to be an irrigation – I'm going to call it an irrigation main – which runs to all of the properties, including the properties that haven't yet been developed, and the last piece of irrigation infrastructure that is developed when the vines are planted is the above-ground –

A. Is above ground.

15 Q. Yes, and when you think about the planting, does that irrigation go in before or after or at the same time as the planting occurs.

A. Well, when you plant – I'm a layperson in that respect, I consume wine, I don't grow it – the irrigation systems or the sprinkler systems will be put in at the same time as the rows of vineyards get put in.

20 1030

Q. Now you have some understanding as to the operation of Strath Clyde Water Limited?

A. Yes.

25 Q. And in your evidence you describe how the water is allocated to each property owner with respect to or with reference to the area of the property actually planted. Now I'm interested to understand the water right and the way by which the allocation occurs on the property, so as I've read the evidence, Strath Clyde Water Limited takes water from the Manuherikia Irrigation Scheme and are you – or do you have any
30 knowledge or understanding of the underlying water permits that exist with respect to the allocation of water for these properties?

A. Each land owner has a quota, a water quota share depending on the plantable area in the Manuherikia Incorporated Society, that share entitles them to a water flow, not a volume but a water flow based on litres

per second and that water is then made available to Strath Clyde Water Limited for disbursement through the various networks.

Q. So as properties come online, so as planting occurs, is more water made available from the irrigation company?

5 A. The water allocation now is sufficient for the additional – for existing water, application for frost fighting and for irrigation and for the additional 54 hectares.

Q. So when you think about that allocation and you think about the water that is currently used, is another way to describe that the full allocation's not currently being used on the property?

10 A. That depends on a season. The allocation that's been granted is suitable for the full 237 hectares, depends on the season whether that water would be utilised or not and Dr Davoren would be able to explain that perhaps better than me.

15 Q. Okay. Do you have any understanding of the underlying water permits held by the Manuherikia Irrigation Scheme that give rise to the subsequent allocation to Strath Clyde Water Limited?

A. They're old historic mining permits that are now deemed to be water permits and the water is taken from the Falls Dam at the top of the Maniototo and then is disbursed through a race that follows through the valley towards Alexandra.

20 Q. And in terms of those underlying permits, when do you understand those to expire?

A. They expire this year.

25 Q. In terms of the infrastructure that was developed on the property, were the three storage dams developed back in that 2002 to 2004 development window or do they come along –

A. I could not answer that.

Q. Right. What year does your involvement stretch back to?

30 A. 2020.

Q. Right so you're very, very new to the, very new to the party. I'll pursue, I'll ask some other witnesses about –

A. I think so.

Q. – the timing, yes in relation to the storage. Thank you, no further questions.

CROSS-EXAMINATION: MS GILES – NIL

RE-EXAMINATION: MR REID – NIL

5 QUESTIONS FROM THE COURT – COMMISSIONER EDMONDS – NIL

QUESTIONS FROM THE COURT – COMMISSIONER BUNTING - NIL

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

10 Q. I've just got some questions again around the relationship between your company and Manuherikia Irrigation Co, you say each land owner has a water quota share which provides an entitlement to water flow, not volume and you're nodding so that's yes for the record?

A. That is yes.

Q. So and that's set out presumably in a contractual agreement between Strath Clyde and Manuherikia?

15 A. The Incorporated Society for the Manuherikia Scheme has rules around that and if you're going to take water, then you have to have a share in the Manuherikia.

Q. It's a share in the company?

20 A. In the (inaudible 10:35:55) – you have to have a share in the Manuherikia Incorporated Society.

Q. Incorporated Society, yes.

A. There's a schedule I think with the various allocation of shares –

Q. Mmm.

25 A. - and then the various land owners have to have a share in Strath Clyde Water Limited in order to take or receive the water from Strath Clyde.

Q. And how does one go about acquiring a share in the Manuherikia Incorporated Society?

A. It's a very good question. I haven't been involved in that, but I would imagine that it would depend on the allocation of water if it was available

because they would know how much they can take out of the Manuherikia Stream or water race, sorry.

Q. Do you have to buy into the Incorporated Society to acquire a share?

A. I imagine there'd be a consideration payable.

5 Q. Okay. You take by flow, not by volume, do you know the reason for that?

A. I imagine that would be historic your Honour, I couldn't give an explanation as to why.

Q. And do you know whether or not that flow can be reduced at times of low flow or subject to other permits?

10 A. I'm relying on the very first glance of the rules of the Manuherikia Irrigation Society and I think it can be under review.

Q. By "under review" you mean...?

A. Under review, so each, if there is a dry season and the water, there's less water in the race then there would be a reduction in allocation.

15 Q. Are you familiar with the term "flow share agreement"?

A. No.

Q. No, okay. Do you know how many shares there are in the Manuherikia Incorporated Society?

A. Sorry I need the schedule of the Society with me to give you that answer.

20 It is publicly available.

Q. So I'm not particularly familiar with incorporated societies but the term "share" means what? I know what a shareholder is in terms of a –

A. Yes.

25 Q. – limited liability company, but not so much a society. Can you assist me there?

1040

A. I think it's, if when we talk about a share there would be so much water allocated under its permit and then you would receive a share of that allocation and so that would be the, the so-called share.

30 Q. Yes, so it's a share of the allocation.

A. Correct. Yes, it doesn't have shares as know it as under the Companies Act.

Q. No. Granted in the deemed permit, yep. Okay.

FURTHER QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

Q. I was a little bit confused in your evidence between, there are two vineyard companies, is that right?

A. Yes.

5 Q. And but then you've used a sort of an overarching thing about McArthur Ridge Vineyards, is that right?

A. Yes.

Q. And in para 10 you've got some areas there, 183 and a further 54. Is that for both of the vineyards, their combined areas, or is it just for one?

10 A. It would be for, I would imagine, the combined area, it's always as further development, but primarily I think McArthur Ridge Vineyard Limited.

Q. Because you said John Rasmussen is going to give us some details on the Mount Dunstan one, is it?

A. Yes.

15 Q. So when you come to para 25, again is that both vineyards or is it just the McArthur Ridge vineyard?

A. That would be, we talk about the McArthur Ridge Vineyard Development as in both vineyards.

Q. In both?

20 A. Combined, yes.

Q. Both, okay. I was just a wee bit confused as to whether –

A. - I couldn't give you the exact breakdown between the two vineyards.

Q. That's okay, as long as it's –

A. - primarily I think it's McArthur Ridge Vineyard.

25 Q. Because the heading says McArthur Ridge Vineyard so that's not McArthur Ridge Vineyard, is it?

A. No it's the development.

Q. It's the total development?

A. Yes.

30 Q. Okay, than you for clarifying that. Thank you, your Honour.

QUESTIONS ARISING – NIL**WITNESS EXCUSED**

MR REID CALLS**DAVID TALBOT JORDAN (AFFIRMED)**

Q. Your full name is Dr David Talbot Jordan?

A. Yes it is.

5 Q. And you hold a PhD in viticulture from Oregon State University, United States?

A. Yes.

10 Q. And you've been involved in the grape and wine industry since 1983, your original expertise was as a viticultural scientist with the Ministry of Agriculture and Horticulture from 1989 to 1994?

A. It was.

Q. And in 1994 you established Vine to Wine and have gained significant commercial expertise in relation to the grape and wine industry since that time?

15 A. Yes I have.

Q. And you have prepared a statement of evidence dated the 4th of February 2021.

A. Yes.

Q. Do you have a copy of that document in front of you?

20 A. I do.

Q. It's an electronic copy, is it?

A. It is. I'm happy to go with a hard copy if you wish.

25 Q. No that's fine. So can you for the Court's purposes confirm that the statement of evidence that you have prepared is true and correct to the best of your knowledge and belief?

A. It is.

Q. Now as part of that statement of evidence you have a summary from paragraphs 13 through to paragraph 15, so could you please read that summary for the Court's benefit?

30 A. I will. A reliable supply of water in sufficient volumes is critical for the sustained commercial performance of premium vineyards in Central Otago. McArthur Ridge vineyard is a good example of a modern vineyard that has invested in optimising the water use for its operations. During

the process of reviewing the water allocation under any plan change, the following should be considered for vineyard entities:

Irrigation water is critical to support the productive performance and wine quality. Irrigation is required every season. The most important and dependent time for water and vineyards is during the unseasonal dry periods or droughts, that occur infrequently and need to be factored into the allocation of water for vineyards. Without sufficient irrigation, vines will experience declining yields and inferior wine quality. The viability of a vineyard will quickly be jeopardised. If vineyards have chosen to use water for frost mitigation then water needs to be available for this purpose. Without this water, reliable frost mitigation is not available and the vineyard performance will suffer and potentially jeopardise the viability of the vineyard business.

Failed vineyards will have many direct impacts on the regional and national economies through the lack of expenditure within the region and revenue generated coming into the region and at a national level as export earnings.

Another direct impact is the employment created in the order of one full time equivalent per three and a half to six hectares of vineyard. Failed vineyards also have indirect impact on the regional businesses that service the vineyard and wine industry like irrigation and machinery maintenance providers, fertiliser and fungicide suppliers.

Q. Thank you, Dr Jordan, could you please remain and answer any questions that my friend may have or the Court may have.

25 **CROSS-EXAMINATION: MR MAW**

Q. Good morning, Dr Jordan.

A. Good morning.

Q. You mentioned in your evidence that failed vineyards have an indirect impact on other regional businesses including fertiliser and fungicide suppliers. I'm interested to understand the fertiliser application in a vineyard. Is that something that you would be familiar with in terms of an understanding of vineyards including in Central Otago?

A. It is.

Q. And can you describe the fertiliser application regime that occurs on a vineyard?

A. The fertiliser application of vineyard is based on, is typically – I'm going to talk in a generalised way – is typically based on three key factors. They are an observation of the soil nutrient level, so through regular soil testing, then the second is on testing the vine itself, so taking tissue samples of representative vines to determine the nutrient level in the vine and then there's also the role of observation to determine through either visual symptoms or thrift or performance of the vines and some of those can be key indicators of nutritional position or characteristics of the vine. So with that information, fertiliser, the application of fertiliser is considered so if the vine is healthy the tissue levels are normal, and the soil levels are normal, no fertiliser may be applied, so it's not an annual application as you may think of in a typical agricultural situation, so it's based on largely objective information and some subjective assessment of the vines. So taking that information, when nutrients are deemed to be insufficient then a fertiliser plan will be created. Out of that a range of options are available to the vineyard owner or vineyards manager, and that's through the application of solid fertiliser, so the application to the soil, and that can either be broadcast or directed to the planted vine row, and can have an incorporated or just applied to the soil surface. A second approach is that which we would term fertigation, so where the nutrient required for the vines is added to the irrigation water, so we've heard described today the pump sheds, so often at the point of reticulation for the water and that can be within the pump shed or remotely from that within the vineyard, nutrient is injected into the irrigation to be applied by the irrigation system, so in a vineyard that's targeted within the irrigation lateral tubing, that's along the vineyard rows, as the water is applied, nutrient contained within the water is now applied to the vines. The third approach and that is we have a regular canopy spray programme in vineyards and that's primarily for the control of fungal diseases that can impact on the performance of vines. That gives us an opportunity to also apply a nutrient by a foliar application, so in the spray wagon, nutrient can be applied alongside the fungicides to also apply nutrients in small amounts on a regular basis to the canopy

so directly applying it to the vine, particularly to the leaves and then to the vine.

1050

5 Q. And what types of fertiliser would you consider to be typical in terms of Central Otago?

10 A. It's always challenging with a generalised... the – I'll start with a premise that the nutrient requirements of vines is very low compared to other fruit and agricultural pursuit on the land, so we're dealing with a low demanding commercial crop compared to anything else that we could be considering, so with the context of low amounts, the nutrients that would typically be applied are the macronutrients which are nitrogen, phosphate and potassium. Magnesium is often applied because it's an important element for grapevines but they're not excluding elements like calcium and then we move onto the micronutrients and there are some micronutrient deficiencies in Central Otago, they can be adjusted, so we're thinking of zinc and in particular.

15 Q. When you think about the application rates, you noted that compare to other types of agricultural activities, viticulture is comparatively low. Are you able to put any further detail around that and ...

20 A. Well obviously it's an area of sensitivity about the application and nutrient and where that nutrient may end up. The – if we focus on the macronutrients, those that would most be likely added in large amounts, we're talking in the order of 25 kilograms of nitrogen per hectare per year.

25 Q. So staying with nitrogen, do you or have you any experience with the modelling, whether any of that nitrogen leach is below the root zone?

30 A. That has been, is a very, as I have mentioned, a sensitive topic throughout New Zealand and has received a lot of attention and various regulations in place to restrict agricultural activities and minimising the impact on waterways. Our industry has invested extensively in its understanding throughout the regions and particularly in Marlborough where the majority of our industry is located and because of the very low amounts that is applied by our industry, there are very low to nil detected levels of nitrate that have been, to my knowledge, from that work that was completed over a number of years, attributed to vineyard activities.

Q. I want to shift onto phosphorus, phosphates and their application, are they – is it common to have to apply phosphorus in vineyard?

5 A. It's a lot less common. As a nutrient, the base levels, I'm going to talk generally again, are at a reasonable level, some of the soils here in Central Otago are because of their various nature of having history of gold mining and other activities, the nutrient level does need to be ameliorated by the addition of phosphate, but typically that's, it's not a regular addition and it would be an adjustment prior to planting and then very infrequently thereafter.

10 Q. Do you ever see or are you aware of situations of any run-off, noting vineyards are often planted on slopes?

A. No as I said, because our application rates are so low and been targeted to the vines themselves, the evidence of run-off, I personally have no even seen no evidence of run-off.

15 Q. Thank you. The second topic I was going to explore with you relates to your paragraph 40 subparagraph (a) and there you refer to the irrigation infrastructure in place. Now please tell me whether you're not particularly familiar with precise detail of the infrastructure layout on the McArthur Ridge development and I'll pursue that perhaps with Dr Davoren, but what's your level of understanding in relation to the infrastructure?

20 A. My level of understanding is based on two aspects. I was involved in the original assessment of this property for the vineyard development back in two thousand and – 2000 I think it was, so that's hazy memories, but in the early phases of that vineyard development, I was associated with and understand aspects of, and I looked at Tony Davoren for the, some other detail, but I remember the extensive development and the scaling of pumping mainlines with lines at the time talking about the mainline pipes of suitable size to enable the complete development of the vineyard, so that's when, discussion of the, seeing the plan up before, so we'd call it the headworks. They're right at the dam and the original pumps that were installed and the pipes are all sized to the full extent that was planned for the vineyard. So the diameter of the pipes at the, where the water originates for disseminating or distributing through the vineyard, is scaled for the whole vineyard. So it starts from the dam sizing to the pump

infrastructure and all the elements within the sheds associated with the pumps, filters, the size of the pipes, the size of the valves, everything's now sized for the ultimate size of the vineyard. You can't go back and retrofit the piping for something you've now added on at a later stage and then at the extremities of that system, and that is fresher memories, because I was on site late last year, and not aware of the significance of paying attention to the new vineyard but that was planned, I was shown that the mainlines were installed within the area to be planted in the future, so that is the extremity, now the, but it's this effectually the end of the supply pipeline is in place to be tapped off for or where the lateral and further, the above ground I think we're talking about today, piping is to be installed to.

5
10
15 Q. You used a word "headworks" as part of that description, when you think of the headworks required for the development, does that include the irrigation mainlines?

A. It does. Well it's the attachment to the mainlines and the aspect of this development, because with frost protection, all the vines, every square metre of that vineyard, the water is being applied at the same time when you're frost fighting which is different to an irrigation, a solely irrigation set up where the water can be cycled on a daily basis, so it may be zoned into, let's pick a number, 24 zones, so every hour the water could be cycled around, so effectively, you're sizing, and this is beyond my true expertise, but just from observation you're sizing of pipes and pumps is scaled back proportionally. In this case, this vineyard is 100% protected by overhead water for frost protection, so the water – the whole vineyard is irrigated (inaudible 10:59:24) at the same time with large volumes of water.

20
25 Q. So, I had a question about the frost fighting and that was always, always intended when this original works were done?

30 A. It was because in that original assessment that I perform back in 2000 and a range of considerations, was looking at the extent, the frequency and the extent or how hard the frosts occur in that area and it was deemed at that point to be beyond what we could effectively protect by the

methods of air movement, the helicopter or frost fan and water for frost fighting was the only option that enabled that vineyard to be established.

1100

Q. And in terms of the original planning and development, did that include
5 the three storage ponds? Were they part of the plan at that stage?

A. Certainly, the take-off dam and then the main pond, but then I believe the second pond was a phase after that.

Q. Do you have any understanding of when that second pond came to be?

A. Sorry, I don't know the exact dates.

10 Q. Okay, perhaps Dr Davoren can assist me with that.

RE-EXAMINATION: MR REID – NIL

THE COURT: COMMISSIONER EDMONDS

Q. I just had one, and it might take me a minute to find it. Your para 24.
15 Perhaps you could just expand a little on what you mean in terms of that paragraph.

A. Just to be sure I'm on the right, para 24?

Q. Yes.

A. Yeah, so I guess it was painting the picture of vineyard development. It's
20 not like an annual crop where you sow the seed and harvesting within three or four months. A grapevine, it's a five-year horizon before you get to full production. The first two years are effectively establishing the vines. The third year, you get a small production. I normally plan for 60% of full production, 90% in the fourth growing season, and then by the fifth growing season, the vines are now in full production. It's really looking at
25 the lead time and the capital spent in the lead time to get to full production.

Q. So that's in terms of the vines that you've planted in the five years?

A. The vines you plant, yes.

Q. Yes, yes.

A. It's a five-year development to get a vine up to sufficient size to now carry
30 a full production crop.

Q. And in terms of the water demand, does that fluctuate over the growth period over those five years?

A. It does. It phases both on vine age and then within the growing season. So as a young vine being established, the root system's very shallow, and oscillating moisture levels around that root system with either enhance or retard vine growth. So the water demand is very high with young vines, little and often to support the vine in its early establishment. As the vines yet older and the root depth and volume gets larger compared to the top, the water use stabilises within the vineyard. Then the demand for the vines is driven by a number of factors. The canopy that's grown on that vine is effectively an evaporative surface, so the moisture within the vine is evaporating from the surface of the leaves. If you have, as experienced down here, warm winds of some strength, that increases the evaporation loss from grape vine canopy, and the vines lose water much faster. If it's combined now with hot temperatures, it's amplified even further. Now, the vine has a range of mechanisms, trying to protect itself from water loss, but understand those severe harsh conditions, the water loss is greater, typically, than what a grapevine can obtain from its root system. Our supplementary irrigation is trying to compete with that water loss through applying water via the drip line to get down to the root system and being taken up by the vine. We overlay another factor, so we've got a growth phase, that canopy starts as little short shoots with very few leaves, and they grow, so the water use has mirrored the volume or area of the canopy. Now we've got the developing berries on the vines that also provide a load and demand on the vine and influence the water use, and we see a peak in water use because of the developing crop, and, as fate would have it, aligning with, typically, the driest and hottest time of the year, which is around February in this part of the world, we have the highest demand from the yield that's on the vine and the water loss because of the conditions that prevail, so we see a peak water use during the summer period, January and February, and then it tapers off in the shoulders, either leading up to that period or after.

Q. And frost-fighting?

A. Frost-fighting tends to be in the opposite ends of the season, so it's in the spring and the autumn. Our main frost-fighting season is in the spring, and that extends from when the buds are just emerging through to when

frosts don't occur, and sadly, I tell many of clients down here you're lucky to get away without a frost in January, so we're thinking of frost-fighting in every month bar January, so October, much higher frequency of frost, November, less, but there's likely to be frost. We have fought frosts in
5 December, up to Christmas, typically, we get off in January, and now we're on frost watch, February, March. Less so in the autumn and late summer and autumn period, but we can be frost-fighting, and frequently, we are frost-fighting while we've still got grapes on the vines, waiting for them to harvest, so at that point, we're protecting effectively the
10 horsepower in the vine to ripen and develop flavours and enable the fruit to be ripe and in the condition that our wine-making clients will accept the fruit, so we need to protect the leaves to enable that fruit to ripen and be in a commercial state to be harvested at the end of the season.

Q. And so that involves the application of the same amount of water for all
15 of the frost-fighting activity?

A. It does. The physics – it seems counterintuitive, you apply something like water, and it freezes, and that's protecting your crop from frost, but it's the physics of changing, the phase change, you actually get the release of heat, which protects the tissue where that ice has built over, built upon.
20 The challenge for people like my colleague is that we need to predict when the strongest or the hardest frost, and what would that be, and the rate of application of water to protect against that. So you gear up your infrastructure to be applying water at that rate, and it's very difficult to run overhead frost protection at a range of rates. You have a fixed rate that
25 the water goes out and applies, so when you turn the irrigation on for frost protection, it's running at a rate that's predetermined because of everything that you've set up to run that system, so if you're running the frost-protection in the spring at five millimetres an hour, it's five millimetres an hour when you run it in the autumn as well. The only piece that you
30 get to vary of any extent is the duration, so when you turn it on and when you turn it off, and that's dictated by, as the temperature declines, you have a trigger temperature to turn it on, and then through the frost and out the other side, you're waiting for that frost, the ice that's built up to

effectively be in the conditions warm enough to melt that, and then you can stop running the frost protection at that point.

Q. And I just had one final question of clarification, you've talked about the end of supply pipeline, and then you went on from there to talk about where the lateral and the above ground to be added, and my question to you is, is there a difference between a lateral and above ground, or did you –

A. I've added extra words in there describing the same. So there's a take-off that rises up from the subsurface, submain and main horizontal infrastructure, I think we're talking about now, so you have to tap into that for the lateral tubing, which is the tube that runs the length of the grape row, where the water is now distributed within the grapevine row. I may have confused you further.

Q. So is that underground or above ground?

A. No that's above ground.

Q. It sits on the top of the ground, is that it?

A. There is a slightly quirky element to this in that we're now applying that same lateral tube subsurface in some situations, but I think for clarity and simplification in this consideration, the lateral is running along the grape row, typically attached to a wire that's 30 centimetres off the ground, so above the ground.

Q. Okay, thank you for that clarification.

THE COURT: COMMISSIONER BUNTING

Q. If I can just ask, in terms of this frost protection, at para 50(a), you talk about the water applied for frost protection offsets the water required for irrigation, right?

A. So which paragraph, sorry?

Q. 50(a), sorry, on page 14.

A. Yes.

Q. Have you got that there? And then at 54(a), you talked about Dr Davoren concluding that the proposed changes have not considered the use of water for frost mitigation. Could you just talk a little bit more about how

the water for frost mitigation assists or off-sets the water requirement for irrigation?

1110

5 A. Oh, irrigation. If we come back to my description of the seasonal water pattern and particularly when frost water could be applied and at the volumes we're talking here. So, lets paint a picture of five frost fighting events in the spring. And we say the last frost fighting event is the first week of December. So we've fought four times, we're applying a lot of water over in average it could be 60 hours of frost fighting in a growing season. So up and until that point, in the end of the 5th frost fighting event, we've applied considerable amount of water and it just doesn't evaporate. It's now landing on the vines to provide our frost protection but the large volume of that is actually hitting the soil and now building a reservoir of water in the soil which now is available for our vines for the subsequent period. So if we come back to my last frost protection in the first week of December, second and third week of December the irrigation requirements for those vines has been met by the frost protection water that's been applied in the beginning of the same month. Whereas if we hadn't frost fought we would have been applying water by the lateral tubing to meet the irrigation requirements. So there is a substitution between the volume of water we apply for frost protection and the irrigation requirements – meeting the irrigation requirements of the vines. So even though it's described as "frost protection" which was its primary reason for application, it also serves to satisfy the irrigation requirements for a period post front event.

20 Q. And does the farmer, we'll call him the farmer; have you know, technical information about the relative contributions of the frost, water and then other irrigation water?

25 A. And the point I've been making in my evidence too, just how well run and how modern the technology that's applied at the McArthur Ridge Development. So the vineyard manager, the farmer on that operation knows exactly how much water and where that water's been applied. And there are, then a range of technologies and approaches that are applied to understand when the irrigation needs to be applied. So looking at soil

moistures, so that's measured on a regular basis. So you see when that slug of water's been applied for frost protection appears on the soil moisture measure and Murray, who's the farmer is watching that till it gets to a trigger and then he will initiate his irrigation requirement once the soil level – moisture levels get to a trigger point to then initiate his irrigation.

5

Q. So it's a very much an integrated approach.

A. It is very much integrated.

QUESTIONS ARISING – NIL

10 **WITNESS EXCUSED**

COURT ADJOURNS: 11.13 AM

15

COURT RESUMES: 11.31 AM**MR REID CALLS****ANTHONY DAVOREN (SWORN)**

5 Q. Your full name is Anthony Davoren?

A. It is.

Q. And you have a Bachelor and Masters First Class Honours in science degrees from the University in Waikato, majoring in earth science, and a PhD in engineering science from Washington State University?

10 A. Yes, that's correct.

Q. You established Hydroservices in 1983 which provides specialist soil moisture monitoring and irrigation management advice to farmers in Canterbury, and in 2016 you established, you merged Hydroservices with Aqualinc, in 2019 you established SWIMS Consulting Limited to continue consulting in irrigation management and soil water related issues.

15 A. That's true.

Q. And you overall have 37 years' experience in soil water and irrigation management and you've been an expert witness in a wide variety of Environment Court cases?

20 A. Correct.

Q. Now, you have prepared a brief of evidence dated the 4th of February 2021?

A. 5th of February, I think.

25 Q. 5th of February 2021, and do you have a copy of that document in front of you?

A. Yes I do, electronically.

Q. Electronically. Could you please confirm for the Court that the contents of that brief of evidence are true and correct to the best of your knowledge and belief?

30 A. I do.

Q. Now, as part of that statement of evidence you have a summary, and that is at the end of your brief, at paragraph 55 to 62.

A. Yes.

Q. Could you please read that summary for the Court's benefit?

A. The intent and methodology of Schedule 10A.4 has been assessed using the Strath Clyde Water Limited take and use of water as an example to illustrate the shortcomings. The schedule is shown to be impractical and is statistically poorly conceived. The schedule makes no attempt to consider the reliability of the take and use with the daily, monthly and annual use, separating out the take and the use. The schedule doesn't consider other essential uses such as frost-fighting requirements. The failure to allow for this would leave enterprises like Strath Clyde and their supplier Manuherikia Irrigation in a precarious position. The base data for all of the Schedule 10A.4 metrics is the take which is the litres per second. The massaging of the flow record is arbitrary and shows little understanding of hydraulics. It does not consider in any way why high flows for example may occur. In the case of Strath Clyde these occur regularly during the frost-fighting season when the flow rate is about 33 times greater than the flow rate during normal irrigation. There needs to be expert interpretation of the flow data for any analysis, not an application of arbitrary limits over an unrepresentative time range. A greater degree of quality assurance of the data is required. The annual volume determined for the five year period 2005/16 (sic) to 2109/20 does not include any higher demand seasons. The seasons are predominantly low percentile demand reasons less than the 50 percentile. The selection of this period is poorly conceived and will provide irrigators and water supply companies like Manuherikia with a low degree of reliability. Strath Clyde is an excellent demonstration of the appropriate approach to reliability and certainly of take and use. They recognise that the allocation, their 75.62 litres a second was not sufficient to met irrigation for 237 hectares of vineyard and for frost-fighting. The latter is crucial to the vineyard. Without water to fight frosts there would be no grapes to harvest in most years. The proactive approach of Strath Clyde to build storage to supplement irrigation demand and for frost-fighting is the facilitation ORC should be taking to adopt to water allocation and which has been and is adopted elsewhere.

Q. Dr Davoren, I have some additional supplementary questions to address to you. So, I think when you prepared your brief of evidence you made

the criticisms of the schedule as it was notified, that you have just outlined in your summary, and you favour in the body of your evidence an approach where demand reliability is taken into account in determining monthly and annual volumes, is that correct?

5 A. That's correct, particularly for annual volumes.

Q. Yes. And that demand reliability was based on, in your evidence, a nine-out-of-10 year demand scenario?

A. That's correct.

10 Q. So, since preparing this evidence have you reflected further on how water availability could be appropriately accommodated for from Strath Clyde and others, reasoning for, or taking historical data as the starting point?

A. Yes I have.

Q. And where do you get to with your reflections in that regard?

15 A. Firstly that all of the period, all of the years of record should be used for any analysis, not a selected five year period and the use of averaging, average data takes away the actual volumes you need to meet the 90 percentile demand.

Q. So, if you were to make those two adjustments to the schedule, what would that do to the availability of water for Strath Clyde?

20 A. If we were to, if we were to adopt what came out of the primary sector caucusing and we were to use maximum values that had been recorded over the period of, over all of, from all of the years of record, that would ease the concerns I had with the way in which the schedule was, had been developed and it will – it would capture the reliability that growers
25 need to have to be able to run a viable operation and in the case of someone like Strath Clyde and other people who use water for frost fighting but also capture those volumes that are required, which are much, much greater than you need for irrigation.

1140

30 **WITNESS REFERRED TO APPENDICES 1 & 2 OF BRIEF OF EVIDENCE**

Q. So, can I just turn to the body of your brief of evidence again, you have attached to your brief of evidence some appendices, in particular a map, appendix 1 and a further map showing the vineyard planted area, appendix 2 and you've listened to the questions that my learned friend in

the Court have asked about the extent of established infrastructure on the vineyard. Are you able to, using those maps identify what infrastructure is in place?

- 5 A. Yes, if I just start with appendix 2 rather than appendix 1, I'd just like to clarify that that, just sort of what happens to the water when it arrives at McArthur Ridge. So in appendix 2 I have map that shows where the take off pond is, where the bottom pond is and where the top pond is. In the body of my evidence it tells you how big these are. And off the top of my head I remember what the take off pond is, it's about 25,000 cubic metres.
- 10 So water is then pumped from take off pond to the bottom pond and it's pumped from the take off pond to the top pond. The bottom pond is used exclusively for frost fighting. The top pond provides all the water for irrigation. So the irrigation infrastructure is established around the top pond and it supplies water above and below to the vineyard blocks. And
- 15 the bottom pond has some – well both ponds actually, have large diesel pumps which are separate to the irrigation pumps because when we're fighting a frost here, we're pumping 3,000 litres a second which might not mean very much to people but 3,000 litres a second is an awful amount of water to put through pipes. So the infrastructure's very different for
- 20 fighting frost and in fact at the moment the irrigation needs somewhere around about 170 – 175 litres a second to be able to fully irrigate the planted area. So that infrastructure is there. So, if you refer back then to appendix 1, the areas that – and Mr Rasmussen this afternoon may be able to identify these more clearly. I should also point out that we've –
- 25 I've worked on this vineyard since about 19– since about 2005, I think. We've monitored – we had monitored soil moisture on this vineyard over – in a number of locations so have wandered across this vineyard quite a lot. The areas that aren't developed are up around where blocks 1, 4, 2, 3 and I think 9 are. But all of the block sizes are already determined. So
- 30 when the design was carried out for McArthur Ridge Development, all the block sizes were sized – were predetermined and sized and all the pipe work that has been installed has been installed so that they can cater for the water demand that's required, the flow that's required for all these blocks. So – and there is, it's not shown on any of these maps but for the

extra 54 hectares that is to be planted, there is also the requirement for another pond in the upper part of the vineyard, that's to the left-hand side of the vineyard. The eastern side of the vineyard – the western side of the vineyard, because there is insufficient water stored to be able to fight frost in the area that's unplanted at this stage. I don't have a plan of all the pipework, I'm sorry. Someone in McArthur Ridge estate somewhere will have a plan of what the pipe sizes and that are there, but they will be substantial, they will be large pipes. We're talking probably 200 to 250 diamond of pipes, and they'll be probably somewhat larger for frost-fighting.

1145

- Q. So just so that we're clear, the additional 50-odd hectares that are still planned to be planted are in areas one, two, three, four and nine, as you understand them?
- 15 A. Yeah, somewhat up in that sort of region, yeah.
- Q. Yeah, and do you understand that those areas are serviced by existing horizontal infrastructure?
- A. Yeah, the existing horizontal infrastructure. When you set out to design, you know, a vineyard of this size, or any vineyard or any operation this size, the last thing you want to do is go back and try and connect back into a main line that is already existing in the ground and then extend it to where you want it to go. The plan was to develop the whole 237 hectares. You put in your major pipework to be able to service those areas at the start, and then you can go back and tee off from there to do all your aboveground work.

CROSS-EXAMINATION: MR MAW

- Q. Good morning, Dr Davoren. Just staying with the infrastructure, perhaps if I can take you to your appendix 2, the take-off pond is indicated on that diagram. Is the take-off pond gravity fed from the irrigation race?
- 30 A. Yes, it is, and it's fed just through a gate, and there's a photograph in my evidence of the gate that feeds directly into the pond.
- Q. Is there any metering between the irrigation race and that pond?

A. No, there is not. So it is effectively, though, a rectangular weir, so it's a rectangular box, and it is check-gauged by the race man, so he does check-gaugings on it to ensure that the opening on the gate is only allowing three heads of water into the pond.

5 Q. As far as you're aware, is there any requirement in relation to the contractual arrangements with the Manuherikia irrigation company to meter the takes from take points.

A. No, not as far as I'm aware.

10 Q. So water is gravity fed down to the take-off pond, and then is it gravity fed to the bottom pond, or is the bottom pond uphill?

A. No, it's pumped to the bottom pond and pumped to the top pond. That's my understanding, because in the body of my evidence, I've got the pumps that are at each of those locations.

15 Q. Now, you mentioned, as you were discussing the horizontal infrastructure, the difference in flow requirements as between frost-fighting and irrigation, and I recall the irrigation demand something in the order of 175 litres per second versus 3,000 litres per second for frost-fighting, is the frost-fighting system running through different pipes, is that a separate standalone system, or is it the same set of irrigation mains, if that makes sense?

20 A. No, my understanding is it's a separate set, because, as Dr Jordan talked about, you're not sending water to three or four blocks at a time, you're sending water to the entire vineyard at the same time, so we're pumping water here at about five and a half millimetres an hour, yes, five and half millimetres an hour so that you can fight down to about minus five, minus
25 six degrees, and that requires a very large pipe to be able to pump 3,000 litres a second around the vineyard, so there are, from memory, I think there's about five or six diesel pumps that do the frost-fighting, and they're feeding into the separate main lines.

30 Q. So is it your understanding that the frost-fighting main line that was put in back in 2002 to 2004?

1150

A. Yes when I first went to the vineyard both of these ponds and the frost-fighting infrastructure was there because the vines were already

established when I got there to start measuring soil moisture, so I can only talk from about that 2005 period on when we started at the vineyard and that infrastructure was there.

- 5 Q. And in relation to that infrastructure as I look at your appendix 1, is it your understanding that the frost-fighting irri- I won't call it irrigation main - the frost-fighting main will be accessible from each of those lots which are shown on your appendix 1.

WITNESS REFERRED TO APPENDIX 1

A. Yes.

- 10 Q. So separate to the irriga- the frost-fighting system there's then a separate standalone system for the irrigation?

A. Yes that's my understanding.

Q. And are there then separate irrigation mains which have already been installed –

- 15 A. Yes.

Q. – for the entirety of the property?

A. Yes, and the take-offs for each of those blocks are, exist.

Q. So can you just describe to me what the take-off looks like. Is there an up, aboveground point?

- 20 A. Yeah there will be a T in the mainline which then brings a riser to the surface and that will be capped at the moment so that's it's there ready to go when they develop those blocks.

- Q. So then in terms of that last phase of the development it's been described as the aboveground infrastructure, the laterals, which are installed, that essentially would be a valve block with the laterals running off it from somewhere above ground?
- 25

- A. Yes I'm not 100% sure that the control, that the wiring is in for the control valves. There will be a solenoid there that will turn those on and off, it would be unusual that the mainline has been put in and there's no control wiring going to those areas. There may be a separate submain that will be put in. The final design of each of those blocks in terms of where the aboveground laterals get connected is probably not quite decided, it's just know, we just know that that's the flow that's needed for those blocks. So
- 30

there will be, there will be some minor underground stuff to go in, but the big stuff is there ready to go.

Q. You mentioned that a further storage pond would be required for frost-fighting purposes for the undeveloped sections. Is that pond, is that shown on the map or is there a clear understanding as to where that needs to go?

A. Yeah there is, there's a clear understanding of where it's going. It's not shown on the map but if you go to appendix 1, my understanding is that it's somewhere up around just to the west of Block 12.

10 **WITNESS REFERS TO APPENDIX 1**

A. And Mr Rasmussen I think will be able to give you that precise location.

Q. When you think about the infrastructure that might be required for that pond to be established, will further horizontal pipes be required?

A. I can't answer that question. I don't know.

15 Q. Insofar as you have a storage pond for frost-fighting water, would you consider that horizontal pipes connected to that pond would be necessary for the additional area?

A. Something will, there will have to be some pipes of some form either there or to be installed to be able to supply the flow at the rate that you need to be able to fight the frost.

Q. And I asked you a question about whether there was any metering in place between the take-off and the take-off pond, and you indicated there wasn't a meter in place, but I do understand there to be meters in place on the various pumps around the property. Is that correct?

25 A. Yes. The diesel pumps for frost-fighting are not water-metered but all the irrigation water and the water that is transferred if water is transferred from the bottom pond to the top pond is water-metered.

Q. How are the ponds constructed in terms of, do they have a liner on them?

A. Can't answer that question.

30 Q. When you are calculating the volumes of water required for frost-fighting, in the absence of metering on the pumps how do you undertake that exercise?

A. Oh well, the pumps will be, there will be a volume of water that's available for frost-fighting, there will still be some water coming from the race to

there and so each of the pumps, there's a constant discharge pump and it will be delivering X litres a second to X number of blocks, and you will just add, they will just add another at the top end they will just add another bunch of diesel pumps, and they go to diesel pumps because they can't risk any electrical failure during frost-fighting.

5

Q. When you are looking at the historic records for frost-fighting, how do you go about calculating the maximum values? Is that information you are having to reconcile based on pump capacities?

A. Well, your starting point is that, is figuring out what degree of frost you are going to fight, and as Dr Jordan discussed, the length of time you might have to fight that frost, and in, you know, rule of thumb is about one millimetre an hour per degree of frost that you want to fight, and if you want to fight five and a half degrees then you need to be able to supply five and a half millimetres per hour across the entire block and you can work, and you work backwards from that, and then you work out what your pump requirements will be to actually deliver that water to the various blocks.

10

15

Q. So in a sense you can calculate working backwards the volume that you might have taken if you know the area, the rate of application and the number of hours of application?

20

A. That's right.

Q. Now I understand from my learned friend's supplementary questions this morning that you are relatively content or content with the version of Schedule 10A.4 that has progressed through conferencing to date?

25

A. Yeah, probably I would relatively, not entirely but relatively, but the fact that we've reached agreement that the maximums are what will be used captures the, as I said, captures the reliability and captures that additional water that's required for frost-fighting in this case.

30

Q. Now one of the other changes recommended by the technical experts related to the water years that could be used for the calculation, and the recommendation was that all available water years be used. You may have seen that the council planner has expressed some concerns with using future water years in relation to water permits that perhaps don't expire with the deemed permits but that may run through to 2025. So if

the water permits that run through to that period of time are able to be exercised to their maximum rates in this future period of time that will have a bearing on what the historical use from those permits would be calculated to be?

5 A. That's correct.

Q. When you think about risks associated with the shift to maxima as opposed to averaging, do you accept that a shift to maxima means that the ability to influence historic records is easier than relying on averaging?

A. Sorry, just rephrase that question? Say that again?

10 Q. Yeah, "easier" wasn't a great word. When you think about the shift to maxima it's essentially a one-off take that you might point to in a data record as providing a maximum rate of take?

A. That's correct.

1200

15 Q. Whereas if you are using averages of maxima across years, the one off spikes might be reduced somewhat by the averaging mechanism?

A. That's true, but by using the averages, then you will take out the high demand requirements of some particular months and some particular years.

20 Q. And so if you think about the future period of time, there might be an opportunity for abstractors to influence those maximum rates through a one off take event if future years data can be used?

A. I think there's an assumption there that they would use the wa- would set out to deliberately use the water inefficiently and I think that's - I don't agree that that's what people are out there trying to do.

25 Q. Do you accept that with a shift to maxima, there is a risk for date period includes future dates?

A. There's a risk but I think you could also put in place some mitigation for those risks.

30 Q. Isn't one of the mitigations that you might put in place simply capping the data period at June 2020 and looking backwards from that point in time?

A. No I don't agree with that. I think if there's reliable water meter data, and the water can be shown to have been used efficiently, then that data should be used.

Q. And the schedule doesn't have any requirement at the moment to demonstrate that water has been used efficiently does it?

A. No it doesn't.

5 Q. In terms of the, let's go back a step, are you familiar with the drafting that the planners have done following on from the joint witness conferencing?

A. Yes.

10 Q. You'll see that suggestions have been made in relation to the matter of discretion in relation to the restricted discretionary activity in terms of using other relevant methods and data. Is it your understanding that the restricted discretionary activity pathway is still only to be used in circumstances where those other methods and data reflect historical use?

15 A. If I can phrase that a little differently, I see the controlled activity pathway as a means of turning what is a troublesome set of deemed permits and mining privileges into RMA consents. If you do not have a data record that allows you to do that, then you have to take another pathway and if it happens to be that restricted discretionary or some other pathway, then that's the path you will have to follow.

Q. And in relation –

20 A. Because you will have missed the opportunity because the data isn't good enough or doesn't exist to be able to go down the controlled activity pathway.

Q. It is your understanding that that exercise is still to be carried out through the lens of reflecting historical use?

25 A. My understanding from the caucusing that I attended, that that was, that the historical use was not part of the restricted discretionary activity.

Q. And is that reflected in the joint witness statement that was produced by the primary sector?

30 A. Yes if you did not have a verified water metre record or water flow record, then you would have to take another pathway. So you didn't – you weren't able to enter the controlled activity pathway.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. It might be helpful that Dr Davoren refers to the part in the technical schedule that says that?

A. Yes.

THE COURT: JUDGE BORTHWICK

Q. Do you have the technical schedule with you? The technical JWS?

A. Yes. From the primary sector?

5 Q. Yes, yes.

A. Yes. Just bear with me and I'll drag it up. Sorry, you'll just have to bear with me while I cruise through here.

Q. Sure.

A. I think it's in the intent of paragraph 17.

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

Q. Well as I read paragraph 17, it reflects an understanding that water meter data should be used to demonstrate the historical take and use of water?

A. Yes. And 16 says that the starting point for the data required for Schedule 10A is flow rate data that is consistent with the current infrastructure the system at the point of take.

15

Q. And so when you think about the restricted discretionary activity pathway where a complete data record may not be available, it's your understanding that the methods used to calculate rates of take and volumes is to be reflective of historical use?

20 A. At the primary witness conferencing, we discussed that in the absence of a record that you could use, that you could – that a way forward might be that you could look at the irrigation infrastructure that was there and that would provide you with a pretty good estimate of at least what the flow would be required to run that infrastructure and that could be a starting point but that was not part that had to be outside of the controlled activity pathway.

25

Q. From my reading of the joint witness statement, it doesn't really get into that issue in any great detail?

A. No there was general agreement at the start of it that we were looking for a way in which people could enter and get through the controlled activity pathway, if you couldn't get into that pathway, then you had to renew or you had to turn your deemed permit into a consent via another pathway.

30

It was made pretty clear to us at the conferencing, we were there, to sort out issues around the controlled activity pathway.

5 Q. I wonder whether I might pick your brain a little now based on your knowledge and experience of irrigation systems for uses other than viticulture, so today we've heard some useful evidence in relation to the horizontal infrastructure requirements for the McArthur Ridge Development, I'd be interested to understand based on your experience whether you see or have witnessed other irrigation developments which are done in a similar staged manner where, might be described as the necessary horizontal pipes are all laid through a property fairly early on but the above ground infrastructure hasn't been completed?

1210

15 A. Yes I have seen a number of, particularly centre pivot type operations, particularly now and in more recent times. Centre pivot schemes that are going to be put in where the horizontal infrastructure in this case includes, not just the mainline pipe that goes in but the cable – the electric cable that goes in. Because if you're one in, you put both in. so they will be taken to the points that which the next pivots will be designed and they will be and the pad– the concrete pads will have been poured at those points so that you can actually bring those two things to the surface on a concrete pad. Very common for that to happen in multi-pivot operations where you know, you get – especially if you're coming out of raw ground so to speak, you'll get one or two going and then progressively develop as time goes on.

20 Q. So with that develop scenario in mind you would see the pumps and the irrigation main lines sized for the full extent of the development?

25 A. Yes certainly the mainlines and at least one of the pumps will be there designed, ready to supply the water for all of the development ultimately. Because these days you'll have variable – you'll have VSD, variable speed control and the pumps, you'd – so you can send the right amount of water to each of the pivots. So that when you want to run at full noise you'll just adjust your VSD to send all that water to all of them – irrigation systems that you want to run.

30

Q. And in your experience what have you observed as being the period of time over which that type of development might take place?

A. Of the order of two to five years.

5 Q. When you think about the level of investment required and I have in mind this scenario where centre pivots are being used. What's the proportion of cost, above ground versus below ground?

A. About 50 / 50.

10 Q. And have you been involved in any particular irrigation design and development programmes within the Otago region where that scenario, you know to exist?

A. No.

15 Q. So that scenario was dealing with, what I'd conceptually understand as being "fixed infrastructure", you may describe it using a different word but conceptually I understand a pivot, there's at least a fixed point and there are some other irrigation systems which are perhaps less efficient where they aren't perhaps considered as fixed. So travelling guns, (inaudible 12:14:17) those sorts of systems. What type of horizontal infrastructure might you see associated with those types of systems?

20 A. I think for the most part if you want to irrigate a block of land and just take for argument's sake, you want to irrigate 200 hectares and it's going to be irrigated by those types of systems then you would lay the horizontal infrastructure for those irrigators, right at the beginning. And you may have the hydrants at the surface, ready to be able to connect to. You know, as I said before the last thing you want to do is to part-build the system and then have to come back and dig it up and re-connect pipes and carry on to the next extent. Unless you buy another block of land next door, then it's a different story. But if you're starting out to irrigate 25 200 hectares, you'll have a design that's going to provide water for that 200 hectares and you'll set up that base infrastructure in get that done. It will be unusual to have a tri- I think it would be unusual in my experience 30 to find a travelling irrigator system that is part-build. If they're going to irrigate 200 hectares with a travelling irrigation system, it will be installed, complete.

Q. So those types of system, in your experience aren't ones which are progressively developed given the ease of shifting your travelling irrigator around?

5 A. Yes. Yes my experience is that those travelling irrigation systems are built in their entirety right from the beginning.

Q. So when we're thinking about this question of "stranded capital" it's not really that situation that's presenting the greatest challenge?

10 A. No. I think the greatest challenge with stranded infrastructure is more likely in the horticultural industry, the wider horticultural industry where you have small blocks within a large block that you know, you get partly developed and then maybe commodity prices don't quite work out and you might not want to plant the rest in grapes. You might want to put it in to cherries or something else, later on down the track. When you're broad acre irrigating, except for centre pivots, anything that's travelling, I think
15 you'll find is going to be built in its entirety right from the beginning.

Q. So when we're thinking about this question of stranded capital, the greatest risks, horticulture and do you include viticulture as a sub-set of-

A. Yes.

Q. - horticulture?

20 A. Yes I include viticulture in the horticultural sector. Mm.

Q. And we heard some evidence from Mr Webb last week in relation to the Webb Orchards and the development programme there. Is it your experience that there's a longer lead time in relation to horticulture-type activities?

25 A. Yes a lot of what you might want to plant is not immediately available. Dr Jordan will - can probably clarify that more than I can but you know, you can't just out and get 10,000 pinot noir on root stock tomorrow. They take years to produce at the nursery.

RE-EXAMINATION: MR REID - NIL

30

THE COURT: JUDGE BORTHWICK TO DR DAVOREN

WITNESS REFERRED TO PARAGRAPH 16 OF THE JOINT WITNESS STATEMENT

Q. I just had a series of random questions which I need to close out. So at paragraph 16 of the technical joint witness statement, so that's the conference that you attended. And there was an interesting paragraph that I've overlooked. I just got to get it back into the statement.

5 A. Yes?

Q. So, that says: "All witnesses agree that the starting point for data required for the schedule is the flow rate data that's consistent with the current irrigation infrastructure of the system at the point of take." And so one of the issues that have come up with the removal of the days, you know, bookending the relevant period is that you could capture a period where there was different irrigation system in place perhaps something inefficient like a border dyke but by the time you come to seek your replacement consent, in fact you've got a more efficient system in the ground. So that – given what you say at paragraph 16, is that a matter that needs to be brought forward into the, a matter of control or a matter of discretion, depending on which Rule it lands? But it needs to be brought forward so it's taken into account.

10

15

A. Something that we didn't consider actually.

Q. This is on the basis that your maximum shouldn't be a border dyke, if now you're a centre pivot.

20

1220

A. That's true. Well, I think, without going back to caucusing again, but something that we did not – it wasn't something that we accept really considered, that we'd converted from border dyke to spray irrigation, for example, and from my own personal expertise, I would be saying that this would be what you currently have. So you might only have five years of record, and that's what you've got at the moment and that's what's needed to supply your current irrigation system, you're not going to turn back the clock and go back to, for example, border dyke irrigation.

25

30 Q. Right, okay.

A. That five-year period, or whatever it would be, would very unlikely contain the years that would give you the reliability data that you might need to operate, in which case, you would then have to decide whether you want to continue down that controlled activity pathway or take a separate –

Q. Take a different route.

A. Take a different route, yeah.

Q. All right, so the data used has to be data relevant to the current irrigation system, not some other –

5 A. That's certainly the intent of this.

Q. That was what the intent was for that. That is helpful. And then, you know, Mr Maw also asked you questions about the other part of the bookend, that is, the future date. That's now been removed as well, and you said, well, in relation to a ramping risk, there are other mitigation measures that you could take, and I'm wondering if you could just round it out, what are the other mitigation measures you could take when looking at data, which could be ramp data, or checking to see if the data is, in fact, reflecting a period of ramping?

10

A. I think people would have to turn up with some evidence that they used the water wisely and efficiently so that it would require them to have some soil moisture monitoring, for example, in place to show that they didn't just turn the irrigation on and keep going, that they have, in this day and age where we have – I know they don't exist so much particularly in the Otago region, but in terms of a farm environmental plan, for example, these days, that there is evidence that you have used that water efficiently in all ways, that you have a system that applies water uniformly and efficiently and you can show that you've got some objective evidence that you did not use the water inefficiently, and I think the best evidence you can have for that is a soil moisture record that shows that you irrigated when you needed to and in the amounts that were required.

15

20

25

Q. And so in terms of bringing to account that objective information to dispel or to ground truth that there has not been ramping, that may be, if you eliminate, again, the water years 2015 to 2020, that may need to be brought to account in a controlled activity rule, and also the RDA rule, the objective evidence. That is information that you should be required to produce at the same time, to prove either historical or whatever we're doing in the RDA space.

30

A. Look, I think a number of people that historically have been measuring soil moisture –

Q. Is not many?

A. – is few. I mean, if you look at all the surveys that have been done of irrigators who have some sort of objective means of determining when they irrigate, it hasn't changed very much in 30 years, 35, 40 years. It's
5 somewhere around about 18 to about 20 percent.

Q. So it's unlikely to be that source of information?

A. Look, yes, I think the people that have set out in this process in the Otago area, and I know a number of these people, they have taken all the right options, they've water metered their use, they've measured soil moisture,
10 they've done a whole lot of things to ensure that they face the best possible chance of getting the water that they have been using historically.

Q. And yet, it's recorded in Professor Skelton's report, or reported by Professor Skelton ramping behaviour leading up to applications for resource consent.
15

A. I have no doubt that that occurs.

Q. No doubt that that occurs, and actually, other witnesses have said so as well, so how do you test whether the data that you're putting forward is indeed?

20 A. I think it would require a lot of work, but you could go back to using something like the Aqualinc method.

Q. Because then you would ground (inaudible 12:25:47) the data against well, was that reasonable?

A. Yeah, and then you could say a reasonable use in this year would have
25 been around about this number, and we know that Irricalc or the Aqualinc method tends to probably overestimate the volume that's actually required, and if somebody has exceeded that volume in that year, there has to be some explanation, and the council has that ability to ask the questions, so I think there are other means that we can look at, and that's
30 not the only model around that could be used to do that. There are models around besides Irricalc model, you can use SPASMO or a number of other models that you could test whether those volumes that were used were reasonable in that particular year, and you would, for want of a word, catch out the rampers.

- Q. Right, because just looking at the sizing of the irrigation infrastructure itself, particularly the main line, or maybe even the lateral, that's not going to tell you much, because if you're ramping, you're ramping under that irrigation system.
- 5 A. What it does, though, is once you've got an irrigation system in place, it can't pump any more water.
- Q. Than that.
- A. Than that. If you've got a centre pivot and it's using 50 litres a second, if you put 80 litres a second into it, it will cut out on high pressure, it just
- 10 won't work.
- Q. Right, okay.
- A. So there's a limit to what they can do. That means they have been using water inefficiently, so your ramping gets caught out on the volume that you use because it's being used at a time when rainfall would have
- 15 otherwise satisfied the demand.
- Q. But these methods to test or verify use are matters that could be usefully explored given that there is a risk, and you've acknowledged it as a risk, there are matters that could be explored as part of the information requirements in a conference. Would that be fair?
- 20 A. Yeah.
- Q. Yeah, okay. So in relation to this farm that we have before us, they've got two main lines, they've got a frost-fighting main line and an irrigation main line, but you're not sure whether or not an additional main line had to go to connect a storage pond which is yet to be constructed.
- 25 A. That storage pond that is to be constructed. My understanding of that pond is that it's for frost-fighting.
- Q. Yeah, I'm not bothered about the storage pond at all, I'm just bothered about –
- A. But I'm unsure that there is – I'm sure about the irrigation pipeline that's
- 30 there for irrigating those blocks, I'm unsure whether there's a main line there to supply that water for frost-fighting, because there won't be any pumps there, you see, and they'll be connected to that main line.
- Q. Okay. I'm just concerned that the addition of the pond and a frost-fighting mainland associated with that new pond, not preclude McArthur under

the current draft of the policy and rules, and so when we're looking at, you know, what is the level of in-ground commitment, is it that everything be built, including, you know, the fifth pond, or the fourth pond plus main line, or can we describe the inground development as being effectively completely by irrigation main line, frost-fighting main line, how do you describe when it's effectively completely? Because there's a small element of this development which is not in ground, not built.

5
10
15
A. Personally, I would be satisfied that the intent to develop 234 hectares was there because the irrigation mainline and that and the infrastructure associated with that mainline is in place, the design it, there's no question it was designed, all the blocks are laid out, we know how many litres a second are going to go to each of those blocks so the intent was there to actually fully develop this into a another 54 hectares of pinot noir. The fact that they now realise they need to have another pond for frost-fighting has probably come out, and I don't know exactly, but will have come out of the fact that they have had some frosts where they have effectively run out of water in the ponds. And they know that those ponds, the two ponds that they have got are not sufficient to deal with the next 54 hectares.

1230

20 Q. Mmm, so again, you know, if you take this matter of control back and now it's being administered by a baby planner at the Regional Council who's not familiar with this hearing process.

A. Yep.

25 Q. What is he or she to take of this, are they going to kick you out because you know you have got a frost-fighting mainline which is required to go to a storage pond? You know, so what should be looking at, should we be looking for the irrigation mainline, the frost-fighting mainline or what or both?

A. I, the key is the irrigation mainline.

30 Q. The irrigation mainline, all right. Okey dokey.

THE COURT: COMMISSIONER EDMONDS

Q. So why is that, why is the key the irrigation mainline when you're equally using water and a lot of it for frost-fighting on occasions?

- A. Well, because when this vineyard was designed it was designed for 237 hectares, you know how much water has got to go, you know right from the beginning what your flow rates have got to be to be able to irrigate those because that's a much greater, that's a much, yeah, much greater knowledge about the requirements of the grapes in terms of their water requirement and the flow rates that you need to actually irrigate in those individual blocks. What you don't know is, is what they didn't know, and I'm just putting words into their mouths in a way, but what you don't know the greater uncertainty is how big a frosts are you having to fight for how long, and what's their frequency during the worst of the seasons? And I suspect that they have found that the fact, I know that they nearly ran out of water in 2016 fighting an autumn frosts. The ponds were effectively just about empty, and the Falls Dam, I think in that year, someone can correct me if I'm wrong, but I think in 2016 the Falls Dam was very low, didn't have enough water, they ran the gauntlet of fighting a frost to save the crop. If there'd been another frost, helicopters would have had to come in. We've already heard from Dr Jordan that that isn't enough inversion in this area to fight a frost with helicopters, so I think they've figured out that they need another volume of water stored ready to go for fighting frost.

THE COURT: JUDGE BORTHWICK

- Q. All right. So then the test for the level of infrastructure development is around the known knowns which is the irrigation demands.
- A. Yes.
- 25 Q. Demand for water by the particular crop in these circumstances.
- A. Yep. Yeah. And these are unique. I mean, you know, if this is a pastoral situation and it's a centre pivot development you are not fighting frost.
- Q. No.

THE COURT: COMMISSIONER EDMONDS

- 30 Q. But would you for orchards?
- A. Well, it would be for an orchard and the same thing would apply for Webbs; they, they'll, they've got storage. Assuming –

Q. Okay, I was just troubled by the word “unique”, it’s a word that’s often used, so I was trying to understand what you meant -

A. - I think when you’ve –

Q. - by that.

5 A. I think that when we’re having to fight frosts to save your crop and save your livelihood then that sort of puts it in my mind in a little bit of a unique situation, we’re not just using this water for irrigation.

THE COURT: JUDGE BORTHWICK

10 Q. Right. And when you are thinking frost-fighting here in Otago, in Cromwell, are you thinking unique in the sense that there is an inversion layer, what, and that’s katabatic winds and, is that right?

A. Well your inversion occurs because you get heat rising and it sits up there at about 20 feet or 30 feet and you’ve got to somehow get it down and spread it down around the orchard or the vineyard.

15 Q. Inversions aren’t particularly uncommon around the country though, are they?

A. Sorry?

Q. Well, the inversion layer is not uncommon around the country. You live in Christchurch.

20 A. Oh, no. Yeah.

Q. Probably above it but yeah.

A. Yep. I mean look, you know, you go into places like Waipara, they, most of the frost-fighting there is using -

Q. - fans.

25 A. - frost fans to pull the inversion down. If that’s - and if they’re not using them they’re using helicopters. Go to Marlborough when there’s a frost and there’s a couple of hundred helicopters flying around the place.

Q. Mmm. Anyway.

A. Sorry, we digress.

30 Q. I understand that you’re thinking is is that it’s the irrigation mainline because that’s the known known, and that’s what’s going to demonstrate what needs to be demonstrated if assets are not to be stranded. Frost-fighting can be planned but can also be upscaled.

A. Yep.

Q. As has happened on the McArthur as well, I think. I was interested in your comment that “The controlled activity rule provides a pathway to turn the troublesome deemed permits into RMA consents” is what you said.

5 And I was wondering if you could elaborate on the troublesome deemed permits and yeah.

A. Oh well, I I’ve always considered them a bit of a troublesome thing because they started not as an irrigation consent but started out as something that was granted so that you could sluice gold, and the fact that the infrastructure just happened to be there in terms of races, and then you know once the glory of gold disappeared then along came, along came horticulture in the terms of orchards, and if you look around a lot of them, you know, the race was running right past the block of land that you wanted to...you know, and I, look I don’t know the whole history of how these things ended up being granted out as irrigation consents, but they were there.

10

Q. Mhm.

A. And, well we’ve known for, I mean, you know, without being critical we’ve known for a long time that deemed, that these deemed permits or mining privileges needed to be turned into RMA consents.

20

Q. Mhm.

A. We’ve probably known that since 1992, I guess.

Q. Mhm.

A. And they’re troublesome now because we’ve reached 2021 and they’re still converted into RMA consents.

25

Q. Yeah, okay. So you’ve got –

A. So that’s where I had my troublesome things, you know,

Q. Right. And those deemed permits come with a right of priority. Are you familiar with the rights of priority?

30

A. Yeah. I don’t want to go there.

Q. You don’t want to go there.

A. No.

Q. Okay, fine. All right. Okay, so -

A. We don’t want any pistols drawn.

- Q. So right, so I'm going to go there because I understand rights of priority where they exist for permit holders on the same tributary or the same mainstem are a flow sharing regime for the benefit of abstractors on that water body. Would that be one way of regarding them? There's no environmental outcome here, it's flow sharing as between abstractors. Is that fair?
- 5
- A. Yeah, well, you know we do that everywhere else in New Zealand so, you know, look flow sharing is a very sensible pragmatic approach to dealing with people continuing to get access to water when you are heading towards a minimum flow, and we need to remember a lot of these places don't even have minimum flows.
- 10
- Q. Yeah, that's right.
- A. But there's nothing unusual about flow sharing.
- Q. No.
- 15
- A. And it is a solution to everybody retaining access to some water. I mean, eventually you reach a point where the access to that water, the amount of water you get is pretty much useless, unless you just stick it in a pond.
- Q. Mmm.
- A. Because you can't, you end up not being able to run your irrigators or your system because the flow rate is not high enough.
- 20
- Q. Mhm.
- A. But it's a pragmatic solution and it's well proven.
- Q. And in terms of your clients, have your, do your clients hold deemed permits, do you have experience of how they exercise those rights, or not
- 25
- A. I've only ever had one client that actually –
- Q. Had one?
- A. – had a deemed permit.
- Q. Yeah, mhm.
- A. And there was no flow sharing.
- 30
- Q. No?
- A. And so his neighbour had priority over the water and he was left without.
- Q. Okay.
- A. He did have another backup source and it was in the, you know, it was in the Maniototo, so.

Q. Yep. And so what did his neighbour do, just tell him to shut down when the –

5 A. - oh yeah, when he needed, you know, when he needed the, when he needed to take his full four heads, and there was, that's all that was left in the river then, or the stream, then that's it, you know eventually, he runs out of water too because all these deemed permits, most of these things run out of water eventually.

1240

Q. Is that because they're in drying reaches or drying rivers or what?

10 A. No, I mean, generally, there's more water allocated with deemed permits than there is flow in the river, eventually.

Q. Yeah, well, if it was all to be taken up, I understand that to be the case. All right, so, as imperfect as that example of your client is, there was an allocation of water determined by the rights of priority as between your client and his neighbour, would that be fair?

15

A. Yeah.

Q. Yeah, but the controlled activity doesn't replace those rights as between neighbours, and we don't have a plan, as I understand it, with the regional water plan that actually sets minimum flows and allocation limits for all water bodies. That will be correct here in Otago?

20

A. That's my understanding, that's my understanding.

Q. So the controlled activity, or even RDA will not be doing that either if there's no minimum flows or allocation limits. So a flow-sharing agreement as between neighbours might, if they're entered into one.

25

A. Yeah.

Q. Yeah, but if they haven't, then your client remains exposed.

A. That's right.

Q. Yes, and so what do you think about? Have you given any thought as to how this plan might speak into that?

30

A. No, this was something that ended up in the High Court and it's been resolved, the place has been sold.

Q. Okay, that's okay.

A. So, no, I haven't given any thought to that.

Q. Would it be fair to say – I mean, I'm assuming that you know about the Manuherikia Incorporated Society and the shares that it sells in the society to other entities, and I'm not sure whether they're just individual farmers or whether they're all irrigation schemes. Can you comment about that? The shares, do they go to a farmer or does the farmer have to be of the scheme?

A. Well, the scheme is the Manuherikia scheme, which has a rough command area, not like we have in Canterbury where you have a command area that's very defined and you can't go outside that without getting a consent change, but there's a rough command area, and my understanding is that all the water that's available is allocated.

Q. So Strath Clyde, which is an irrigation company – what is Strath Clyde, then? So you've got Manuherikia, which is an incorporated society. The incorporated society itself has a command area which it is conveying water to, and Strath Clyde is taking off at some point of that conveyance, and then it distributes to its people.

A. And so Strath Clyde is sort of, I guess, another level of multi-ownership. A lot of the other entities that I'm familiar with on the Manuherikia scheme are individual orchards and vineyards that are taking water, so they have an allocation, they will have bought some land that had a mining privilege attached to it, and my understanding of Strath Clyde is that block of land was bought and it had three heads of water allocated for that block of land, which is what their rate of take is, three heads.

Q. So does that always have to be the case, that in the case of Strath Clyde, it needed to have had its own allocation under permits, or is it the case that Manuherikia irrigation is the permit holder?

A. I can't answer that question, you'd have to ask somebody that is more involved in the Manuherikia in the Strath Clyde, but my understanding was that when the block of land that was bought, there was available an allocation of three heads of water for that – well, it's actually more than 237 hectares, it's a much bigger area than that, but that title of land had an allocation that was three heads of water.

1245

Q. Yes but yes, okay so I'm a little unclear now but it -

A. Because it, the -

Q. - but it's probably not material as to whether or not McArthur's irrigating – using an allocation from deemed permits held by Strath Clyde or deemed permits held by the Antheridia Care Irrigation.

5 A. No they're deemed permits that are held by Manuherikia Care.

Q. Pardon? By the deemed permits held by Manuherikia?

A. Yes.

Q. Yes, okay no that's fine. All right. And those deemed permits held by Manuherikia Care, we've heard about. One is in relation to the Falls Dam.

10 Do we know, the other deemed permits are – they all from that source or are they up and down the breadth of the river?

A. I don't know that.

Q. Don't know?

A. I don't know the details of that sorry.

15 Q. All right. Falls Dam itself, is a deemed permit or a resource consent under the RMA? Yes? You know, no regular...

A. Pass. It was built by the Ministry of Works though –

Q. Yes.

A. – from my understanding. Is that correct? Can someone tell me? I think
20 it was built by the Ministry of Works.

Q. Don't know.

A. Falls Dam.

Q. Okay. All right.

A. Because that's when the Manuhera scheme was –

25 Q. Yes.

A. – developed. The Falls Dam –

Q. Mm.

A. – was built, it then had a number of deemed permits that it could use to fill the dam.

30 Q. Mhm.

A. And then used exist – mostly existing water race –

Q. Yes.

A. – water races to deliver the water.

- Q. Right. Okay, so the purpose of the question is just really to look at the exposure of – or risk associated with deemed permits finally expiring on the 1st of October and whether that risk is ameliorated by the share arrangements between water takers and Manuherikia Care Irrigation Company, effectively providing a flow regime which overtakes, if you like the deemed permits. Yes or a flow sharing agreement, I think they also call it the same thing. Again, effectively overtaking the deemed permits and the rights of priority there to provide for a flow sharing arrangement between Manuherikia Care Irrigation Co and its shareholders. So that's the area that – yes.
- 5
- A. Yes you just, I think you just miss a key point here and that is that Falls Dam –
- Q. Yes.
- A. – provides you with a bit storage –
- 15 Q. Yes.
- A. – that gets you over the issue of those –
- Q. Deemed permits.
- A. – those deemed permits.
- Q. Yes.
- 20 A. They using those deemed permits –
- Q. To fill the dam.
- A. – fill the dam.
- Q. Yes.
- A. So that they can then provide a reliable source of water to all of their, for want of a better word, shareholders or whatever we want to call these people that are all part of the Manuherikia Care Scheme.
- 25 Q. Yes.
- A. It's very different to somebody that has a deemed permit that's on a stream for which there is *no* storage.
- 30 Q. Mm.
- A. Or a number of people that are on a stream where there is or a (inaudible 12:48:21) they won't be one of the major rivers that are on a stream where the priority still exists –
- Q. Yes.

A. – and they haven't come to some mutual arrangement where they can share the water.

Q. Yes. Okay, not that's fine I think...

A. So they're very different...

5 Q. They are very different scenarios and each have a different risk profile, if you like and that's really helpful. I think it's confirming my general understanding of what is going on. And those are my questions.

THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS

10 Q. Commissioner have you got any questions?

A. Yes, I'll just (inaudible 12:48:53) I wanted to explore a little further.

THE COURT: COMMISSIONER EDMONDS TO DR DAVOREN

15 Q. When you were answering questions in relation testing reasonable use, you talked about Aqualinc and then, was it IrriCalc...

A. IrriCalc. Yes.

Q. IrriCalc.

A. I-R-R-I-C-A-L-C.

20 Q. Yes, no I've written it correctly, I just thought it was an E at the end rather than a C, my poor writing and then you said that in relation to those two approaches that it was known that the volume requirements were overstated. I wondered, one what you meant by that and two, what the basis of your observation was?

25 A. Yes so, so IrriCalc and Aqualinc are effectively the same thing. IrriCalc is used to develop the Aqualinc guidelines that the Regional Council has a report of for Otago. So, IrriCalc is a theoretical model so where it – you know, there's you running a daily water balance that and with some irrigation rules and some uniformity information and some information about the soils and it models how much water will be used on a daily basis. You can set the length of the irrigation season so that in the case of, if you were running it for the Manuherikia Scheme, for example, you would set it from the 7th of September to the something April, I can't remember what the date in April is, but that's the irrigation season, so it would not do any calculations outside of that period. So there are no –

what is not included in this, are the management decisions that somebody makes on the ground. So, and it assumes that everything runs according to the theory, so in practice when you go out in the field and see somebody that's got a – might have a 1,000,000 cubic metre volume for a year, you generally find that they very rarely use that 1,000,000 cubic metres, if that's the 90 percentile demand season volume, because there's a whole lot of other factors that are going on, something might break down, you decide not to irrigate for one reason or another, you've got managing irrigation very differently to the way in which the model works, so we know that all over New Zealand, where the Irricalc model has been used, that it tends to overstate the volume that growers need. So –

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Q. So has that been quan- I mean can you quantify that at all or is it...

15 A. It's more than anecdotal but it's – nobody's sat down and done a quantitative study of what people are actually using, although water meter records now are helping us show that and particularly if you go into the Canterbury area where water meter record- we've got really good water meter records on most of the really big takes since about 2011 or '12 and so if you look at those, those periods of record, we've got, we've had some really high, we've had some 90 percentile demand seasons in that period and we've never used as much water as Irricalc has, not even on the big dairy farms have we used that much water, so we know that it sort of slightly overstates it, that's why I'm saying if somebody has far exceeded the volume that Irricalc calculates in that particular season, then you'd have to be pretty sure that they're ramping the irrigation use. Not my pumping –

Q. So you'd be sceptical –

30 A. I'm very sceptical of somebody that does that. In fact I think even if they get to the Irricalc volume, I'd be going, "Phww, man you must have done some irrigation that you didn't need to do", I'd be looking pretty hard at it, yes.

Q. So then you talked about other models and SPASMO was one that's –

A. So SPASMO –

Q. – been mentioned and I have heard that and is associated with horticultural activities –

A. Yes so SPASMO is –

Q. – in particular, but is it confined to that or...?

5 A. No, no. No, you can use it for anything. It's been used in Hawkes Bay for – Hawkes Bay Regional Council used it to – instead of Irricalc to determine what the irrigation demands were likely to be for when the Ruaturnaford Dam and Irrigation Scheme was to be developed, so that's – it was a Hort research Steve Green model and equally as good as –
10 and there are other, there are other daily water balance models around that you can use.

Q. So I have been involved in a number of cases where there have been arguments about what models is appropriate to use.

A. Yes.

15 Q. And so, I mean what is it you're really looking for here in terms of a selection of a model if you were ...

A. Well at the end of the day you're probably arguing about pennies rather than dollars when you compare the models. They all have the same base operation, they are all running a daily water balance, it just depends on
20 the finer intricacies that they apply to those models.

Q. So if you weren't to be specifying an actual model name, what would be the objectives or the purpose of the models that you would need –

A. Oh well it would need to be a peer review model.

Q. Yes, but in terms of the inputs and outputs and what it is you're seeking
25 to have demonstrated through that model, is there a simple way of describing that?

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A. No I think, I think the fact that it's a peer-reviewed daily water balance model. I mean I think from a scientific point of view, technical point of view
30 when you're talking about a daily water balance model, then there are some inherent characteristics about those models that if they weren't wouldn't pass peer review scrutiny.

Q. So what you are saying is this is a daily water balance model?

A. Yep, a daily water balance where you deal with what happens on a daily basis rather than, you know... for example, if you compared Overseer which I'm sure you've heard of which –

Q. Well yes, more than a bit.

5 A. Which doesn't deal with, doesn't run a daily water balance model. It's, it has a crude assumption of a daily water balance model, and a daily water balance model deals in event, so it deals with rainfall that actually, have actually occurred historically on that particular day, and so you can determine then when much more precisely what the irrigation demand is likely to be.

10

Q. Okay. So thank you for that. So I just want to be clear on another point and that's this vexed question of broadening out the water years which came out of the joint witness statement process, and I really want to understand the phrase "for which water meter data is available" what that actually means. You know, what years might we be talking about for that, for a starter?

15

A. Yep, so if you go back to the water meter regulations of 2010, all takes that were greater than 20 litres a second were to be water-metered, so we're probably not going to get too many records that are older than 2010. The really vigilant irrigators I suppose, those that were really conscious of what they were using might have some water meter records that pre-date 2010, probably don't, some of that record probably isn't very good. And wouldn't pass scrutiny, probably wasn't verified, but the nice thing about the regulations in 2010 specified that the water meter records needed to be verified and there were some standards set that you had to meet and so if they're met those standards then you've got a, you've got a reliable record that you could use, and scientifically, technically, the longer your record the better the answer that you're going to get. And in this case when we're talking about irrigation demand for irrigators, we will cover a range of reliability seasons, we will, we will get that range from when you hardly have to irrigate to when you have to irrigate most of the season.

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Q. In terms of the maximum that you've taken, is it?

- 5 A. Yeah. You cannot allocate water on the basis of the maximum though. It might be, today it might be the 100th percentile season. If you did that then nobody would get water, there would be very few people that had water, but you can live with a reliability of somewhere around 90%, 90%, so the nine-out-of-10-year season has proven to be a reliable estimate of what irrigators need to be able to run their businesses.
- Q. So if you've got 2010 as the water meter and date that you're speaking to, why wouldn't you specify that 2010 in terms of the one end of the limit?
- 10 A. I don't think we should prohibit any data that precedes 2010 so long as it meets the, so long as it meets those standards. If it's got a reliable water meter in there that may not have been verified but it might be an electromagnetic meter and it may have been verified soon after 2010, and it's shown to be precise, then why wouldn't we use any period of record? I just think the longer the period of record you can use the more, the better
- 15 the result is going to be all over for everybody.
- Q. I guess I just want to take you back to the point which you reminded us about in terms of the joint witness statement.
- A. Yep.
- Q. Where you talked about basically the data needing to be consistent with
- 20 the current infrastructure, the system –
- A. Yes.
- Q. - at the point of take. So, I don't see that reflected in the notion of for which water meter data is available as the controlled activity is currently written.
- 25 A. Well if we take Strath Clyde, for example we could actually go pre-2009 because they water-metered their data prior to that and, and right at the beginning they had 174 hectares of vineyard planted, so that data would reflect their current use as well.
- Q. Yes, but that might be unusual, mightn't it?
- 30 A. It probably is unusual. But I don't think you can preclude those irrigators that have been responsible and have been monitoring data for a long period of time.
- Q. Yes but the point I'm asking about is the current infrastructure point, so I'm really saying, if that's what it's about shouldn't the data that you are

looking at only relate to the current infrastructure and not go back to previous infrastructure that might have produced quite a different data set from what you are now considering.

5 A. Yeah, no, Strath Clyde is probably a little bit different because their infrastructure hasn't changed.

Q. Yes.

A. Not since it was developed in 2004.

Q. Yes, yes I understand. But do you understand the point of my question?

A. Yes I do.

10 Q. I guess I mean I'm, I have had had experience of yes, hearing evidence on the change in historic takes that's a consequence of putting in new and efficient infrastructure and moving away from methods like border dying and wild flooding, and we had a evidence there's still a lot of that going on.

15 A. Oh yeah.

Q. Yes, so...

A. That statement in our, in the joint witness statement I guess is you know, I guess what's implicit in that is it, that what is currently there now could have also been what was there in 2010 -

20 Q. Yes.

A. - or 2012. But that if you have changed your system then it's the period of record that you have for that current infrastructure.

Q. Right.

A. Whether that be one year or five years or 15 years.

25 Q. Okay. Look, thank you for that, that's been very helpful.

THE COURT: JUDGE BORTHWICK

30 Q. Actually there was one more thing I wanted to ask you about, it just came up with the evidence with Lionel Hume from Federated Farmers yesterday and he was proposing off the top of his head an RDA pathway which would be open which would not increase the land under irrigation and would pertain to the existing land use so it wouldn't be a change say from pasture to crops, existing land use, and he said an RDA pathway which allows a volume to be allocated based on an efficiency

assessment, so I assume he means Aqualinc because I know he's familiar with Aqualinc. He said the advantage there would be that here you are not talking about irrigators who have got, you know, inground infrastructure already built but people who were in the process of improving irrigation efficiency by yeah, improving irrigation efficiency. It's not capturing those folk that are going to do, those folk who in order to get improved irrigation efficiency also need to be taking more and irrigating more to pay it off. So it's the same land area, same land use, an allocation based on irrigation efficiency, you know, reasonable use and demand. What do you think about that? Would that likely attract people who were transitioning to more efficient systems or not, by itself. Six years –

A. This was –

Q. - he didn't say six years, I'm saying six years, because I know that's in the RDA already.

A. Yeah, look, we did discuss that at the conferencing, because I mean you, you've heard from Lionel and we know where his sympathies lie, I mean he didn't, I'm not sure that he entirely agrees with the controlled pathway thing either, because you know he's very much about efficiency and uniformity and farmers getting the right amount of water, and I, you know, I sympathise with that. Hang on, I've just got to think what I was going to say now. That option was there. If somebody just, I mean somebody could decide for example that the controlled pathway is not for them.

Q. Mmm.

A. That they don't like the numbers that are coming out the other end, I don't know they would choose that if they've got good records to work with, but they could then decide to go down the other pathway which would then provide them with exactly what Lionel was talking about. I don't know that that's answered your question really though.

Q. No. Do you -yeah so he was, I guess his pathways were for people who have plans to develop irrigation infrastructure as opposed to you know the category that we're looking at here where the irrigation infrastructure is already in the ground. And he said that there was a group of people who would increase irrigation infrastructure provided that they had the

surety of an allocation based on reasonable use of demand, not an allocation based on hitherto historical, so they would go forward with those improvements and to that limited extent there would be, or could be an improvement, some gain for the environment based on efficient use, but you know, to that extent.

5

A. That's fine.

Q. Do you think that there would be people –

A. - but there has to be an allocation available to do that.

Q. Yeah, it has to be an allocation available. Okay, so that's where you think that falls down, that?

10

A. I mean –

Q. It's all very well to say I'll have reasonable use and demand, but if there's no flow in the river then you've got a problem, okay.

A. Or if the ground water is fully allocated, what can you do?

15

Q. No, nothing. Okay. And so, is that the difficulty moving from historical to, you know, an allocation based on historical use for current irrigation systems to something which is now completely based on reasonable use and demand.

A. (no audible answer 13:07:14)

20

Q. So we are talking about replacement permits, you know, it's not a newbie?

A. Yeah, yep. Yeah, I mean the only way around that is that there has to be, I mean, someone would have to store some water.

Q. Mmm, to, so to move on –

A. - to be able to move, for that to be able to be put in place; there may not be an allocation available, there may not be any flow in the river, so what you've got to be able to do is then to be able to find another, you've got to be able to find an allocation to actually do that, it's all very well for that to be a pathway, but it may be entirely impractical because there isn't any water available to do it.

25

30

Q. But this would be for replacement consents, existing permit holders or deemed permits, so they're to be replaced.

A. But they are looking to increase their irrigated – no they're not looking to increase their irrigated –

Q. – same irrigated area, same land.

A. Well, if they're looking to improve their irrigation system then, then they should be actually using less water than what they are currently using.

5 Q. Yeah. Oh well, yes. Yes, they should. But he's saying for some people they will only move towards that level of investment if they have the surety of volumes and rates based an Aqualinc methodology or equivalent, as opposed to anything that this plan is seeking to do. Don't know?

A. Yeah, I don't have an issue with that, but at the end of the day it still comes back to is there an allocation for them to actually move in that direction.

Q. Mmm.

10 A. It might all be all very well to get a paper allocation but if there is no water to be had, then you know, they may be better to try and get down this controlled pathway and get some –

Q. And is, does that indicate then that hesitancy indicate that if you're moving from historical use to reasonable demand that there will be an increase in the total volume?

15 A. Yeah, if you move from, I think probably if you move from historical use that, and you moved to that for want of a better word that Aqualinc volume, that the volume allocated will increase.

Q. And why does it increase?

20 A. Because if you look at the deemed permit situation and this controlled activity, the irrigators on these schemes they know how unreliable this water is, because there is far too many deemed permits out there for the water that's available. So they have actually already shored themselves up with storage on farm. Just look around at all the storage ponds that are around and the schemes that develop, Last Chance, Manuherikia, you know, even if you go around these little places around Bannockburn, they've all got ponds to store water in because the scheme's unreliable, so they've already become very efficient users of the water. I think it's unfair to suggest that the users of these deemed permits, you know, except for perhaps they may have been border dyking or they may have been, god forbid, randomly blood irrigating.

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Q. Apparently, they're doing that too.

- 5 A. You know, they're not bad irrigators, that's just how they actually did it, but if they've moved to more efficient systems now and they understand the unreliability and they've shored themselves up for that unreliability, moving to, you know, an Aqualinc type allocation would mean, paper wise, a larger allocation. Probably doesn't answer your question, (inaudible 13:11:28), you still want to ask me.
- 10 Q. No, no, it does. So if I haven't built my irrigation infrastructure and I am wanting an allocation calculated by the Aqualinc methodology, my irrigation infrastructure may need to include both storage as well as an upgrade in the distribution of irrigation water, but it's probably a larger volume than your historical use.
- 15 A. And the risk for them is that they're probably going to build a storage that's going to be oversized at the end of the day, because if they're putting in a much more efficient system, then they'll end up using less than what the allocation that they've received on paper is.
- Q. And all of that can be demonstrated, do you think, mathematically and in writing for the course to see Aqualinc historical use? You know, because these ideas are put out there, but they're not landed on paper.
- A. No, that's true.
- 20 Q. So it's attractive, but what are the pitfalls?
- A. Again, it's a bit more than anecdotal. I mean, if I can use an example, if you look at Central Plains Water, for example, stage one, they've now got an over-designed system, because everything was done again, and this is not a criticism, the Aqualinc system, but if you looked at the volumes and the rates and the design, the system designs that were used, they're finding that actually, the farmers are getting by on, like, four and a half to 25 4.7 millimetres a day, and it was designed for 5.2, so they're now going hang on a minute, we're, like, 20 percent over design. Well, we can't increase our command area – well, we could try, but you know. So while it's not mathematically present anywhere that the Court could grab it and say well, look, this is what actually happens when you have efficient use and, you know, reasonable and efficient use allocation that's been developed theoretically compared to what is actually physically being 30

used, there's a bit more than anecdotal evidence, but it is sort of really anecdotal.

Q. Okay.

A. They're case studies, I guess.

5 THE COURT:

Q. I just wanted to get a little bit of clarification on the McArthur Ridge development, if I could.

A. Yeah.

10 Q. You said originally there were three heads. Can you just clarify what a head is?

A. A head is 27.67, I think it is, litres a second.

Q. Okay.

A. Something like that.

Q. Okay.

15 A. I mean, it was a crazy number because it was the water that needed to go through a sluice gun.

Q. Okay.

A. And if you had one sluice gun, you got a head of water.

Q. Now, this scheme has a control gate, shown on appendix 3.

20 A. Yes.

Q. Where's the water meter? Is it metered? Where is it metered?

A. No, it's not. So that flows through that control gate, which is periodically, I guess – and I don't know what the frequency is – but the flow through that control gate is gauged, so there's a flow gauging done by the
 25 raceman to ensure that the opening on the gate hasn't been changed, I guess, or that the rating still applies. It's actually a very stable structure because there's nowhere else for the water to go, it can only go through that gate, it's fully submerged, so from a hydraulic point of view, it's a precise measure. Without it being a continuous measure, so long as it's
 30 always submerged, fully submerged, and the gate opening, nobody goes out there and lifts the plate up and down, then they're going to get their three heads.

Q. And is that a constant supply –

- A. It's a constant supply.
- Q. – for this development?
- A. Yeah. If the pond – and you'll have to ask, I don't know how they do this, but you'd have to ask either John Rasmussen, Murray Petrie's not giving
5 evidence, but what I do know is that if their ponds are full and they're not irrigating, they don't take water, so there must be some bypass there that then sends it back into the race.
- Q. Okay, you said that the short term, the main, you know, frost-fighting water is way, way above irrigation. After they've had a frost and the ponds
10 are emptied, is that the maximum take for this?
- A. Yeah.
- Q. So the maximum take for this development is not for irrigation but for frost-fighting?
- A. Oh, no, no, no, no.
- 15 Q. Explain.
- A. No, they just continue to get their three heads.
- Q. Okay.
- A. So, you know, if they empty the pond, particularly the bottom pond, so the top pond will still be there, it will be a little bit of water's using for frost-
20 fighting up there, but most of the frost-fighting's done out of the bottom pond, so they could empty the bottom pond in one frost event.
- Q. So is there a problem the next day if there's a frost?
- A. Yeah, there could be a problem the next day if there's a frost, although, you know, they're putting 77 something litres a second into there, so that's
25 a lot of water over 24 hours.
- Q. So it should recover?
- A. Yeah, and I don't know what they do operationally, I don't know what they do if they get another six degree frost tomorrow. They might not have enough water to fight.
- 30 Q. Okay, so it's a constant supply, and when they're full, they stop.
- A. It's a constant supply, yeah.

QUESTIONS ARISING – NIL

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Should take lunch. Back here at, well, might as well make it half past two because we're going to run out of witnesses shortly, and so we'll take a full lunch.

5 A. (inaudible 13:18:07) Mr Rasmussen is required. If he could be relieved, it would suit him, but – probably only matters of curiosity that are left on my list, which seems an inefficient use of his time.

Q. I haven't talked to the commissioners about whether we require them. Have you got any thoughts or any questions?

10 **THE COURT: COMMISSIONER BUNTING**

I think I've got a reasonable understanding.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Same here, so we don't have any questions, so we could admit the evidence by consent and place whatever weight we see fit to place on it.

15 Happy with that? All right, well, that's what we'll do then. For the record, in relation to the evidence-in-chief of John Rasmussen, that is admitted by consent, and so we will be back here at 2.30. Mr Maw. No, we won't be back here.

A. Where to next?

20 Q. Where to next? I've still got all of those minutes to release, and I could do that.

A. My friend Mr Van Mierlo –

Q. He is here.

A. – he is here, and I understand he's ready to go.

25 Q. Okay.

A. If need be.

MR VAN MIERLO:

That's correct, we can proceed this afternoon if necessary, ma'am.

THE COURT: JUDGE BORTHWICK

Q. No, we're happy to do that. So as to allow me a small chance to catch up on the torrent of minutes I've been promising, and likely to be releasing minutes on PC1 and 8 as well in terms of forward planning there, can we start at 3, and so I can get some of that paperwork done, and then tomorrow, I see that we've got (inaudible 13:20:19) and we're fine with (inaudible 13:20:23). I thought there might have been some AVL, but there's not. Okay, all right, so we are adjourned until 3.

COURT ADJOURNS: 1.20 PM

10

COURT RESUMES: 3.05 PM**THE COURT: JUDGE BORTHWICK**

We are nearly there on the minute, you see day by day we think, “Oh we should ask that question, no we shouldn’t”, “Oh we should put that in for further
5 consideration, no we shouldn’t”, so it’s a bit like that. But we are all but there and everybody will get it today. That’s the minute about further conferencing in relation to PC7 schedule, things to look at in terms of the controlled activity rule and RDA rule and one other matter where we’ve noted do you need to consider the objective a little bit further so we’ve noted that as well and so there’ll be
10 some folk who are going to – some planners who are already going to be there for the schedule, but we’re going to have to also note other planners might need to come in, because they’re not interested in the schedule, so we’re trying to organise that and at the same time think about priorities which we are giving a lot of thought to and we might and we’ll need some time for as well, it may not
15 be part of this, it might be part of something else, yes. Some other event, yes. Lots of balls. So we’re going to hear from Dr Davoren, we’ve asked for him to be recalled, we’ve just got a couple of clarifying questions and won’t take too much time.

20

MR REID RE-CALLS**ANTHONY DAVOREN (RE-SWORN)****QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

- 5 Q. I think new had a little chat after we finished and what we wanted to come back on was a couple of things. For the irrigation on this development, where is the water metered and how is it done?
- A. Okay so the water is metered, for irrigation the water is metered as it is pumped out of the ponds to the vines.
- 10 Q. Okay, so there's how many metres are there? Is there more than one metre?
- A. Oh good question. I think there are, at the top pond I think there is two water meters.
- Q. Okay.
- A. I stand to be corrected on this without opening up my file –
- 15 Q. That's okay.
- A. – having a look at it but it's, they're electromagnetic meters, have been since 2009 so they're a very good record, good reliable record, so they'd water metered at that point and there's a water meter on the bottom pond that measures the water that's moved from the bottom pond to the top
- 20 pond.
- Q. And that's for irrigation?
- A. Indirectly.
- Q. Yes.
- A. Because it's just a record of what they've taken out of the bottom pond to
- 25 send up to the top pond.
- Q. So is the frost water fighting water separately metered?
- A. No.
- Q. So it's a combination of the two that's metered for this –
- A. Yes so the water that is metered is the water that goes strictly for
- 30 irrigation. The frost biting water, you'll see when you do the site visit that they are big, CAT diesel pumps and I guess their decision, I wasn't part of the decision, but when you look at it you'll look at it and you'll look at the size of the pipes go, the cost of the meters to go onto those is pretty

horrific because they're big pipes and as I said to Philip Maw, that these are constant discharges pumps, so when you turn them on you know that they're pumping X litres a second.

Q. So is the frost fighting water not metered at all?

5 A. It's not metered at all.

Q. So that doesn't fit within the overall water take for this development?

A. Other than we know the water that is getting transferred out of the bottom pond to the top pond which in the frost fighting season will be going to frost fighting. If that makes sense, so when – you'll see when you get
10 there, when the frost fighting is turned on, the electric pump at the bottom pond is metered, so we know that that water is going to the top pond and we know the top pond has got, you're going to have to check my evidence, I can't, if it's got 60,000 cubic metres in it, then it pumps out 60,000 cubic metres plus what is transferred from the bottom pond to the
15 top pond because that's where the – sorry from the... yes, there's a little bit of water goes out of the top pond for frost fighting and, sorry, everything else comes out of the bottom pond for frost fighting.

Q. Now you told us that the frost fighting water is sort of in order of a magnitude or many kinds –

20 A. Many orders a magnitude.

Q. So –

A. 170 litres a second or thereabouts for irrigation and 3,000 litres a second for frost fighting.

Q. So when you look – go back to maximums, in terms of the schedule, is
25 the maximum for rate of take nominated by frost fighting?

A. The rate of take, no because the rate of take is constant through the gate. So their off take is always coming through the gate and that's a constant flow rate through the gate into the first pond and then that water's transferred to the other two ponds, so that rated – their rate of take is
30 three heads and it's set by the gate.

Q. So what about when you've had a frost, lot of water taken for frost fighting, what about the daily volume then? Is that dominated by the frost fighting? The maximum daily volume?

- A. Yes, you can pick up the maximum, it probably doesn't have all of them daily volume for frost fighting but it has a fair proportion of it because you're transferring the water from pond to pond and that's metered.

THE COURT: JUDGE BORTHWICK

- 5 Q. So for the purpose of this system, particularly the system which has frost fighting with large volumes and also has irrigation with considerably smaller volumes, how does a schedule talk to that particular system in terms of calculating historical use?
- A. Because when we go back through the record, for the most part we
10 capture the frost fighting in the daily and the monthly volume.
- Q. I see, yes, okay.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER BUNTING

- Q. And with that there was the maximum because it's a lot more than a daily take, say for the irrigation during (inaudible 15:12:40)?
- 15 A. Yes so when you go back and look through the record you're – almost all of them, the maximum dailys occur in either, usually in early October.
- Q. Yes.
- A. Frost fighting day, frost fighting night and if you have a bad September, October, or a bad October then your maximum monthly take is in those
20 months, is in that month.
- Q. So does that mean for the rest of the time there's a whole lot of surplus water available for irrigation because if the –
- A. No. No because they've got storage, they're balancing this out, so when I talked to – or you will talk to Murray Petrie but when you talk to
25 Murray Petrie there are times during irrigation season when they don't take any water. So they're not, not even using, basically not even using their take because you're pumping out of the top pond for irrigation, you're simply topping up from the other ponds when you're actually irrigating. Make sense?
- 30 Q. Still a little confused because I would have thought that the maximum daily was, you know, happened during the frost fight?

A. Yes the maximum daily does occur during the frost fighting season and the maximum monthly occurs during the frost fighting season.

Q. Then there's that – so that's not available then for the rest of the year or the – for irrigation? Because that's the maximum or?

5 THE COURT: JUDGE BORTHWICK

Q. So your rate of take –

A. Yes, sorry, I'm not make-

Q. Yes you're missing something. Well, we might be missing something. So your – the rate of take itself, that rate of take is geared to irrigation? Yes? No? Rate of take, historical rate of take?

10

A. The historical rate of take I've assumed is the same day in, day out.

Q. Yes which is what –

A. Because it comes through that gate, 77 litres a second.

Q. 77 litres per second, yes.

15

A. In fact it sort of averages out at about 51 because they don't get, they get it, whatever it is, X days out of X days.

Q. And that rate of take, is that through the gate? Is that a back calculation of the gate?

A. It's a – the gate is set to allow only that amount of water into the intake pond.

20

1515

Q. Something which is equivalent to 77 litres per second. Yep.

A. Yep, and that is check-gauged by the raceman.

Q. Yeah. And so that 77 litres per second in this instance doesn't have much of a mathematical relationship with the daily and monthly volumes?

25

A. No.

Q. Because they are being set by frost-fighting measures.

A. And their buffer that they have in storage.

Q. Yes.

30

A. So it doesn't even bear any resemblance to the take for irrigation.

Q. Yeah. Yeah, which you said was 170 litres per second.

A. Yeah, I mean –

Q. But because you're sitting in storage, that's, yeah, okay, no, understood.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER BUNTING

Q. That's because the storage is the sort of the balancing –

5 A. Yeah the storage is the buffer. I mean, they know that that take is or that allocation will be at some stage unreliable. And so, storages have been built primarily so that they've got water for frost-fighting, because there's no way you can get 3,000 litres a second out of the race, so they have built storage big enough to fight and X out frost, and then have the opportunity to refill it again with that continuous take the next day.

10 Q. So for your particular client in, I guess viticulture, but maybe also horticulture actually having consent conditions pertaining to rates of take monthly, daily and monthly volumes are really important in terms of pinning the actual usage, correct?

A. Absolutely.

15 Q. Some people, I've heard evidence that oh no, just ignore the monthly or daily or even annual, I've forgotten which way it goes but just some of the volumetric controls, maybe all you need is an annual.

A. Yeah, look purely from a, if you weren't frost-fighting I'd see no value in the daily or monthly take.

Q. And why's that?

20 A. They don't serve any purpose.

Q. Yeah.

A. What do they serve? I mean -

Q. - I don't know. How has it been explained to you?

25 A. The litres per second if you multiply it up by 86.4 should give you your daily take.

Q. All right.

A. All right?

Q. Yeah, yeah.

30 A. So if you irrigate for 24 hours a day which usually doesn't happen then you are going to get a daily take. What does a monthly take, what does a monthly volume actually serve when you've got, if all you are doing is irrigating?

Q. All right, so it's important for some industries like viticulture and horticulture.

A. Yes.

Q. But for pastoral industry it's not important?

A. Don't really serve any purpose really.

Q. Okay.

5 A. Because everything else is driven then by your, the take you need to run your irrigation system.

Q. Mmm. And storage doesn't come into it at all for pastoral act-

A. Oh yes, it does.

Q. It does yeah.

10 A. Because there will be times somewhere along the way that you may not get all of that water.

Q. Yes, but that's not impacting in terms of any volume which is required to be available for daily or monthly?

A. No.

15 Q. No, so that's still only rate of take and annual volume?

A. Yeah. Look I haven't dealt with, I haven't dealt with any of the, any sort of pastoral operations, but they may have, they may have purchased a property with allocations that aren't large enough in terms of litres per second to run their irrigation infrastructure in which case you will supplement that by, buffer that by putting in storage so that you can, you might have a 200 litre a second take and you need 250.

20

Q. Mmm.

A. So your other 50 litres a second will come out of your storage.

Q. Understood. All right.

25 **QUESTIONS ARISING – NIL**

WITNESS EXCUSED

THE COURT: JUDGE BORTHWICK TO MR REID

30 Q. I just had a technical question for Mr Reid. So two things, firstly I am guessing though I haven't checked the website possibly has Dr Davoren's supplementary evidence. Shall we take it off the website?

A. Yes I think so, your Honour.

Q. Okay, good. And whilst it remains part of the court –

A. I don't think it is up there, by the way.

Q. It is up there?

5 A. I don't think it is, no.

Q. Oh okay, so we'll just double-check, make sure the supp's not up there, and whilst it remains part of the court record because it's been filed, we're not asked to have a look at that and so we won't read that supplementary evidence. Then the second thing is because we are minded to press into this through the expert conferencing route -

10

A. Yes.

Q. - as we discussed, but we also discussed tightening up on the wording of the drafting of the policy and we talked about that this morning, and I suggested a change but you know there may yet need to be some more finessing. If this has merit, there may need to be some more finessing of the policy in the rule by the planners and their thinking around, yeah, around the level of development which is captured. But to the extent that you, that we - it would be helpful for us to refer it to expert conferencing you having filed a memorandum today with that finessing on the policy at least done.

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A. Yes.

Q. So I can say, "Look, have a look at this."

A. Yes.

Q. And then see what they think.

25

A. So I have given that some thought and so what I would propose to do is yes file a memorandum with a redrafted, tweaked policy and rule.

Q. Yes.

A. And the two things I would do in relation to that would be to adjust the policy as we have discussed.

30

Q. Mhm.

A. But also seek to deal with the question of the absence of frost-fighting horizontal infrastructure.

Q. Yeah.

A. So just to make it clear that what was required in terms of the rule was the existence. The prior existence of irrigation –

Q. - mainline.

A. Of all irrigation infrastructure, or required –

5 Q. - yeah, it's not all of irrigation infrastructure, it's actually your hori- your mainline that's what needs to be in, 'cos you don't want to capture the laterals.

A. Yes. No.

Q. That's not all and the storage dams, et cetera.

10 A. No.

Q. So this is where you're sitting is with the irrigation mainline, horizontal.

A. Yes, that's right. So I will, what I propose to just make those few tweaks to it and then I can file it as a memorandum.

15 Q. Could you get it done today because I have a fabled minute that is meant to be going out, and I thought, well I'll just attach your memo to my minute and then we can just send it out.

A. Okay, I'll get it done today, yes.

Q. All right. With that said, thank you.

THE COURT: JUDGE BORTHWICK TO MR VAN MIERLO

20 Q. Mr van Mierlo we're in your hands.

1521

MR VAN MIERLO:

25 May it please the Court. At the outset, I will signal for the Court that Aotearoa New Zealand Fine Wine Estates Limited Partnership, which I will abbreviate at AONZ through these submissions, largely supports the 8 April version of plan change 7 that emerged from the planner's caucus. That's a significant shift from the position set out in the original submission, but one that reflects a significant evolution of the plan change through the hearing process to date. So, starting at paragraph 1:

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AONZ submitted on plan change 7, water for Otago, when originally notified by the regional council, and it further submitted when plan change 7 was called in and re-notified by the EPA.

- 5 AONZ operates Manata Estate, a 27-hectare property containing a vineyard producing award winning pinot noir wine near Cromwell. Manata Estate operates under organic principles. Although in some respects, it is a highly specialised, possibly unique vineyard operation, in other respects, it is typical of hundreds, possibly thousands of agricultural, horticultural and viticultural enterprises in Otago, in that it relies entirely on water. Without reliable access to adequate water, Manata Estate could not exist.

Manata Estate holds deemed permits for take and use of water from the Lowburn. They expire on the 1st of October of this year. Application has been lodged for replacement resource consent, under plan change 7 as notified.

Manata Estate may not be a large scale operation relative to some other viticulture properties. Its focus is on producing a premium product. It takes a long-term view of its relationship with, and impact on, the environment. Such an approach is inherent in the organic philosophy that it applies to its land management and grape production. Organic viticulture relies on sustaining and enhancing the long term health and viability of the land and environment. From this viewpoint, longer term water consents are highly desirable because they provide the ability of the consent holder to plan and invest in longer term efficiency and other environmental enhancement measures. Conversely, shorter term consents carry with them a risk of short-term thinking, and not providing incentives to water users to implement best practice measures over the medium or longer term to achieve better efficiency and other environmentally positive outcomes.

30

In keeping with its long term perspective, Manata Estate has invested significantly in infrastructure to increase and enhance the efficiency of the use of water on the property. This investment includes recent construction of a 19-million-litre dam, by recent there, the dam was first filled in October 2019, and

also installation of pumping equipment for surface irrigation and frost-fighting purposes. That investment is ongoing, with subsurface irrigation of vines to be installed in coming years. This infrastructure is focused directly at maximising the efficiency of water use on the vineyard. The storage dam, for example, enables water to be taken at times of high flow, thereby reducing the demand for water during low flow periods. Such investment can only occur if a longer term view of land and water use, and a property's relationship to its catchment, is taken.'

- 5
- 10 It is for these reasons that AONZ's original submission opposed plan change 7 as notified, and specifically sought that it be declined, or if not declined, that limitations to a six-year term be removed, and a longer-term consenting pathway be enabled as a discretionary activity. AONZ has taken a focused approach to the plan change 7 process. Early on, it anticipated that a wide
- 15 range of parties, representing the primary sector, central and local government, iwi, councils, business and conservation interests would call expert evidence. It also anticipated that during the course of the hearing process, the drafting of the notified plan change would develop and evolve from that originally notified.
- 20 AONZ has followed much of this evidence and the related drafting iterations. The revised wording of the proposed plan change, and in particular, the amendments accompanying Mr de Pelsemaeker's supplementary evidence of 14 March, which I refer to as the 14 March PC7 version, and more recently the amendments set out in attachment 1 to the joint witness statement arising out
- 25 of the planner's conference of 7 and 8 April, which is the 8 April plan change 7 version, have been carefully considered.

The relief which AONZ seeks through its submission has likewise evolved, significantly. AONZ's position may now be summarised as follows:

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The refocusing of plan change 7 to more clearly be a process plan change is acknowledged and supported. In particular, the 14 March version, and the 8 April version have a clearer focus on providing a procedural rollover of existing deemed permits. AONZ accepts and supports the intent of this approach, on

the basis that regional council will provide a plan structure that provides for longer term water consents that give effect to the NPSFM 2020 when the regional plan is updated in 2025.

- 5 To give effect to this revised approach, AONZ considers that it is essential that the controlled activity pathway provide an efficient, timely and cost-effective pathway to a replacement resource consent for deemed water permit holders. It is also essential that applicants have a high degree of certainty that taking the controlled activity pathway will result in the grant of a replacement consent that
- 10 reflects the rights to water which have been exercised under deemed permits, and thereby enable deemed permit holders to carry on operating through the interim period, as they have been authorised to do under their deemed permits. Subject to some drafting matters that are discussed further in these submissions, these elements are considered to be appropriately reflected in the
- 15 draft wording considered by the planners and included in the 8 April version.

I will note, I'll come back to the issue of current infrastructure in the water meter data record which was discussed with Dr Davoren prior to lunch.

- 20 It follows that in light of the substantive evolution of the proposed plan change from that notified, through the 14 March 7 version, and more recently the 8 April version, AONZ has revised its position such that it is now supportive of the revised form of plan change 7 as set out in that 8 April version, subject to the matters discussed further below. It is understood that the 8 April version
- 25 remains draft and that further conferencing is to be scheduled on the schedule. AONZ will remain interested in the outcome of that future conferencing, and in particular, may wish to submit on any further proposed amendments.

THE COURT: JUDGE BORTHWICK TO MR VAN MIERLO

- Q. How are you going to do that?
- 30 A. Well, I was –
- Q. I mean, you're exposed in the sense that you haven't got planning evidence, but so is Mr Reid exposed, so we threw him a lifeline. So how do you think you're going to come back into this?

A. Well, what I was going to respectively propose to the Court is that if there's substantive developments to the plan change, as proposed through caucusing, that parties have a limited opportunity to submit on that.

5 Q. No. Well, I think there, we have some problems, because we've got, as you will have seen from the transcript, a large number of amendments being proposed, which, in the ordinary course, the Court would say thank you, consider, release a decision, because there's all sorts of changes. If those changes have merit, perhaps, then, direct further expert
10 conferencing or further evidence, but if they don't have merit, close it out. The difficulty that you're in, and the difficulty the other parties are in, is relief hasn't been proposed which can be tested through a planner, or there's second-thought litigation, or the relief is exposed or found wanting in some respects through cross-examination or the Court's questions.
15 Then do you just give another party another go at it? And so we're in this endless cycling.

A. I appreciate, your Honour, it cannot be an endless cycle, and if there were any opportunity to submit, it would clearly be very confined and limited.

20 Q. No, yeah, that's the difficulty. How do we do that? You've got no planner. I can't tell what's coming next. What I can do is throw you a lifeline, like we did with the last party, and say "do you want to think about it?" but it's not an endless cycling through of options. The Court's got to now make a decision about something.

25 A. Yes. I would say, though, your Honour, that what has emerged through both the council's evidence and now is emerging through the planner's conference is a substantial shift from what was notified, and so parties could only submit on what was notified, and now, obviously, we've come to the hearing and obviously have to respond to the most recent draft of the document.

30 Q. So what's the process step that I haven't taken which you say is demanded in terms of fairness? Because you haven't attended the whole hearing, you've only been here for very few parts of it, and so there was an opportunity to test all sorts of planners from all sorts of different industries about what it was.

A. And there's no issue as to fairness in terms of what has come to date. My concern is what may evolve from where we are now and whether there's an opportunity for parties to comment on it, and perhaps an analogy is the issue of the potential notification of the regional policy statement.

5

Q. Oh, well, we know that's coming, and if it's notified, evidently, we're to look at it, either on the papers or through a hearing, but that's its own confined topic, and it's not necessarily broadening that out. So is what your saying that you want an opportunity to have a written reply, oral reply, actually, in writing and to the Court, that's what you want?

10

A. I was anticipating the opportunity in writing, focused specifically on issues that may arise in any caucus version of the plan change that arises out of caucusing, so focus only on changes that emerge from caucusing, post parties having had an opportunity to present at the hearing, and I appreciate that if such was –

15

Q. This hearing process is difficult insofar as it's not your regular appeal process, and so there's no easy lines of sequential exchange or simultaneous exchange in replies, and so we've adopted the fairest process that we can see in consultation with parties, and no party has said that there's a different process, more preferable process. So the witnesses will conference and they'll come back out of it with a joint witness statement, hopefully, where things will be largely agreed or disagreed, and then, depending on what they come up with, there may or may not be a need for also supplementary evidence, but, you know, joint witness statement can stand in the shoes of evidence, so just depends on, you know, the extent of agreement or disagreement. Your opportunity, if you have an interest in that document, you could cross-examine on it. You could cross-examine Mr de Pelsemaeker. You've got a party-to-party interest with the regional council, and there, I would expect you to be testing what comes out of the joint witness statement, assuming that it's largely conclusive. So you could test this evidence. If you, for example, didn't like what Mr de Pelsemaeker said but liked some other witnesses, you could sayL “Well, I support the outcomes for planners A, B and C.” You could say that in a submission. You wouldn't

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need to test it. I think it's an unsatisfactory process for the Court simply to hear a submission that says: "Well, I don't like what Mr de Pelsemaeker said, and I never tested it," or: "I don't like what Ms Dicey said or what Mr Barrell said," or whoever the planners are, "but I never tested it, but I don't like it." That wouldn't be really helpful, unless you were raising some sort of legal issue about what it is or where it is that they got to. So you have to think about, you know, how you're coming back in, so I don't think I'd be assisted by you making simply a submission on the planners' expert opinions. I'm more assisted if you thought and wanted to test that in cross-examination, or if you really liked them, that could come in by way of submission, but to submit and simply say: "Well, I don't like it" would be almost tantamount to giving evidence, unless there was a legal issue, a fundamental failure in the thinking.

A. I certainly wasn't anticipating making a submission to say I didn't like something. If it was a submission, it would be a matter of interpretation in drafting, which can be a matter of legal interpretation, just as it can –

Q. But still, it is better to put that to the witness. It is better to put that to the witness, otherwise, you might take the Court in places where the witnesses, as a group, collectively did not want to go, or may have had a thought about that. Very easily, I would have thought in this case, all of these minor changes and tweaks here and there can rapidly lead us down a road which the planners did not have in mind, so I think it's actually important that you put your questions to witnesses unless there's a fundamental matter of law which they've missed, but again, even that might be preferable to put that to them rather than just deal with it in a submission.

A. Yes. I take your point, your Honour. At the end of the day, it is difficult for smaller parties to engage –

Q. I know.

A. – in these processes, and to date, I don't think – I might stand corrected – but whether there's been an opportunity for parties to question the planners on the 8 April version, I don't know that there has been.

Q. There has been.

A. There has been?

Q. Yeah, there's been a lot of questions, and at this stage, because there's more to come, it's you really just testing the thinking around some of the changes and the rules in particular, so testing, testing what's there, what was missed. No one has really questioned on the schedule at all that I can recall, mainly because we know that the schedule has not been completed, that it's still under consideration. It's been informally conferenced between experts. We'll know whether they've completed that tomorrow, with further expert conferencing scheduled if they're in disagreement over any matter. So no one's really touched the schedule, but there's certainly been some testing around the wording of the controlled activity rule and the RDA as it has been amended by planners in response to changes in the schedule, where there is a consequential change to those rules. The Court's been asking questions as well. One of the things that we'll invite parties to do, though is now complete the conferencing on controlled activity and the RDA, and not limit it just to the schedule but to the rule structure itself, and we might need to pull in the objective to be able to complete that process properly.

A. Yes, and I do make some observations and submissions on what has emerged from 8 April in terms of the planning, the latest version, and I address that in the submissions before you. I don't know if I can take it any further than that.

Q. No, I don't know.

A. Obviously, I don't know what's going to come out of that further caucus.

Q. None of us do. So, no, none of us do, and one of the things that I've asked Mr Maw to do, though, is the canvass parties about further directions. Did I? I've forgotten the ambit of that. I say forgotten, I've got the transcript back but I haven't checked it from last week. You were going to canvass parties and come back to us on Friday about forward directions. Have you forgotten that? Oh, Ms Mehlhopt is responsible.

30 **MR MAW:**

Ms Mehlhopt's responding to these matters.

THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT

Q. Can you remind me what you're doing?

5 A. As far as I recall, your Honour, it was around the directions for the joint witness statement coming back to the Court, whether there's any need for supplementary evidence and how that might be.

THE COURT: JUDGE BORTHWICK TO MR MAW

10 Q. And how that's going to be handled, and, of course, you know, still thinking of the directions to come, you know, we haven't talked about rights of reply. I mean, I had originally thought it was just the regional council, but, to be fair, many parties have got their witnesses now engaged in processes about which they have no knowledge in terms of the output, so maybe also limited replies there. There needs to be directions on priorities as well.

15 A. Yes, we will endeavour to cover off that suite of matters, and at the risk of interrupting my friend, I have been thinking about this issue of fairness to parties in light of the fact that things have moved, sometimes after parties have completed their case, but where they have an expert, say, a planner involved in the conferencing. The ability to cross-examination on the output of that conferencing, I think, is an important protection mechanism in terms of the process itself, and it's interesting.

20 Q. We have – and I think Mr Cooper's going to confirm this, hopefully – embedded into the schedule the ability to actually at least call back all witnesses who are involved that schedule to give evidence, if that's what they need to do, although there could be, perhaps, a more streamlined process, but, you know, that ability is there in the schedule now.

25 A. Yes, and precisely what that looks like may depend on how close or how far apart the witnesses are, but at its most streamlined sense, there may be an opportunity, and we talked about this, I think it was last week, where one or two representatives might speak to a joint statement if there's full agreement, and they then may be able to be cross-examined on that. If
30 we have two or three camps, again, likewise, it may well be that there are –

Q. Could do something similar.

A. Yes, and to me, that may strike the balance between efficiency, but giving parties an opportunity to test the outcome.

5 Q. Yeah, and the worst-case scenario, which is the scenario they're planning for, is they're all back. Okay. So just confirming that there is that opportunity to test witnesses. It's not being taken away from you, it's actually been planned into the Court schedule, and I think rights of reply now, because the case is evolving after you've opened. In saying that, are you pursuing the relief that you filed or not? You know how you filed a separate –

10 A. No.

Q. You're not.

A. AONZ is supportive of what is there in the 8 April version. There is a drafting matter which I'm going to come to shortly, and so if that were the outcome, that would resolve my client's concerns.

15 Q. So in other words, I don't need to have a look at your proposed relief set out in the memorandum dated 5 February, you're well beyond that.

A. No, things have moved on substantially since then.

Q. Good, all right.

MR VAN MIERLO:

20 I think I'm up to paragraph 14 Ma'am.

MR VAN MIERLO CONTINUES READING OPENING SUBMISSIONS FOR AOTEAROA NEW ZEALAND FINE WINE ESTATES LIMITED PARTNERSHIP

25

In terms of evidence, a statement of evidence has been filed by Mr Nick Paulin. Mr Paulin is the estate manager at Manata. He has 16 years' experience in the viticulture industry in Otago, managing vineyard irrigation and frost fighting in several different sub regions. Mr Paulin's evidence describes the Manata
30 Vineyard, its recent development, and future development plans. Included are photographs and descriptions of recent significant investment in water infrastructure that enables substantially greater efficiencies in water use to be achieved at the vineyard.

Mr Paulin sets out concerns with plan change 7 as notified, in particular, that it did not recognise more recent irrigation development or water usage records, it did not encourage water users to be efficient in their water usage, and it created uncertainty by only providing for short term permits. A number of these issues have now been resolved through the revised drafting which has emerged through the hearing process to date. While the focus on short term permits remains, in light of the more clearly-focused nature of plan change 7 as an interim step only towards a planning regime which provides for longer term permits, this issue is not being pursued further by AONZ.

Turning to the National Policy Statement for Freshwater Management 2020, plan change 7 is intended to establish an interim or transitional consenting regime to bridge the gap between deemed permits which are about to expire and full assessment of replacement consents under the NPSFM 2020 and a regional plan that gives full effect to that NPSFM. The regional council has, through its evidence, highlighted the limitations in information, in particular, water data, which it holds, and which is available to inform decision making on water consents. Furthermore, there are also process steps to be put in place and undertaken, before the NPSFM 2020 can be implemented. In this context, plan change 7 is not capable of fully giving effect to the NPSFM 2020, but nor is it required to. The NPSFM 2020 must be given effect to “as soon as reasonably practicable.”

Accordingly, plan change 7 is an important step towards implementing the NPSFM 2020, but it is an interim step only. As noted above, AONZ accepts this interim approach, on the basis that the 8 April plan change 7 version provides an efficient process for rolling over existing deemed permits into replacement resource consents which reflect past actual usage of water but are of an interim six-year duration.

Until such time as the regional plan has been revised, and the essential process steps set out in the NPSFM 2020 have been undertaken, Te Mana o te Wai cannot be given full effect to through plan change 7. It is likely, in my

submission, that longer term water consents will be an important tool to give effect to Te Mana o te Wai, in this region. The development of long-term visions for freshwater are an essential component in the implementation of the NPSFM. AONZ considers such a long term vision is essential for sustainable management of water resources, and that consent duration should be integrated into relevant timeframe considerations, but it is accepted that this cannot currently occur in the context of plan change 7.

The balance of these submissions consider and comment on drafting matters. All references are to the 8 April plan change 7 version. I first wish to comment rules 10A.3.1.1 and 10A.3.1A, matters over which control discretion is reserved. Item (a) of rules 10A.3.1.1 and 10A.3.1.A was amended in the 8 April version, and it reads, as I have set out there, the amendment was to take out “in accordance with” and substitute the words “within the limits of,” and a similar amendment was made to 10A3.1A. The joint witness statement notes that the reason for this amendment was to make a consequential change to a matter of control A to remove “in accordance with” and replace it with “within the limits of” to be consistent with a change to the matter of discretion (a) in the restricted discretionary activity rule, as referred to in paragraph 11. Paragraph 11 said: “An amendment has been included in attachment 1 to make matter of discretion (a) clearly limited to historical use and introduce the ability to consider a range of methods and data. All witnesses agreed to that change.”

In my submission, rather than providing clarity, this proposed drafting change has the potential to introduce unintended ambiguity and uncertainty. It suggests that Council’s ability to control the volume and rate of water taken, dammed, et cetera is restricted or limited to volume or rates that are within the limits of historical use and existing permit conditions. In other words, even if an applicant is proposing to remain within the limits of their historical usage and existing permit conditions, the ability to set alternative conditions within those limits, controlling the volume or rate of take is reserved.

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THE COURT: JUDGE BORTHWICK

Q. So what does that mean?

A. So what that means is the – this is a matter of control, so it's something over which the Council has reserved its control.

5 Q. Yes.

A. And we start out with the words, “within the limits of historical use” –

Q. Yes.

A. – “and existing water permit conditions” so the control is reserved to being within the limits of historical use and existing water permit conditions.

10 Q. Yes it is.

A. Yes.

Q. And so – and you've got a problem with that? Your client's got a problem with that?

A. My – the concern I'm raising is potential ambiguity –

15 Q. Yes.

A. – I would have thought that the matter of control is to ensure that any rates of take which are outside the limits of historical use are addressed, so once the control is – once the proposed use is consistent with the historical usage, then it's a controlled activity and I – my understanding based on the evidence which was filed was that this was intended to be a roll over of actual usage and if that is the intent, then I'm just concerned that those – that wording may have introduced more ambiguity than what was intended.

20

Q. So let's just have a look at that. So you've got entry conditions for that controlled activity addressed in subparagraph (a) and (b) so it's a permit currently authorised under – activity authorised under a deemed permit and (inaudible 15:51:28) use of surface water and that is a controlled activity provided certain conditions are met including Roman numeral (iv), the rate of take is, shall be no more than the rate of take recorded in the water years and Roman numeral (vi) volume of water shall be no more than the daily volume or monthly volume or annual volume in the water years and so Council comes to reserve control and I think the issue you're raising is whether the Council's got the right matter of control so you've got – you've already got a qualifying, an activity which is qualified

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because it's in the en- satisfied the entry conditions, so why do you need this matter of control unless the matter of control is actually because somebody is trying to take a bit more than the historical use, is that your argument?

5 A. Yes and that's clearly something that needs to be controlled if the actual amounts that are proposed don't reflect the historical usage and that must be a matter of control that Council -

Q. Is that a matter of control inasmuch as the answer could be yes or is that a matter of control as in, look, if you are found to be outside of the historical use, then you've got to bring yourself inside the historical use?

10 A. That's right.

Q. But aren't we already inside the historical -

A. We should be, yes.

Q. - use because of the entry conditions?

15 A. Yes.

Q. Yes.

A. So I think part of the difficulty is around the words, "the limits of historical use" and I'm not entirely sure what that means, so if someone's historical use, the daily limit is or the daily actual usage is, a number is arrived at, for argument's sake it's 100, then are the limits of historical use anywhere from zero to 100? Is that the limit and within that is something that is being exercised control over? I would've thought that the Council is reserving its control to ensure that the volumes and rate of take are consistent with the historical usage.

20 Q. I shall just confer with my friend. So just thinking about it (inaudible 15:55:25) -

A. Yes.

Q. - so are you saying if you're through the entry conditions -

A. Yes.

30 Q. - there is no longer a matter of control which the Council needs to be exerci- you know, turning its mind to because you're either satisfy the entry conditions or not. If you can't satisfy them, then you have to look somewhere else, maybe an RDA, D or -

A. Yes, yes.

Q. – non-complying activity. Then on the other hand if you can satisfy the entry – this may be how the Council’s thinking, okay so you can satisfy the entry conditions but the matter of control allows us to put a condition on a resource consent that pins you down on the rates of take etc.

5 A. Right.

Q. Right, so that could be – that might be what they’re thinking. Is that what you’re thinking?

MR MAW TO THE COURT: JUDGE BORTHWICK

10 A. Yes it is and whether the wording is making it abundantly clear that that’s the purpose of that matter of control –

Q. Yes.

A. – my preliminary view is the wording could be improved to ensure that clarity.

15 Q. I think it’s been your thinking or he’s signalled –

A. Yes, yes.

Q. - that is, yes.

A. I put a question to one of the witnesses that perhaps the purpose of it was to enable or to give the Council the ability to impose a condition reflecting those rates of take.

20

Q. Yes and that’s how you see a controlled activity –

A. Yes.

Q. – and the matters of control. It allows us to control –

A. Yes.

25 Q. – via conditions on a permit –

A. Yes.

Q. – and that is actually making it absolutely clear that –

A. Yes.

Q. – that this is it.

30 A. To avoid the very argument that sometimes occurs from an applicant saying the Council has no matter of control within which it may then impose a condition and that argument has been run before and it’s an argument which will be shut down in the drafting if that can so be achieved.

Q. Yes. Okay.

THE COURT: COMMISSIONER EDMONDS

Q. That was the intention?

A. Yes.

5 Q. And so the drafting could leave these question marks.

THE COURT: JUDGE BORTHWICK

Q. Could be improved?

THE COURT: COMMISSIONER EDMONDS

Yes.

10

MR MAW:

Insofar as there's a concern that the Council is retaining control to reduce back or claw back.

THE COURT: JUDGE BORTHWICK TO MR MAW

15 Q. Or even allow more?

A. Or allow, well yes or allow more, it's simply there to give the Council a platform to impose the condition –

Q. A condition, yes.

A. – reflecting historical use.

20 Q. Yes.

THE COURT: JUDGE BORTHWICK

Q. So with that in mind, is that how you're thinking it should've been used but actually the wording could be improved?

A. Yes. That is correct.

25 Q. Okay.

A. And my learned friend used the word "reflecting" twice in the answer and that is what I would've thought the matter of control was about, ensuring that the volume and rate of take reflects –

Q. Historical.

A. – the actual, historical use -

Q. Yes, and, yes -

A. - and not an opportunity to claw back within some sort of range –

Q. I see, yes.

5 A. - that's identified as historic use –

Q. Okay.

A. – and thereby impose further restrictions –

Q. Yes, or, yes.

A. – and I don't think that latter interpretation was the intention –

10 Q. No, no.

A. – but I'm –

Q. Okay.

A. – the concern I'm simply raising is that there's I think the wording could be improved and could be tighter to ensure that it reflects that intention.

15 **THE COURT: COMMISSIONER EDMONDS**

I mean I have seen rules that have entry conditions that then allow control or discretion basically to what you might consider overriding being true conditions, so it's a matter –

THE COURT: JUDGE BORTHWICK

20 Yes and you don't want (inaudible 15:58:41) either way.

THE COURT: COMMISSIONER EDMONDS

Yes, clearing up that that's not the intention.

25 **MR VAN MIERLO:**

Well in my submission this is quite a crucial point in terms of this plan change and it's obviously engendered a lot of thought, and a lot of issues, so it's not an area where there's room for ambiguity and I think the plan change needs to be clear on that.

THE COURT: JUDGE BORTHWICK

Q. Okay, so the matter of control A, well any, is not to allow – oh is to allow
a condition on a permit reflecting historical use during the – historical use,
it's not to allow if you like, ORC to impose a condition which is less than
5 historical use or indeed more than historical use, so, yes.

A. That's correct.

Q. Or I suppose if you reserve a discretion as to what historical use is, is –

UNIDENTIFIED SPEAKER:

10 (Inaudible 15:59:43).

THE COURT: JUDGE BORTHWICK

Yes.

MR MAW:

15 It's not a definition.

THE COURT: JUDGE BORTHWICK

No.

THE COURT: COMMISSIONER EDMONDS

No.

20

MR MAW:

It has a bearing perhaps on where the schedule lands and the need to ensure
that there's very careful alignment in terms of the phrasing used.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

25 Q. Okay, all right. Very good. Now again with that in mind, how does that
get picked up for the expert conference, you know, if it's a valid point
because I know you've been exploring all sorts of points and I'm saying
largely nothing, well apart from the things that we've been interested in,
and I'm saying nothing about that in the minute, so if this is important, and

I know you've noted it before in cross-examination what are we doing here?

1600

THE COURT: COMMISSIONER EDMONDS

- 5 Well actually we have included it in our questions and our draft minute. So I think I might tweak it slightly but I think that it is covered off.

THE COURT: JUDGE BORTHWICK

So, it's – okay, but there may be other things that we have not divined but are on our mind, yes.

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

A. Chicken and egg as to whether you show us your list first or we show you our list of questions.

- Q. We are going to show you our list of questions and as I said we'll do that today but of course there has to be an agenda set for the expert conference expert conference and experts themselves have a fair idea about what was outstanding but counsel may also have to co-operate and you there probably need to be really directed in terms of getting experts to thing about the matters that are in issue that need some consideration. Through the agenda.
- 15

- 20 A. Yes, so hopefully most of them are picked up, but then, yes, through, I think through the agenda.

Q. Yes, if we don't have it, you'll have it through the agenda setting process?

A. Yes.

Q. Okay.

- 25 A. Provided it's very clear to parties not to, for example, go into some of those places the Court signalled it will simply make a decision on, because I foresee some parties saying, "Oh, okay we'll put the discretionary activity we're pursuing on the agenda for conferencing and I am not persuaded that conferencing will resolve any differences on that.

- 30 Q. No I think we've been consistent to the extent but with only one exception and that's the exception for the Stranded Asset case –

A. Yes.

Q. – and that’s the only exception that we are making. We will look at that.

A. Yes. So if that comes through clearly and as long as other matters that remain at large are hanging off of that more limited range of matters, and
5 also and just thinking about the issue we’ve just been talking about, that’s something that’s come back from the planners’ interpretation of the conferencing that the technical experts undertook and it may well be that there’s some further –

Q. There’s an issue there.

10 **THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS**

Q. Can you flag that? Well have we flagged that one yet, the –

A. Sorry, I didn’t quite get what it is that –

MR MAW TO THE COURT: COMMISSIONER EDMONDS

15 Oh right, so the issue we’ve just been speaking about within the limits of historical use was the planners’ interpretation seeking to reflect that which came out of the technical conferencing and my recollection is there’s still some feedback taking place in terms of whether, what the planners interpreted the technical experts to be saying has been reflected in the drafting.

20

THE COURT: COMMISSIONER EDMONDS

Yes we have, we did pick up at least one point this morning (inaudible 16:03:14) that, or two points.

THE COURT: JUDGE BORTHWICK

25 Two. Yes, we’ve got two parties -

THE COURT: COMMISSIONER EDMONDS

But there may be other points.

THE COURT: JUDGE BORTHWICK

- who have a different understanding of the RDA than the planners.

MR MAW:

Now I'm somewhat comforted by Mr de Pelsemaker's presence here because he has been listening of course to all of this, so in terms of some of the other
5 issues that I've been flagging in cross, Mr de Pelsemaker will have somewhere in his mind that there may need to be some further discussion with the planners about those.

THE COURT: COMMISSIONER EDMONDS

So we have picked up on the existing infrastructure that was in the JWS primary
10 production statement as came out of the cross-examination this morning, so we definitely reflected that.

THE COURT: JUDGE BORTHWICK

Oh yes and also Mr Reid's –

THE COURT: COMMISSIONER EDMONDS

15 In terms of the historical use point, yes.

MR MAW:

Yes. Okay, well –

20 THE COURT: : COMMISSIONER EDMONDS

So we're trying to pick them up as we go along, but that isn't to say that the agenda couldn't pick up things that Mr de Pelsemaker, for example, might have noted along the way.

THE COURT: JUDGE BORTHWICK

25 Yes.

MR MAW:

Yes.

THE COURT: JUDGE BORTHWICK

Okay, so, yes it's just our questions, and as we clearly say, there'll be other questions from the technical people's perspective and also for the agenda as well to be set, consultations, counsel, only difficulty that, only tricky thing is why
5 planners are picking up these signals on the RDA differently, whether it pertains to historical use or not but there seems to be a communication issue there about which we have no particular view, but there seems to be a communication issue there.

10 MR MAW:

It's clear there's a difference of understanding as to what the RDA is doing and
–

THE COURT: JUDGE BORTHWICK

Yes, yes.

15

THE COURT: COMMISSIONER EDMONDS

Well also, perhaps not with all the planners and all the technical people because we've only had the opportunity to ask questions of some of them, so we're not sure whether everyone's on the same page necessarily.

20 THE COURT: JUDGE BORTHWICK

But at last two of them are not.

MR MAW:

We know that, yes, in light of the questions I've been putting in terms of its –

25 THE COURT: COMMISSIONER EDMONDS

Yes, yes, have highlighted those issues, we had noted them Mr Maw.

MR MAW:

There may be others is the ...

THE COURT: JUDGE BORTHWICK TO MR VAN MIERLO

Q. Okay, sorry about that. Mr Van Mierlo you make a good point and I'm just asking how that point then gets picked up. If it's not been picked up by us because we've already heard it in other cases, then it will be picked up if you like in the agenda setting process which Mr Maw will be in consultation with everybody about, (inaudible 16:05:49) set an agenda, Council, Regional Council gets everybody's items onto the agenda within the boundaries set by the Court.

A. And in essence that was exactly what I was going to propose your Honour that it be something that further conferencing could usefully focus an intention.

Q. Okay, all right.

A. So that's where that was actually heading to.

Q. Okay, good, yes.

A. I think that takes us to paragraph 33 and we're looking at Controlled Activity Condition. This is related to the land area under irrigation and the specified dates, the wording as set out in the 8 April version is supported, specifically the revision and updating of the dates for assessing the maximum area irrigated to 1 September 2017 to 18 March 2020 addresses the concerns earlier raised by AONZ in relation to the notified version as it enables consideration and more recent increases in irrigation area than were able to be considered under the notified plan change, the wording enables changes in irrigated crop type, for example, pasture devines provided the overall maximum area irrigated does not increase above that irrigated in the relevant specified period and such an approach is appropriate and is supported. It is noted that some parties seek the deletion of this subclause and AONZ would not be opposed to its deletion but would oppose its amendment if that were to lead to any further restrictions or reduction of the area that could be irrigated under the controlled activity replacement consent. I turn next to controlled activity condition 10A3114 and this is where the specified dates have been replaced with reference to water years, 1 July, 30 June for which water meter data is available and this amended wording as set out in the 8 April version is supported and specifically the focus on utilising all available

annual water meter data is considered appropriate. This resolves a concern raised by AONZ in its submission on the notified plan change, that the arbitrary dates referenced in the notified version were prejudicial and ignored relevant data.

5 Q. Now we will be directing questions on that point and it's – although there's different views across the panel, my view at the moment is that there's some need for further finessing, work on that, so we can, if it is open ended, that we are only dealing with current infrastructure and you would have heard –

10 A. Yes.

Q. - examination of Dr Davoren about that and that certainly seems to be consistent with the primary sector, JWS, paragraph 16 and then at the other end, so that's not capturing historic water hungry activities, but just current infrastructure and then at the other end the, you know, the no future date, again, well what's the method to test that there are not unscrupulous practices dealing with ramping. So there seems to be some thought that needs to go into that, so there's a risk, I don't think, I'm not suggesting by any means everybody will get into that, but it certainly has been noted in this region that some people do practice those behaviours.

15
20 A. Yes and I think in listening to the discussion prior to lunch, you had the illustration of McArthur Ridge where the infrastructure was all installed in one go back in the early 2000s. Manata Estate is an example at the other end of the spectrum where the substantial dam infrastructure was commissioned in 2019, so there is now, whilst there's quite a number of years of good water meter data in terms of take under the deemed permits, in terms of under the existing infrastructure there's only one year of frost fighting water records. Two years of irrigation under the new (inaudible 16:10:11) sought irrigation infrastructure. So that will potentially have quite an impact, depending on how the numbers come to be analysed.

25
30 Q. Mmm. So there needs to be some thought, I guess around people who have a short data record, (a) whether they can avail themselves easily of the controlled activity or needs to be some thought around the short (inaudible 16:10:37) or even under the controlled activity or do they just

go into the RDA pot with what sort of information or evidence would need to satisfy the council as to the water demand, if the historical record is not long. So you know, we've talked about what that could look like. That could be, maybe Aqualinc but it could be other things as well, like
 5 Dr Davoren was making some suggestions about that today. What is the object to the evidence – what consists objective evidence?

1610

A. Yes.

10 Q. Yes and again so that you know whatever result you get from the council it's predictable --

A. Yes.

Q. – under a methodology.

15 A. Yes. And even down to issues like well what is existing infrastructure? So if for example, a vineyard is planting an additional hectare of vines and that there is going to be irrigation support for those vines, is that new infrastructure? To what extend to...

Q. Well that's the route that McArthur was dealing with, if it's already got irrigation infrastructure main you know, the horizontal mainline in the ground.

20 A. Yes.

Q. Then there may be a pathway through for that. If that's already been committed to. But if you're saying let's talk about irrigation treat- with increasing areas and increasing water, then I expect this plan's not probably not, you know the 8th April version is not talking to that or speaking to that.

25 A. No and indeed and the discussion around the horizontal infrastructure was in relation to one of the controlled activity gateways in terms of irrigated area so that's under 3. Whereas the water meter data is and the potential limitation of that to existing infrastructure is under Romans IV and VI of –yes. And it...

30 Q. What's the point you're making about the additional hectare? Are you talking about being – yes, is that the same point that's been made by McArthur. It's got irrigation in the ground or you saying, extend the

mainline. We want the opportunity to extend the irrigation area by expanding the irrigation infrastructure?

A. The point I'm making is simply that if we tie the water meter data down to data whilst the existing infrastructure is in place –

5 Q. Mm.

A. – we need to be clear as to what existing infrastructure needs to be there because infrastructure, I mean there's – on a working farm, on a working horticulture / viticultural property, things will change over time. At what point do we lock it in to say well, "this water meter data is relevant and able to be considered" –

10

Q. Mm.

A. – "this water meter data is no longer relevant and considered because you installed a different irrigator on that date".

Q. I don't know. What yours?

15 A. Where would you, I know. And...

Q. Yes, but you see, I don't know unless you can put some relief before me. What were you thinking? Yes, what are you thinking?

A. I'm just thinking and I've only just come aware of this issue because it only came to light a couple of hours ago.

20 Q. So, this – so the McArthur avenue is not necessarily relevant to your client but you're saying, "well actually it needs a bit more thought" than just the policy amendment and Rule as proposed by Mr Reid?

A. In terms of the horizontal pipelines issue, that's not relevant to AONZ at all. That relates to the maximum irrigated area and there were no issues associated with that for my client. My client looked at and we've discussed the wording in the joint witness statement of 8 April and that was and is supported. As set out in the submissions but this morning, understand now that that's going back to caucusing and there may well be further changes to that in terms of the way that water meter data is deemed to be relevant or not.

25

30

Q. You mean in – (inaudible 16:15:07) control number 6?

A. Control 4 and control 6. Yes.

Q. There needs to be some discussion around the current set of irrigation system. So you're not taking in water year data from an inefficient system

which has a high level of demand which in no way actually represents what you're doing on the ground?

A. Yes.

Q. How that's reflected, I don't know but it's an issue.

5 A. Yes.

Q. And we're going to record it's an issue and if we don't then I expect Mr Maw will because he's been pursuing it in his cross-examination. And then at the other end, as I said there's a question around ramping behaviour. So it's – if you don't have an end date then it's testing for ramping behaviour, yes.

10

A. Yes. And so the point that I'm making I behalf of AONZ is that unlike McArthur Ridge there are entities out there who have invested recently, who will get potentially affected by these changes.

Q. Again I don't – I'm sorry I don't what you're saying in terms of what relief you want. Or are you just saying, where if you change from the 8th April document then we might mo– we could be adversely impacted you know if it goes back to conferencing?

15

A. I appreciate it's going back to conferencing and I don't know. I can't comment on what comes out of conferencing...

20

Q. Yes but I'm still not sure what your concern is. What is it that you foresee and that's troubling for your client?

A. So the existing water records...

Q. Yes. Can be very short, is what you said.

A. They can be –

25

Q. Yes.

A. – depending on how this is changed and currently they're quite long and they go back over a five-year period. And they support the activities of irrigation frost fighting of vineyard. We only have one year of frost fighting record and it wasn't a cold year. So depending on how the records are then used that may or may not reflect the water needs, going forward. And I don't know if I can take it any further.

30

Q. Well, I don't know what *relief* you want.

A. No.

Q. That's the fundamental issue is I don't, you know, I think you're saying – are you saying we're happy with Roman numerals IV and IV –

A. Yes.

Q. – now? As they presently stand but if they change, we may not be happy?

5 A. That's...

Q. That's all you're saying but you don't know, okay.

A. So the version that – what I understood was the most up-to-date, the 8 April version, we're happy with that. And I've confirmed that. Understand that may well change and I can't comment on how –

10 Q. No.

A. – it might change. I can merely signal that it may well be relevant for my client.

Q. Yes, I think I understand which of course comes back to the importance of having scenarios which are actually representative. You can't have everybody tested but you know scenarios that are actually representative of yes, real life irrigation on the ground. Yes. Okay. Happy now, may not be later. May not be later. I can't do anything about that because you may still be happy in the future.

A. Yes.

20 Q. Even if it changes.

A. Yes.

Q. Or you may not but you do have a question to examine Mr de Pelsemaeker and I suspect other witnesses, depending on where that lands? Mmm.

25 1620

A. Yes. And until we see where it lands it's a bit difficult to comment further, I'm sorry. I think that takes us paragraph 38. "This will provide for the restricted discretionary activity pathway for instances where the rate of volume or take exceeds the rates calculated under schedule 10A4. This approach is considered appropriate, provided the circumstances where a wider discretion to consider other relevant matters and data to support calculation of historic use is required. Again the terms are limited to a maximum of six years and then the default position is non-complying activity for applications that did not meet the conditions of clause or

applications that did not meet the conditions of Clause 10A311 and 10A31A1, in particular any applications seeking a longer term than six years will be processed as a non-complying activity. In terms of the gateway test in section 104D the director policies in Plan Change 7 regarding term would not be met by such an application accordingly any non-complying activity application would need to demonstrate this adverse effects on the environment would be no more than minor and as an interim planning framework, until such time as longer term consents can be sought under revised regional plan AONZ accepts this framework as being appropriate, accordingly it no longer seeks a discretionary activity pathway for consent applications over six years' duration under Plan Change 7. Turning to other matters, priorities, permits held by AONZ include priorities, they have priorities over some other deemed permits and some other deemed permits have priorities over them. I have instructed that priority issues have not arisen in practice in relation to these deemed permits, at least not in recent years and it's noted that Council considers that priorities are not currently a condition of consent and they are not enforceable by the Council. As such, Council does not propose to include existing priorities as a matter of control or discretion, rather it says that to the extent that existing priorities had been exercised in the last five years, this will be reflected in the actual use calculated in accordance with Schedule 10A4. So that in practice, status quo will continue. Now AONZ accepts this approach and considers it will be difficult, if not impossible to draft a rule regime that accurately rolled over existing priority rights in an enforceable manner as conditions of resource consent, however, the Council's proposed approach and Mr de Pelsemaker's comments noted above, do serve to underscore the need to ensure that the actual volume and rate of historical water usage as calculated under Schedule 10A4 is accurately reflected in the rolled over consents issued and is not subject to further control or discretion by Council officers when replacement permits are processed. I've noted in paragraph 45 that it's appreciated further changes to the 8 April version, May perhaps I should have said will be proposed, the planners' conference appears – it appears that the planners did run out of time and

that further conferencing is to be scheduled. Now I've noted there, there are further relevant developments on the horizon, for example, the notification of the RPS, at least potentially and I have respectfully sought the opportunity to submit to the Court further in a limited sense on such matters, we've discussed that and I appreciate the Court's concerns and reservations. In conclusion, Plan Change 7 has evolved significantly since public notification, a number of changes incorporating into the 14 March version and the more recent 8 April version have addressed matters raised in the AONZ submission. In light of these changes and the move towards a clearer procedural rollover of deemed permits to resource consents, AONZ are supportive of the intent in the general drafting of the 8 April plan change version. Fundamental to achieving the intent of the rollover is the notion that actual historic use will be reflected in the rate and volume of water able to be taken under replacement consents. The wording of matters of control 10A311(a) and 10A31A1(a) in my submission is potentially ambiguous and should be reviewed to ensure the rates and volumes of actual historic water use as calculated under the schedule are not able to be reduced through the intended rollover process, but subject to addressing that issue, the wording in the 8 April version would resolve issues in AONZ' submission.

THE COURT: JUDGE BORTHWICK

- Q. That's excellent. I feel like saying success for one.
- A. Well, yes I mean optimistically so, but I'm also very conscious that there is further changes on the horizon and that obviously –
- 25 Q. There is.
- A. – is something that we're very interested in and whether there's an opportunity to efficiently –
- Q. Yes.
- A. – comment further on that, that would be greatly appreciated.
- 30 Q. Yes and you'll have to work in with Mr Maw when he – when we talk about the process to come, the agenda setting.
- A. Yes.

- Q. The agenda setting for that conference which is coming up upon us screamingly quick, some time over the next two weeks and so there's the contribution can be via that. Contribution can be via cross-examination and I mean it can be by closing submission, but I do think it is – that's difficult save in relation to legal issues?
- 5 A. Yes.
- Q. Perhaps, it's, yes.
- A. No, I would certainly accept that last comment that any closing submissions need to be limited to legal issues.
- 10 Q. Mmm.
- A. I wasn't trying to suggested otherwise.
- Q. Yes, that you'll do some drafting on the way because it's, yes as I said, it's difficult drafting in legal submissions because then it hasn't been tested by –
- 15 A. Yes.
- Q. – the planners, yes.
- A. Yes. I mean that said, and my submission is that counsel can comment on drafting issues and if there is, as I've endeavoured to point out, a potential area of ambiguity, I mean that's legitimate comment for counsel that I do accept that we've got the benefit of some very experienced planners in this process and we need to utilise them.
- 20 Q. Okay, no that's good. I understand where you stand and your client's obviously got a lot to say about deemed permits because we've signalled our interest in that.
- 25 A. Yes.
- Q. Just really trying to get some evidence from people who are impacted or potentially impacted by the exercise of priorities?
- A. Yes.
- Q. What is the impact, if there's no impact, why is there no impact? So just trying to get a sense for scaling the significance of any issue arising from their expiry on 1 October?
- 30 A. Yes. So Mr Paulin obviously is available to speak to that –
- Q. Good.

- A. – in terms of his experience, but the one comment I would make from having discussed it with him, is it may be that Manata Estate’s example is a relatively simplistic scenario in terms of deemed permit priorities as opposed to some others that are out there.
- 5 Q. Yes and we are trying hard to try and get the range of experiences -
- A. Yes.
- Q. - I mean we’ve encountered somebody where he’s the only deemed permit holder so, therefore, he has to, well I think talk to himself and his mother he said. So that wasn’t going to be hopefully too difficult?
- 10 A. Yes.
- Q. But that’s not everybody’s experience –
- A. No.
- Q. – and so we’re trying to get a handle on what is the scale and significance of this issue?
- 15 A. Yes.
- Q. Therefore, should there be a response here or somewhere else, yes?
- A. And it does seem to be very fact specific in terms of –
- Q. Yes it does.
- A. – particular context -
- 20 Q. Yes.
- A. – from what I can gather.
- Q. Okay.
- A. So I’ll call Ms Paulin?
- Q. Please.

25

MR VAN MIERLO CALLS**NICHOLAS JAMES PAULIN (SWORN)**

Q. Your full name is Nicholas James Paulin?

A. Correct.

5 Q. And you are the estate manager at the Manata Estate Vineyard?

A. Correct, yes.

Q. You prepared a statement of evidence dated 5 February 2011?

A. Correct.

Q. Sorry, 2021, sorry?

10 A. Yes.

Q. Do you confirm that to the best of your knowledge that the statement of evidence you prepared is true and correct?

A. Correct, yes I do.

15 Q. Do you have a brief summary of the key points raised in your statement of evidence?

A. Yes I do.

Q. Could you please provide that brief statement and then answer any questions from my learned friend and from the Court?

1630

20 A. Thanks Dean. So just quickly, I have worked for the company for three and a half years and that's since the owners purchased the property. In that time we've converted to certified organic production, fully certified as of 1st of April. The property has produced previous to our ownership award winning wine. It's got the potential now with our increased
25 plantings to produce up to \$5,000,000 worth of wine off 10 hectares, so it's a fairly – we're aiming at the top end of the market for what we're doing, we've invested a substantial amount in a new irrigation and frost system. That's north of \$1,000,000. We intend to run our irrigation system sub-surface. So burying the dripline underground in the middle
30 of the row. The main benefit of this, is there's less weed competition with the vines. It's easier for us to manage and it's a more efficient use of water. We have less evaporation loss and we're intending to run an off grid system where we're running on solar system and it means we're be able to irrigate during the middle of the day which otherwise wouldn't be

possible in a surface-based system. We have installed all of this in the 2019 / 20 season. The dam was commissioned in 2019 in October and we've had two full seasons of irrigation and one season of frost fighting. One of the, I guess key points from our earlier submission that has been addressed is that the – I'm struggling for words, the view of data changing to more recent seasons is much, we appreciate that. One of the other concerns with us is the short-term duration. With wine we see from other areas of the world that vine age and wine quality peaks at around 20 years. A consent of six years wouldn't allow – it would provide a barrier to investment in a property such as ours and we see that in the, I guess in the region that there was a large planting of vines in the early 2000s and now we're seeing the, I guess the fruits of those investments. And there's some award winning wines that come out of Central Otago from those properties and that's pretty much it. I think and yes.

15 **CROSS-EXAMINATION: MR MAW**

Q. What sort of grapes are you growing?

A. Point noir and Chardonnay.

Q. Very good. I have some other questions as well. The transition towards the use of the property as a vineyard, my reading of your evidence, correct me if my understanding's not quite correct but when the property was purchased it was fully under irrigation but for pasture, was that? What was happening?

A. There was three and a half hectares of existing vines.

Q. Yes.

25 A. That was planted in 2000 and then the rest of the property was pasture, irrigated. I guess one –

Q. And so...

A. – point just to previous to the vines being there in 2000 it was flood irrigated also.

30 Q. Yes.

A. So the – the Westmoreland race passes through the property and that's I guess 150 years' worth of irrigation.

Q. Was that border dyke irrigation or this thing of wild flood irrigation?

A. Not formal border dyke and probably not wild flood. There are channels through the property but not a formal border dyke as such.

5 Q. So when you think about the maximum area of the property irrigated between 2017 and 2020, the entirety of the property was irrigated in that window of time?

A. Excluding the north-side of the creek. So where's there's about – the Lowburn runs directly through the property and there's about four hectares on that side that has no access to water.

Q. Right. Whereabouts is the pond which side of the river is that on?

10 A. South-side. Yes.

Q. So the shift towards a vineyard and the inclusion of using water for frost fighting that's a more recent change?

15 A. Yes, I guess in the design of the property we chose to use water as the most effective form of frost protection that we could. The katabatic frosts that do occur, water's the only solution.

Q. So those are the – where you don't have an inversion –

A. Correct.

Q. – (inaudible 16:35:11) a bush down.

A. Yes.

20 Q. So you're left with water as that option?

A. Yes.

Q. When you put in the infrastructure for the property was all of the underground infrastructure laid at the same time or was it being staged?

25 A. Yes. No, we've done – everything was 2019 except for the existing vineyard we tapped into that but all of this new development has been 2019.

Q. Right, so irrigation mains for both irrigation and frost fighting were laid?

A. Correct.

Q. And that's underground infrastructure?

30 A. Correct. Yes.

Q. Two separate pipes –

A. Yes.

Q. – just in terms of the sizing?

A. Mhm. Yes, as Tony discussed this morning our frost system pumps at 125 litres a second and irrigation's, seven litres a second. So, it's, a 300 mil pipe versus a 80.

Q. Sure.

5 A. Yes.

Q. Now, I understood from your counsel that there are water metering records available for the property but those records would relate to the previous uses on the property.

A. Correct. Yes.

10 Q. And when you think about those records, is it fair to say that they perhaps don't close to recognising the volumes of water that you will require for the new use?

A. They don't recognise the volumes for frost fighting. I think that's our concern. For irrigation we're comfortable with the buffer we've got, with the dam but for the frost period, that's the anxious part.

15

Q. What sort of magnitude or what sort of level of difference in terms of volume does the frost fighting require?

A. So, yes, so 125 litres a second and versus seven. So that's – 12 times.

20 Q. Mm and how many hours a year to you estimate frost fighting might be required?

A. I think in my 16 years, probably the average per season would be about nin– eight or nine events and any, say eight hours a night.

Q. Yes.

25 A. So, and then that's as an average, you know some years are worse than others.

Q. Yes. And when you think about the buffer that's created by the storage pond in a sense, is that pond, trickle-feed by the irrigation race, is it a gravity take –

A. Correct. Yes.

30 Q. – just off the race?

A. Yes.

Q. Prior to the installation of the storage pond, if the water wasn't required for irrigation then presumably the gate would just be closed and the water would be bi-washed back into the Lowburn.

A. Back into Lowburn. Yes. And we have a system now as well, we can, if there's a flood or we don't need the water we can shut the gate and put it in back into Lowburn.

5 Q. And in terms of the takeout from the gate or from the race, is that metered?

A. Cor– yes it is. Yes.

Q. So is that a piped, is it piped or is it metered through the race?

A. It's a open channel.

Q. Right.

10 A. Open channel, meter. Yes. An open channel race for majority of it.

RE-EXAMINATION: MR VAN MIERLO

15 Q. You were asked by my learned friend that water records that you hold would relate to previous activities on the property and my recollection was you said that they did. Do you have any records that relate to current activities with current infrastructure?

A. Yes, so we've got records from 2019 since it was installed.

THE COURT: JUDGE BORTHWICK TO MR PAULIN

Q. As a matter of interest what road is your vineyard located on?

A. Mmm, it the major frontage is Swann Road.

20 Q. Swann Road up the Lowburn Valley?

A. Yes.

Q. Okay. So my question was do you, in terms of frost fighting, do you take water out of storage for that particular purpose or do you – are you taking it straight out of the race?

25 1640

A. No it comes from the pond. From storage.

Q. It comes from the pond. And is that because the rate of take would exceed that which you could draw from the race directly?

A. Yes. So we're currently 23 litres a second.

30 Q. Yes.

A. And we're pumping 125.

Q. Understood. So you've very much like the previous vineyard McArthur?

A. Yes, mhm.

Q. And that's why it's important to have both the rate of take and the daily and monthly volumes –

A. Correct, yes.

5 Q. – there reflecting different usage and in combination storage?

A. Mhm, correct.

Q. So I'm very interested in deemed permits and why that's not a problem for you?

10 A. I guess in my – I guess my experience is limited to three years with this property, so I guess we're privileged that the previous, or not privileged (inaudible 16:40:58) – the previous owners and I can't remember the exact year, they restructured the way the permit was operating, so previously it was one point of take for six shareholders and there was unreliability issues with the race and a neighbour who was very cautious with people entering his property, should I say?

15 Q. Mhm.

A. It involved guns normally, so they decided that they need to break up the way the permit was utilised and so we've now got our own point of take and sole use of a water race. The other permit holders take from different locations and they've shifted downstream and there's three from one point, we have the highest priority, so we're upstream of the people that we have priority over, so has caused us no issues.

20 Q. Because you're upstream?

A. Yes and the people upstream of us have not caused any issues, so we've never had to deal with it, and I think, I guess talking to the land owners next door who have been there for 25 years plus, there's never been an issue with the creek running low enough that they've had to start to divvy up the water and I think, I guess personally for me and when it comes to that point is being neighbourly about it, I think the no dickhead policy, excuse my language if I may –

30 Q. That's all right.

A. – that really, for me, is part of the process of being neighbourly and dealing with those issues.

Q. Yes, you mean in terms of any potential reliability issue from the upstream lower priority takes?

A. Yes so I mean I guess in a small community I think we're lucky at the moment that we all get along and we all know each other so I wouldn't see it as being any issues and I guess our – the way I see it for us in terms of priority, our peak need is Spring time for frost protection.

Q. Yes.

A. Which is not a time that pasture is generally being irrigated as much as it does say the end of January when we are back to just irrigating.

10 Q. So in that sense your peak Spring time for frost fighting doesn't compete with your neighbours demand for a water for irrigation for pasture?

A. Yes, correct.

Q. Yes, okay. And the creek that you're taking off, is that the Lowburn or something else?

15 A. The Lowburn.

Q. It is the Lowburn?

A. Yes.

Q. And it's the Lowburn through the Westmorleand race?

A. Correct.

20 Q. The race is owned by who?

A. The race is – that's a tricky one, we've just uncovered, so the race is, we have an easement to use the race through the neighbours properties.

Q. Oh yes.

A. Section 417 I think is correct?

25 Q. Yes it's another deemed permit but it's a land use right I think, yes.

A. Yes.

Q. A section 417.

A. Yes.

Q. Okay.

30 A. Yes, we're just, yes, going through this consenting processes, been a learning experience.

Q. So you have an easement, is that land use right is to – does what? This is something I've only just recently encountered, so the easement allows you to run –

- A. Convey-
- Q. – structures –
- A. Yes.
- Q. – over your neighbours land to a point of take off the race?
- 5 A. Correct.
- Q. Oh yes, off the race?
- A. To a – where it goes into our property.
- Q. Yes, (inaudible 16:45:25) a take point? Yes.
- A. So a right to convey water.
- 10 Q. Right to convey water over land, okay.
- A. I think is how it's – and it's like a six metre strip I think is the – and then we have to – I guess is it a use and maintain right? So we have to maintain it as well.
- Q. You have to maintain what though?
- 15 A. The water race.
- Q. The water race? Okay. So everyone taking off the water race has an obligation to maintain that water race and (inaudible 16:45:50) -
- A. But we're the only, so we're the only users of that section of race, so it's, it's a kilometre of race that we maintain ourselves.
- 20 Q. Okay. But if there were three takers at a single point which I think there is, that you've described that, do they sort of divvy up?
- A. They divvy up the max, so they take to a, what I guess is a gallery beside the creek –
- Q. Oh yes.
- 25 A. – and they pump from there, so their maintenance is a lot less than ours to maintain a kilometre of water race.
- Q. Yes. And who else is on that race?
- A. There's no current users on the section that we –
- Q. Yes.
- 30 A. – we take or that we use.
- Q. But there's some upstream users off the same race?
- A. No.
- Q. No, okay.
- A. Off the Lowburn Stream.

Q. Off the west and yes.

A. The west, there's a section of Westmoreland on the other side of, the northern side of the Lowburn that there's other users but we have no connection to that.

5 Q. But insofar as they're downstream from you or –

A. They're upstream.

Q. They're upstream from you and when you say you've got no connection what does that mean?

10 A. We don't use that section of race so we have no dialogue with them I guess.

Q. So in my mind, and I've obviously got the wrong picture, that the Westmoreland race is a continuous race?

A. Yes.

15 Q. Open race of water and that might be wrong if you've got, if, yes when you say you've got some upstream people on the northern side of the Lowburn, yes. Is it a continuous race, if there's two races branching races?

20 A. It's a con- I guess it's described as a continuous race but our permit we're using allows us to take water six metres upstream of the Westmoreland race.

Q. Mhm.

A. And divert it into the Westmoreland –

Q. I see, yes.

A. – and carry it in that race to our property.

25 Q. Yes, yes.

A. There's another section of Westmoreland that goes upstream of us that we have a permit for but we don't use.

Q. Yes.

30 A. So we, the permit we're working under, we couldn't physically connect to it.

Q. So there's all sorts of –

A. There's a lot of –

Q. – different arrangements of races -

A. – rabbit warren.

- Q. – and permits. So you've got a permit, the permit allows you to push water into - a deemed permit allowing you to divert water into a race –
- A. Mhm.
- Q. – and you do that to supply yourself?
- 5 A. Mhm.
- Q. And that generally speaking there's been no difficulty with reliability of flow in the Lowburn to date?
- A. Correct.
- Q. The water's always been –
- 10 A. As far as, yes –
- Q. Yes.
- A. - in three years.
- Q. There's no minimum flows in the Lowburn, so but there's always been water to push into the race?
- 15 A. It's, you know, anecdotally what I've heard, talking to the neighbours, is it's never run dry.
- Q. Yes, yes.
- A. There may be eviden- you know, someone may have forgot something 30, 40 years ago, but as far as I'm aware.
- 20 Q. I think I understand. Might have to draw myself a wee picture but I think I understand.
- A. Yes.
- Q. So in that sense when the permits expire on the 1st of October, on the assumption that there will always be a reliable flow in the river, your hope and expectation is that you will continue as normal for the next six years
- 25 until this new plan comes into place?
- A. Mhm.
- Q. Yes. But if you were to get a really dry year, then what?
- A. We've got the buffer of the dam – the storage, so -
- 30 Q. You've got the buffer of this dam, so that's, yes.
- A. That 19 million litres is probably enough to get us through from Christmas.
- Q. Yes.
- A. To the end of the season with irrigation.
- Q. Right, yes.

- A. I can't remember the figures off the top of my head, but I think it – in the last two years we've pumped 30 million litres through our irrigation system, through the water meter and so if you split that over two years it's 15, if we start at Christmas time and the dam's full, we should have enough, even if we can't take any water.
- 5 Q. Mmm. And -
- A. So, that's, I guess that was part of our thinking when we designed the layout and we designed the system is that if we have this big enough then we're safe from a dry year.
- 10 1650
- Q. Yes.
- A. And we can contribute back to the environment when not taking water.
- Q. Yes, okay.
- A. Well contribute to the stream but you know...
- 15 Q. Sustaining of flows.
- A. Yes.
- Q. Yes, where you can.
- A. Yes.
- Q. All right, your neighbours have them, who are also taking water via deemed permits off the Lowburn, have they future-proofed themselves also by building storage on to their farms?
- 20 A. Yes.
- Q. Or are they less – oh, I see was going to say they might be less exposed because they're not frost fighting but...
- 25 A. There's a cherry grower above us who has a dam. The vineyard next door doesn't have a dam.
- Q. Mm.
- A. The guy with horses doesn't have a dam.
- Q. Mhm.
- 30 A. So, yes. One out of three. But I thi– you know like the guy with horses, it's stock water for him.
- Q. Yes.

- A. It's not a – and it's not an economic dear I say it's not an economic outcome for him. Like it's – he's retired and he loves horses and that's what he wants to do.
- Q. Okay, the vineyards are different. The other vineyard's a different story
5 though, potentially.
- A. And a cherry grower as well, he's...
- Q. Yes, so you've got a cherry grower and a vineyard also taking water via deemed permits without storage, is that what you're saying?
- A. The cherry grower has storage.
- 10 Q. Has storage but the vineyard, doesn't?
- A. The vineyard doesn't.
- Q. So there's a risk if you like?
- A. Yes. But and I guess they're taking water for irrigation which is under 10 litres a second.
- 15 Q. Oh okay.
- A. If I can remember the figures. Yes, it's seven or eight litres a second, I think is what the maximum is.
- Q. Right. Okay.
- A. So, yes, I think for us the dam was about frost protection and a buffer –
- 20 Q. Yes.
- A. – irrigation in summer.
- Q. Okay. All right, no that's really helpful.

QUESTIONS FROM THE COURT – COMMISSIONERS – NIL

QUESTIONS ARISING: MR DE MIERLO

- 25 Well the only matter I was going to say, is if the Court is interested in taking a view of Manata Estate, it can certainly be arranged. We haven't added it on the schedule because I'm conscious that it's already a pretty heavy schedule in terms of sites visits I suspect but it's, the invitation is only and I can certainly liaise with Mr Cooper if that's...

30 THE COURT: JUDGE BORTHWICK TO MR DE MIERLO

- Q. Not entirely sure it's on my schedule. What's been arranged for all of us.

A. All right.

Q. Whether or not we've got an opportunity something similar where we've got you know individual permit holders that are diverting water out of a creek into a race, on to their farm. That might be interesting from looking at you know those huge irrigation companies which are taking water you know, like in the previous case out of Falls Dam and then large irrigation distribution – a conveyancing network then into yes, other conveyancing companies, if that's the right word, like for Strath Clyde and then distribution on to farms. So that's sort of a, quite a large proposition this is a small proposition so we're sort of trying to get the reach and scale.

A. Yes.

Q. Yes, so how might individuals be impacted?

A. I mean I was certain conscious that McArthur Ridge is on the schedule on you'll be seeing vineyard operations.

15 Q. I think Webb is also on the schedule but I – Mr Webb is he on the schedule I thought he was.

THE COURT: COMMISSIONER EDMONDS

Well we were told he was on the other day.

THE COURT: JUDGE BORTHWICK

20 Yes but I'm not sure what he's doing in terms of his races and where he's, you know – I think his permit is from the lake, probably to the farm.

MR DE MIERLO:

Yes, I'm not aware of that one but the invitation is there, so I leave it at that.

25 **THE COURT: JUDGE BORTHWICK TO MR DE MIERLO**

Q. Well, think about it because we are trying to get a sense of the activity.

A. Yes. I think Lowburn is on your itinerary. Fish & Game have proposed that.

Q. Well, if we're up the Lowburn –

30 A. So, that's...

Q. – it's probably a step to Swann Road.

MR PAULIN:

You have to drive past it to get up Lowburn, so. Yes.

THE COURT: JUDGE BORTHWICK

All right, you might want to consider putting that on the agenda if that's okay
5 with you, so we can –

MR PAULIN:

Depending on timing.

THE COURT: JUDGE BORTHWICK TO MR PAULIN

10 Q. Because you're what – cropping? Yes I understand.

A. No I'm expecting a new arrival in the family shortly. I might be out of
action.

Q. Ah, no well that's, you do not want us bothering you. Look if it's not
convenient then I would understand that it –

15 A. Yes.

Q. - may not be actually. It might be just one hassle your partner does not
want. Just say so, because it's no big deal, yes.

A. But yes, just, I don't know what dates, yes.

20 **MR VAN DE MIERLO:**

Perhaps we'll confer with Mr Cooper and see where we get to, but unless
there's anything further.

THE COURT: JUDGE BORTHWICK TO MR PAULIN

25 Q. No, no that's been really helpful, unless there's anything you want to add,
yes.

A. No, it's good.

Q. Been very, very helpful, so thank you very much.

A. Thank you, no worries.

30 **WITNESS EXCUSED**

**CASE FOR AOTEAROA NEW ZEALAND FINE WINE ESTATES LIMITED
PARTNERSHIP CONCLUDES**

THE COURT: JUDGE BORTHWICK

5 Five minutes to five and the fabled minute has yet to be released.

MR MAW:

(Inaudible 16:55:45) running ahead of time for the first time in the period.

THE COURT: JUDGE BORTHWICK

10 For the first time in a wee while.

MR MAW:

I think that concludes today's –

THE COURT: JUDGE BORTHWICK TO MR MAW

15 Q. Yes, not that does. So we are five minutes to five and we do have a
working draft and as I said, it just needs to be finessed, make sure we're
asking the right questions, it doesn't preclude counsel asking questions
through an agenda, the agenda has to be set. Yes and then, the ques-
we are interested in the question of priorities, we expect individual
20 exposure is different, it's not the same and we had some thoughts around
that, if we put that through to – well I can tell you one thought anyway, if
we put that through to expert conferencing, our thought was that we would
engage our special adviser to attend that conference, Mark Sinclair and
he can brainstorm with the best of them and be a contributing author to
25 that JWS and be available to answer any questions that the Court may
have of him, so we just really wanted to put in as wide a range of planning
options on the table. He's agreed to participate and that's one thing that
we'll be noting in a minute is that we'll ask the Court's adviser to attend
on our behalf?

30 A. Yes the more brains the better I rather suspect -

Q. The more brains the better?

A. – on that topic, it's –

Q. Yes, no I think that's fair because not all planners, in fact possibly few planners are going to be involved despite the potential reach of the issue.

A. Quite.

5 Q. And then we also have some thoughts or thinking around the legal submission phase which I just need to sort out before I tell parties, yes.

A. Very good.

Q. Okay, so very good, so we're adjourned through to tomorrow and if you –
COES. I'm just wondering if we had a 10 o'clock start, then you definitely
10 will see those minutes.

UNIDENTIFIED SPEAKER:

(Inaudible 16:57:55).

THE COURT: JUDGE BORTHWICK

15 We shall romp through, yes.

MR MAW:

So a 10 o'clock start?

THE COURT: JUDGE BORTHWICK

20 10 o'clock start. Are you able to contact the COES folk, which is Matthew Sole to say 10 o'clock start, see if that's convenient to him but the witnesses, Sullivan, Sole and Murray will need to be present because I think we're probably going to move through that part of the hearing fairly quickly, I know for myself I don't have any questions in relation to their evidence, it's very clear, yes. So
25 I'll leave that for you to talk to those folk.

UNIDENTIFIED SPEAKER:

Your Honour, they have actually said they'll be here at 10 o'clock.

THE COURT: JUDGE BORTHWICK

30 Brilliant.

UNIDENTIFIED SPEAKER:

(Inaudible 16:58:39).

THE COURT:

Yes, yes, okay Judge prefers their thinking, okay, very good, all right, so we're
5 adjourned tonight.

COURT ADJOURNS: 4.58 PM

COURT RESUMES ON WEDNESDAY 21 APRIL AT 10:06 AM**THE COURT: JUDGE BORTHWICK ADDRESSES COUNSEL (10:06:10) – ANY QUESTIONS ARISING OVERNIGHT?****5 MR MAW:**

The only loose end I have, your Honour, relates to the Proposed Regional Policy Statement.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Oh yes. Subtly said, that's not a good start.

10 A. It's a loose end insofar as I have offered to have hard copies produced for the Court's benefit and I now have those. I am minded to provide those –

Q. You have not notified though, have you?

A. No, this is not the – sorry, this is the partially operative.

15 Q. Oh this is the partially operative?

A. Yes, no, I was getting two months ahead of myself. No, this is the partially operative, the 15 March version that we had up on the screen at one point.

Q. Oh, okay, and we haven't got that in the bundle?

A. It's not in the bundle.

20 Q. Okay, no that's fine. So I'll admit that into the bundle as it's been referred to in evidence and also examination.

A. Yes. now, it doesn't have common bundle numbers stamped on it.

Q. That's not, it's not a real problem for me.

A. The document itself has page numbers so it could be put under a tab at
25 the end of the bundle, and we'll at least know where it is.

Q. That's what I was thinking.

A. So we'll provide that to the Registrar.

Q. That'll be good. Thank you.

THE COURT ADDRESSES MS GILES – ANYTHING ARISING – NOTHING.
30 **MS GILES WILL HELP NEXT PARTY IN EXAMINATION; IS NOT THEIR REPRESENTATIVE (10:07:42)**

MS GILES:

I believe Mr Sole will be sworn in and then he will just speak from his perspective as an advocate and a witness.

5

CENTRAL OTAGO ENVIRONMENTAL SOCIETY**WITNESSES TO FOLLOW:****MATTHEW JAMES SOLE (SWORN)**10 **EXAMINATION: MS GILES**

Q. Mr Sole, do you confirm that your full name is Matthew James Sole?

A. Yes I do.

Q. And that you have prepared a statement of evidence dated 5 February 2021 for the purpose of this hearing?

15 A. Yes I have.

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

A. Just on Point 28, I've just elaborated at the end of that statement.

Q. Is that paragraph 28?

20 A. Paragraph 28.

Q. Yes.

A. And I've added "fit for purpose with a holistic systems approach, as opposed to reductionism, siloed reductionism."

THE COURT: JUDGE BORTHWICK

25 Q. So you want to add to the bottom of paragraph 58 a new provision G, is it, or something like that? No?

A. No, no. Just adding on to paragraph 28, "I think Plan Change 7 will provide time to produce a land and water management plan," and I am adding "fit for purpose with a holistic systems approach as opposed to siloed reductionism."

30

Q. Very good, we've noted that.

EXAMINATION CONTINUES: MS GILES

Q. Thank you and with those corrections, do you confirm that your evidence is true and correct to the best of your knowledge and belief?

A. Yes I do.

5 Q. And have you prepared a summary statement of your evidence?

A. Yes I have.

Q. And you have also prepared, I understand, a PowerPoint presentation of the photos that were in your statement of evidence, is that correct?

A. Yes, thank you.

10 Q. Can you now please read out your summary for the Court and then remain for any questions that they may have.

A. Okay, thank you.

MATTHEW JAMES SOLE READS SUMMARY OF EVIDENCE

15 Thank you for the opportunity to appear before you today. My name is Matthew James Sole. Through COES' respective submissions we are giving voice to our Manuherekia Rohe and her many tributary catchments of creeks, streams and rivers, the living arteries for this terrestrial life-sustaining land.

We have three members of the Central Otago Environmental Society speaking to their summary of written submissions and evidence. First, myself -
 20 archaeologist, naturalist, father, grandfather residing in the Manuherekia; followed by Jillian Sullivan — mother, grandmother, writer, home builder and Ida Valley resident; and finally, Phil Murray - consultant in Natural Resource management, keen kayaker, resident in Clyde with two children now adults who
 25 have represented NZ in kayaking overseas.

The statements provided by COES have a focus on the Manuherekia, because it is where we live and is at the forefront of our minds. We fully acknowledge that Plan Change 7 will have impacts outside of the Manuherekia, with much of what we discuss being relevant to the other catchments,

30 We support the temporary short-term consenting mechanism as an interim holding step while a new water and land plan is prepared and implemented to give effect to the National Policy Statement Freshwater 2020.

Our focus in relation to supporting Plan Change 7 uses our experiences and observations with the Manuherekia Rohe (the Kai tahu spelling) where we

largely reside. Through our evidence and observations provided below we are speaking and giving voice to Manuherekia and her tributaries over the loss and degradation of 'being' that we have experienced and noted over many years.

5 Through sustained engagement with ORC and Irrigator lead community workshops and working groups we are frustrated and disillusioned with that lack of meaningful understanding and explanation of the ecological needs and functional requirements of a pre abstraction/naturalised Manuherekia Rohe.

10 Of concern is the division and time consuming debate caused by the lack of understanding on ecological functional needs, robust baselines and incongruous monitoring and data to meaningfully understand the function and life-supporting needs of our Manuherekia and its catchment tributaries. This is critical in order to manage sustainably the environmental needs of the catchment and make appropriate allocations for community function, wellbeing and a steady state economy without sacrificing ecological health and function
15 of the Manuherekia Rohe.

We understand the human need for water but we as community members have not been provided with the knowledge and understanding on the ecological needs and life-sustaining operational thresholds for the Manuherekia and her tributaries. Without the pre abstraction naturalised needs of the river needs
20 being understood, assessed and benchmarked, we do not have a basis on which to consider what the Manuherekia and her tributaries can provision us with for our human needs. We cannot determine the abstraction capacity until we know and understand the rivers ecological life-supportive needs and benchmarks?

25 The Manuherekia Rohe has a history of over-allocation for over 100 years, as mining privileges are the primary legal means used to allocate water in the catchment. Mining privileges were allocated with little or no understanding of the Manuherekia and its catchment tributary systems and without regard for ecological, hydrological function or instream values. Progress is being made
30 by land users on runoff and more efficient water application, however our observations are, these gains in water efficiency are being directed to more land modification under irrigation as opposed to reducing abstraction and restoring waterway ecological function. The need to provide environmental

flows and restore ecological and hydrological river and tributary function has been clearly signalled with a thirty-year time frame.

As a lay person, the best means I have of assessing and monitoring for aquatic ecosystem health is the stark contrast in river and stream vitality and health in the headwater catchments outside of the modified valley floor, where I can and do drink, swim and absorb and revel in the vital life-giving properties of nature's own.

From the evidence, our observations and monitoring of the Manuherekia Rohe, we show that it is overallocated or over extracted, degraded in ecological function and has at times severely reduced in ecological energy and productivity.

There is poor understanding of the catchment valley's naturalised state when contrasted with the health and quality of ecological function and vitality of the Manuherekia headwaters and her tributaries. Meaningful ecological thresholds and benchmarks for the naturalised ecological functional life-sustaining needs of the Manuherekia and her tributaries appear non-existent as a first order priority. These are essential to assessing and determining the environmental effects of the second order essential needs of the community and then the third order ability of the people and communities to provide for their social, economic and cultural wellbeing, now and into the future.

It is the view of the Central Otago Environmental Society that the current ORC water plan as per the Skelton Report is not fit for purpose. This position is informed by multiple expert planners in this hearing. Plan Change 7 will provide time to produce a land and water plan fit for purpose with a holistic systems approach as opposed to the siloed, reductionist approach.

Thank you for providing the opportunity to present to you today. I am happy to respond to questions you may have and I have a power point available of images I have referenced in my evidence.

And if may I indulge the Court, I would like to read this quote from David Suzuki.

*THE WAY WE SEE THE WORLD SHAPES THE WAY WE TREAT IT
IF A MOUNTAIN IS A DEITY, NOT A PILE OF ORE; IF A RIVER IS ONE OF
THE VEINS OF THE LAND, NOT POTENTIAL IRRIGATION WATER; IF
A FOREST IS A SACRED GROVE, NOT TIMBER; IF OTHER SPECIES ARE
BIOLOGICAL KIN, NOT RESOURCES; OR IF THE PLANET IS OUR*

MOTHER, NOT AN OPPORTUNITY THEN WE WILL TREAT EACH OTHER WITH GREATER RESPECT. THIS IS THE CHALLENGE, TO LOOK AT THE WORLD FROM A DIFFERENT PERSPECTIVE.

THE COURT: JUDGE BORTHWICK

5 Q. Thank you and I take your point. Words mean absolutely everything in terms of the messaging, both overt and underneath the words themselves. Now, did you want to take us through those photographs, or is that better for another witness? You've got some slides there?

A. Just one or two keys points I'd like to highlight.

10 Q. Yes, sure. Mhm.

WITNESS SPEAKS TO PHOTOGRAPHS ON POWERPOINT

A. This is land over the road from where I live, and it's been cultivated four times this season, and I have been monitoring it during rain events, and this is one sequence of four that I've recorded.

15 Q. When you say cultivated four times this season, how long is the season, what season are you referring to?

A. I'm talking from last winter.

Q. Yep.

A. So it's had a winter feed crop, two grain crops.

20 Q. Yep, right.

A. So, sorry that's three, not four.

Q. That's three. Okay, all right.

1020

25 A. And they, basically it's herbiciding, direct drilling and I've just been monitoring the silt sediment in rain events and I've got four sequences.

Q. Mmm.

A. And so on the left you have the sediment coming from the property across the road and on the right, yeah on the right, is runoff from the same rain event from uncultivated land.

30 Q. Mhm.

A. And as I say I've got a succession of three or four sets of this, of rain events around about three quarters of an inch.

Q. Right, okay.

A. And this is a photo of the Dunstan Creek in a rain event on the 29th of June. And we can still see the wet bed gravels and things are still visible, and then this is the same river where it joins the Manuherikia and this is after it's come through the farm door, intensively grazed valley floor with high sediment load, and it's about 20 minutes later.

5

Q. Mhm.

A. And this sequence here is the Thompsons Creek total abstracted on the left, and that was the case for over a fortnight, it was totally dewatered and I have in my report the ORC river flow data that shows the sequence of water flows over that period in there, so, so you know the ecological function of Thompson Creek for a fortnight was without water.

10

Q. Mhm.

A. And this is just an interesting perspective. This is some history. We don't see this so often now anymore, this is people swimming in 1975 in the Manuherikia in Alexandra. And this slide here is, this is a, I can't read it from here, 1884 survey plan, and this is a section showing the wetlands that existed on we now know it as Thompsons Creek, then it was known as Spotters Creek, but basically it has been extensively modified and it bears out the fact that our New Zealand statistic for wetlands are that we now are down to the last 10% of wetlands in New Zealand, but this is just an example of showing the loss of wetlands in the Omakau area over time. This example here is, can't see the date, oh 1980, so this is a section of river bed just upstream of Omakau, and at that stage it was sheep grazing with some wild flood irrigation. This is the same piece of land with intensive dairying on those gravel previous braided river braids, so it shows you the confining and constraining of the river.

15

20

25

Q. Can you flick back to the previous slide so I can see what you mean by confining and constraining river. Right.

A. You can see that out to the road was largely in the place of flood plain.

30

Q. Yes. I can see that.

A. And now it's in intensive agriculture and the river is reduced in its ability to perform as a wild river.

Q. Insofar as there is armouring of the banks of that braided river or insofar as land use has changed?

A. Definitely land use has changed.

Q. Yes.

A. And that land use is on a very leaky system.

5 Q. Well, an unconfined aquifer, is that what you mean, underneath the braided river systems?

A. Yes.

10 Q. Yeah, no I understand that. But the, I was just curious as to why you should say that the river systems now confined, aren't they just simply dairy farming on a flood plain? Or are you saying that there's stop banks and other armouring going on there?

A. Yeah, I can't answer that question. And this is just an example of the Galloway Irrigation Scheme and its take and what it's left as a residual flow as a river, and the arrow is the residual flow left for supposed ecological function of the Manuhereikia below that point.

15 Q. And that shingle bank, that's...

A. That's the bund to capture the irrigation take.

Q. The water, yeah, yeah, okay.

20 A. And that's looking downstream and if we can...this photo here is an indication of what the irrigation scheme's use of the water does. On the left we've got Manuherikia campground, and if you look towards the right it's largely flatlined in that yellow area, and the diagram on the right is Dunstan Creek and it shows the unimpeded natural fluctuations over the same time period, and the Dunstan Creek is a fairly good indicator of what the Manuherikia, how it would behave in a natural unaffected state through irrigation abstraction.

25 Q. Is that something you know or something you have been told?

30 A. I've looked at, I would have to get the research papers but there was some research done to look at how the Manuherikia would function and they did work on the Dunstan catchment and they, they attribute the ramping rates and things would be similar to the Manuherikia if Falls Dam wasn't there.

Q. Okay.

A. So this is the nearest we have to what the Manuherikia would behave like if we took Falls Dam out of the equation.

Q. Mhm.

A. And that's an aerial photo of that take that I was talking about, the Galloway irrigation take.

5 Q. So, Galloway, if you like in terms of that slide for the record, labelled page 20 Manuherikia, Galloway irrigation take March 2019, are you saying that to the left is the, to the left of the water body where water continues to flow, that is flowing now to the take, for the irrigation scheme?

A. Yes, to the, yes.

10 Q. And to the right, where water remains within the water body which looks to be a you know, a gravity, quite an extensive gravity bed, that is the water flow in the river?

A. Yes.

Q. Okay. All right.

A. Ui think that's the end of my slides.

15 Q. Mmm. Now, was that, that was in your evidence. I know I've seen it before.

A. These are all from my evidence.

Q. Okay, no that's good.

20 A. Except the only one that's not is that one, the shot comparing the two different flow regimes of Dunstant Creek versus, that is not in my evidence.

25 Q. Okay, so probably just – we'll grab a copy of all of those slides again for the records so that everyone can see what we've been looking at. All right, now I have a question for you. Well, actually, no, before I have my question for you, has Mr Maw got any questions for you? Mr Maw is the lawyer for ORC.

CROSS-EXAMINATION: MR MAW

30 Q. Good morning. Just one question arose in relation to the slides that you showed. You showed a slide with some runoff from a paddock that had been cultivated. Was that paddock under irrigation or was that a non-irrigated land use?

A. Ah, it is occasionally irrigated by a big, um, but most of the time it's not irrigated.

Q. Thank you. That was my only question.

RE-EXAMINATION: MS GILES – NIL

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

5 Q. So one or more parties will say and indeed have said that they are looking
for merits-based long term consents to be included in PC7 or for PC7 to
be rejected and therefore allow resource consent applications to be
processed in the usual fashion under the water plan, to deal with the
concerns that you have illustrated through these slides, for example,
Thompsons Creek if you want to avert what is happening at
10 Thompsons Creek in your slideshows, a dewatering of
Thompsons Creek, and your evidence was dewatered on that occasion
for a period of two weeks, then consent holders, parties would say
sometimes they'd say, well let us apply for resource consent and we can
ensure that there are appropriate minimum flows, recession flows,
15 recessions conditions and all of the other suite of conditions. That can be
brought to bear so that that event does not occur. What is your response
to that? So this amending Plan Change 7 to allow applications for
resource consent processed under Plan Change 7 for long term
consents, whatever that means, but it means at least for some parties 20
years plus.

1030

A. I guess my concern is I don't believe I have been aware or shown the
information of what those, how Thompsons Creek functioned
pre-abstraction.

25 Q. Mmm.

A. And I think one of the things I struggled with is while we talk about the
water plan, what we do on the land has a very significant effect and so I
think it's more than just water allocation and water takes, that there's a,
we're dealing here with a, you know, a whole complex terrestrial an
30 aquatic system, and what I struggle with is that we tend to separate the
two, and I guess that's what I'm trying to show with the sedimentation
issue; while we have improved direct drilling and things, I still believe from

my observations that we don't know enough about the effects of what we do on the land and therefore the implications on our water takes and...

Q. Right, and so the silo-ing that you are talking about in your evidence is the silo-ing of water from land?

5 A. Land.

Q. And the use of land.

A. It's also silo-ing in terms of the fixation with galaxiids.

Q. Yeah, go on, tell me a bit more about that.

A. Galaxiids are only one element. Probably the best example I can give
10 you is like in the CODC Plan farmers are allowed as of right to spray Matagari but the problem with that is that fair enough matagouri has an impact on the farming regime, but matagouri is not matagouri on its own, it's a whole ecological system that supports lizards, birds, insects and a whole array of other species. It's not just total matagouri, but also that
15 matagouri, or we'll call it grey shrubland regime has a carbon sequestering role, it has a water harvesting and water interception role. I believe that the land that we're looking at now is vastly different. I work as an archaeologist and if you read the early diary accounts of the early pastoral farmers coming here they used to lose their dairy cow, their farm dairy
20 milk sign in the shrublands.

Q. Mmm.

A. And this they were living on the banks of the Manuherikira at Galloway, well that's a vastly different ecological regime compared to what's there
25 now. And I think because you know we're not, we don't understand, we look at things in just the recent 10 years rather than what we've done over the last 150 years, I think we come to the wrong conclusions.

Q. And so the risk in having a single focus on galaxiids is what, again, can you expand that?

A. Well, my point is that the galaxiids it's also about the habitat that they
30 need to survive, and we are making a particular point on the galaxiid habitat but what about all the other invertebrates and what about the, in the past there was inanga and other species, but we're fixated just now on what's remaining rather than looking at what was, and if we were

managing our rivers to their naturalised state, what could we get back or what would be the ecological function.

5 Q. You also talk about Fall Dam in your evidence at paragraph 48. And you say "Many dam structures like Falls Dams are past their design life, with little seismic design included in their construction," and then you talk about Falls Dam being under deferred maintenance, liabilities, and design deficiencies.

A. That's all referenced in two Opus reports.

10 Q. Yes, and again the, that fact that dams are beyond their design life with little seismic design included in their construction is used by some to say therefore we want a long term permit, because there are health and safety issues arising in relation to the continuation of those dams, but people are unlikely to invest in their reconstruction or get on with deferred maintenance unless there is a long-term permit associated with water takes and diversions which might also apply to those dams, so, you know, to fill the dams. So what do you say about that then?

A. Yeah. That could take a while.

20 Q. You take your time because as, this far, again we have still got three weeks of hearing to go but we haven't heard a lot of evidence about dams, and really I'm trying to draw out your own personal experience rather than things that people might have said to you, you know, anecdotally.

25 A. Mmm. Well, I mean it's yeah, I come back to my the point I've been making, if we are going to look at a replacement dam we need to understand fully the impacts on the ecological function of a river. The situation we've got is Falls Dam is only one of many all built relatively around in the 1930s and they were actually employment schemes of the government, and it was to, you know, to supposedly improve the productivity of the land. If you read through the history of the Ministry of Works, there was a continuous, I guess, disagreement between the
30 irrigators and the Ministry of Works required on the amount of maintenance to maintain these systems going into the future. The government decided that there was, I guess, to hand those over to the irrigators, but there was an incredible amount of deferred maintenance.

You know, these schemes unless they are maintained, you know, and concrete doesn't last forever.

Q. Mmm.

5 A. And so we're now, we've gone from a scheme that was basically publicly funded and now we're in an environment where it's user pays and the free market applies, and so I guess the difficulty I have with all of this is what is the public good component of these things versus what is the private, you know, gain, and I don't believe that we're given enough information, I mean I've been involved in the various working groups that
10 the irrigators have you know, arranged and they've put in a huge amount of work investigating all the various options. But at the end of the day, the irrigators themselves weren't prepared to put up an more money to fund a larger dam.

Q. Are you talking about Falls Dam?

15 A. Yes.

Q. Yeah. Yeah.

A. And so I think that the rub comes in that they haven't got enough money among themselves or they are not prepared to commit, it's then, you know, there's the community aspect, is there merit in the community
20 engaging with, you know, a new dam, but again, I mean, I'm just thinking out loud here because I've been involved in the farmer negotiations and I guess for them the economic decision is, is that, you know, they only have so much money and they... but the corollary to that is that I've also seen in the last four years a sheep farm being converted heavily over to
25 dairy support, and it all now has pivots and things, and they've built dams, and that's all gone ahead, being fully aware of plan change 7 and the water plan changes, so, I mean, I guess people make their choices on the information they have at hand and, I guess, the funds that they've got available to them.

30 Q. And in that example that you've given, when you say they've built their dams, you're talking about on-farm storage ponds?

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A. Yes, yeah, yeah, yeah, yeah, totally.

Q. Okay, yeah, and Falls Dam, which I haven't seen, is a bit bigger than an on-farm storage pond, I gather.

A. Totally, totally, but to be fair, there's some pretty big on-farm storage reservoirs being built. If you do take the trip to Falls Dam, you'll see some very large ones just underneath Blackstone Hill.

Q. All right, and so the issue with Falls Dam, you note in your evidence, its need for maintenance has been ongoing since 2013 or earlier than that. Again, you're not sure?

A. I'd have to reread. There's two very good reports on that.

Q. And the debate in the farming community and broader sector, which have been engaged with Falls Dam, is whether to replace with a bigger dam or to maintain that dam, do deferred maintenance. That's essentially what the debate has been.

A. Yeah.

Q. Okay. Were the decision made by those who would fund a rebuilt, you know, for a larger dam not to take that course of action, is that what you're saying, the decision at the moment?

A. I mean, I can't speak for the farmers, but my understanding is it was, for them, not financially viable. Put it this way, they didn't vote for it.

Q. Didn't vote for it. When was that vote taken, the vote that you're talking about?

A. Would be three years ago now.

Q. About three years ago, okay.

A. It's all under the Manuherikia Water Catchment Strategy Group. There's a whole website with a huge amount of reports.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. Just your para 40, where you talked about views, you talked about defining roadway viewpoints, and you mentioned some views, but we haven't got photographs of all or any of those views, presumably.

A. I do have photographs, but I haven't put them in the report.

Q. I suppose my question more was we do have a site visit, and it may be that we're going by some of these places. I don't know at this point, they may be not on our itinerary, but I just wondered whether the locations

would be clear about when you just refer to “above Butchers Dam,” for example. Is that pretty obvious if you’re on State Highway 8?

A. It’s the view you get travelling from Dunedin and come out into the Manuherikia Basin and you look right down the valley and you see the
5 Hawkduns. Probably best illustrated in the wintertime, when the Hawkduns are all capped, but that was the one that stuck in my (inaudible 10:44:40) when I first arrived here.

Q. So is that pretty obvious, is it?

A. It’s just if you can remember Butchers Dam, and you’ll come along beside
10 Butchers Dam and then you’ll come up to a small rise, and then the view opens right out, or there is one just a bit further back from Butchers Dam still on the same highway, and it’s just a higher perspective and you get that first initial vista of so you can see out over to Clyde, Alex and then up to the Manuherikia.

15 1045

Q. All right. I might even have a photo, taken a photograph of that myself in the past, thinking now

A. Right, and the other one is Blacks Hill.

Q. But is there a place to pull off the highway there, or?

20 A. I did suggest it to the council that that would be a good place to put a stop, but no.

Q. No. Right.

A. The, yeah, no they’re both quite highway-hazardous.

25 Q. Right, okay. Yes I do remember taking some photographs in highway-hazardous situations.

A. You are supposed to be concentrating on your driving, but.

Q. So, just thinking the next one, the view west off Blacks Hill from the Ida Valley.

30 A. Yeah, so that’s, you’ve come up from the Ida Valley, you are coming over Blacks Hill and you are looking out, so you are getting a cross-section view across, well you’ve got the Manuherikia valley upstream and downstream and then beyond that you see the hectares and the Remarkables. It’s a pretty iconic view, particularly stunning in the early morning or the early evening.

Q. Mhm, and then the next one was the view either way when traveling below Pennyweights Hill. That name – that didn't – Pennyweights Hill didn't, that wasn't something I'd ever heard of, so.

5 A. Right, so Pennyweights is you're coming from the Ida Valley and you are coming just past Home Hills and then you rise over a wee low saddle and then it opens out again, but then you are looking up into the headwaters of the Manuherikia, you are looking along the Haughton faces, you are looking at Mount St Bathans, and you can see up both the headwaters of the Manuherikia east and west branches, and up into Dunstan Creek, so
10 that's the real headwaters of the Manuherikia.

Q. Right, okay.

THE COURT: JUDGE BORTHWICK TO COMMISSIONER EDMONDS

Q. Do you want to put that on our list?

A. Well, I'm not sure how any of that will work out.

15 **THE COURT: COMMISSIONER EDMONDS**

Q. But I just wondered if it was possible for you to annotate them on a map?

A. I could do that.

Q. And that would give us a bit of a sweep –

THE COURT: JUDGE BORTHWICK

20 And then if we've got time we might take it in.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING

Q. No I think, I suppose just the bottom line is you support the plan change, is that right?

A. Yes.

25 **THE COURT: JUDGE BORTHWICK**

Q. And you are tracking through with changes on the plan change, I take it. recommended changes, I mean obviously there's no decisions yet.

A. Yeah I've had a real struggle, I've got atrocious, my broadband has just collapsed and I've been dying to watch the video and but I just can't. so I've been looking at the PDFs that

5 Q. Yeah, the PDFs, the joint witness statements probably a thing to be really keeping an eye on, and have you got any comments about anything that you've seen in terms of the expert conferencing and...?

A. Not really, because I haven't been able to get fully across it. And it's been a real disappointment from my perspective not being able to, but I've been battling with a broadband supplier for six weeks now. so.

10 Q. Oh, okay. There's many things I can do but I can't help you out there.

A. Yes, so that's yeah. It has been a disappointment not to be better across the discussion but yeah.

Q. Anything else you want to add?

15 A. No, just thank you very much for the opportunity to be heard and to contribute.

Q. No, thank you very much.

QUESTIONS ARISING – NIL

WITNESS EXCUSED

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MS GILES CALLS**JILLIAN RUTH SULLIVAN (SWORN)**

Q. Do you confirm that your full name is Jillian Ruth Sullivan?

A. Yes.

5 Q. And that you've prepared a statement of evidence dated 5 February 2021?

A. Yes.

Q. Are there any corrections that you would like to make to that statement from the 5th of February?

10 A. No, I need to point out I've just done a two page summary of that.

Q. Great. So in terms of your evidence from the 5th of February, can you confirm that that's true and correct to the best of your knowledge and belief?

A. Yes.

15 Q. You can now read to your summary please and take the Court through your Powerpoint slides if you wish to.

A. Okay thank you.

MS SULLIVAN READS SUMMARY OF EVIDENCE

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A. Kia ora, my name is Jillian Sullivan. I am a mother, grandmother, writer, natural home builder and Ida Valley land steward. I'm also speaking as secretary of the Central Otago Environmental Society." And I "thank you for this opportunity.

25

As a lay person, my witness to the health of the Manuherekia comes from walking the river for seven days" over four months "from its source in the mountains to the confluence with the Clutha / Mata-au, repeating sections of the river at a level of less than one cumec, as well as walking much of the tributaries Ida Burn, Rocks Creek and Dunstan Creek.

30

There is no-one alive who has seen the Manuherikia River as it was – flowing in its own strength from under the Hawkdun Mountains and Mt St Bathans till it slides into the Clutha / Mata- Au near Alexandra. Since the days of gold, we have cut channels and leaked the river's water, so that in places it turns from tumbling alpine river into" a "stream, from glassy waves to sluggish and shallow. And that is why, one week in January 2019, a group of scientists – freshwater ecologists and hydrologist – come to walk beside the river, to count each step of run, riffle, pool, to note each habitat, to be with the river its whole length.

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The following visual and prose reflection shows the difference between when the river and streams have a strong natural flow and when they are dewatered, lending credence to the case for Plan Change 7, that the river needs protection until the new water and land plan is prepared and implemented to give effect to the NPSFW 2020.

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Photo" number "1" is the "Manuherekia above" the "Falls Dam – Te mana o te Wai.

10

In the upper reaches of the river, it is the river's voice I feel with my skin, my cheeks, my ribs, my heart, for the water knows nothing of what is to come, only from where it has come: waterfall, spring, stream, cleft, into this – a ripple / tumble so vociferous and glassy and light-filled, so clattery and fresh, that to step into its wild push is to feel as if I too have come from gleam of snow and will end in the wide surge of sea.

15

In the beginning - Every flank of hill had a crevasse where water ran down, and through matagouri, wetlands, grasses and bunchy snow tussock, the water found the stream and the stream gurgled, deepened, ran away down the valley. The air chilled with a smell of wet grass and rock.

20

My eyes and my heart followed the stream, under the track and upwards where the golden hills came together and beyond them was only sky. There, in a silver thread, the Manuherekia began, up there in the silence and the rain.

25

Following the river from those alpine clarity beginnings, the power of the water as I ford it, feet slipping on boulders, and through the long length of braided strands, where the pale, dried-silt covered rocks glare in the sun and the way seems interminable to the far willows. The river each side clattering, gliding, making forays towards itself in shallow wide ripples, joining one braid then parting, then joining, singing all the while.

30

From Loop Rd bridge, the river accompanies us with its tumbling and rushing in long stretches of ripples. The air is mineral scented from the wet rocks and water sparks. The rocks are slabby sandstone and rounded river boulders. On the banks: tussock, briar rose, thistle, broom, buttercup, bugloss, woolly mullein and rushes. In the warm air their fragrance rises. The river turns through the valley, that sequence of riffle, glide, pool, over and over, each turn a new vision of light on water, and the continual voice of the river, rushing and clattering. There are times of peace; quiet enough in a glide to hear the quails snickering, or to watch a single blue / grey heron turn and soar on outstretched wings and come into land on stones."

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45

This is the "Maunherkia after" the watertake at the "Galloway

Today, when we walked the Manuherekia at a one cumec flow, less than half the flow of the last walk, the wonder has gone. There is no magic about the next corner or the next ripple pulling at our legs. When we came

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to the Galloway intake, two thirds of the already depleted river has been shunted off to the side by bulldozed banks for the irrigation intake. We know it is two thirds, because the hydrologist who is waist deep in the” irrigation “channel measuring cross sections tells us. Over to the right, the main stem of the Manuherikia limps on. It is a stream I step across in two steps. All the consent asks of the irrigation company is that a river 15 centimetres deep and 30 centimetres wide is left for the public’s recreation.”

5

10 This is the “Manuherikia near” the “confluence just a few metres back from the “Clutha / Mata-au April 2019

It is autumn when I come to the last stretch of the river. What had been summer and long, hot days on the stones, the pools beckoning under the willows, has turned to frost in the mornings. Beside me, the water deepens to a depth I cannot see. The silt is packed between the stones so that my footfall is cushioned by mud. The river is deep, quiet, mysterious. It holds the soil washed down from the tributaries and from the newly ploughed fields for the winter brassicas. It holds whatever has been put on the soil.

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The water holding wounds deep within, yet moving regally, elegant and gracious and alone. It’s bright promise as a silver tumbling thread through tussock under a sky that only saw hill and hawk and rock, to this: aged and slow and laden.”

25

These photos are of “the Ida Burn before and after” a “water take, January 2019” and I thank “the landowner for” giving me “access” up on his farm and I follow the Ida Burn as far as could through sheep country where it wasn’t affected but then it joins with Hills creek and Gorge creek and I’ll show you the photo of how it ends up in Oturehua. Which is, this is the stream behind my place. This is what it looks like. This is the same week, that tumbling alpine stream, that was the same stream.

30

“All day in a path of water, a rippling cloud of a stream, clean as the stones beneath. Keep singing water, over the stones. Below, and much too soon, a pipe shuts off your crystal celebration. Stream, you are like us now, bereft of source.”

35

So maybe, two minutes’ walk from that tumbling stream it, the water take comes off and it goes underground, so it’s only a few minutes from that to that; from those two views.

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THE COURT: JUDGE BORTHWICK TO MS SULLIVAN

Q. And again, do you know because I haven’t been, particularly keeping a check on the site visits but do you know whether any of these locations are in the site visit that the Court is trying to take. So I think we are doing

45

a flyover and we might be doing a desktop, I'm not sure. that is a desktop flyover.

A. Okay, I'm not sure if that you would be going up the Ida Burn which goes up under Mount Ida, is one of the tributaries. When I was walking it I honestly felt like I was in heaven.

Q. Yes.

A. I didn't know there was the water take around the corner, I was – it was the most blissful day I'd spent walking and I couldn't understand how that stream ended up the way it is in Oturehua. There's a lot of the other two streams comes through different farms and there's a lot of – there's been a lot of clearing but I don't – can't explain it and I hope the ORC one day will work out what's happened to the Ida Burn. But I think some of the landowners are going to set up a catchment group and hopefully we can find out but it mimics what's happening, my photos of the Manuherekia from those beautiful alpine beginnings to that silt laden, what happens at the end you know. So, to see it in it's purity and to see what we to do to it is pretty shocking when you do it. Yes. So, that's that' Ida Burn.

MS SULLIVAN CONTINUES READING SUMMARY OF EVIDENCE

A. This is the confluence of the “East and West Branches” of the Manuherekia. We where organised the public walk to go there and you can stand in the river and you can feel the East Branch on one leg and the West on the other. They feel different. The West is a colder, swifter one. So, I'll end on that photo.

“I have seen the river at its beginnings; at the tributaries falling silver from the mountains – the Ida Burn, Rocks Creek,” and “Dunstan.” I've “seen the wild shags on rock cliffs, the dart and joy of young fish in clear pools over clean stones, and felt the surge and thrust of the stream through stretches of tussock and rock, over boulders that glisten golden, or white pierced through with green. In the wide expanse of tussock lands, and through rocky valleys, the streams come to the river. I hold in my mind the whole length of the Manuherikia. To know the river like this, each step of it, to be beside it, to merge with the water, to be in its ripple and sing, hour after hour after hour, is to know one thing and that is this – the river is its own being and as such, has the inherent right to thrive.

Ngā mihi nui

1103

CROSS-EXAMINATION: MR MAW – NIL**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL****QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

5 Q. Just one question. What triggered this journey in 2019?

A. We were at a meeting of, there was the mayor and councillors in ORC and they, we were talking about the river and they said they were going to walk the river, the scientists had to count every footstep so they asked of all those who were interested in the river could accompany them, because they, because we were walking for eight or nine hours a day but they organised it all so there were cars, all we had to do was turn up. So the first day I turned up and I was the only person apart from the scientists and a Fish and Game person. Yeah. There was no irrigators or consultants, or... but one day a farmer came and one day a couple of, there were a couple of consultants, and Matt and Brian came on different days, but I did the whole lot and also from the east and west branches, and also the tributaries, because I, I wanted to understand the river and I didn't know enough, so I just wanted to learn about it. Yeah. And I guess I, it was that offer from the scientists that started it.

20 Q. So what was their purpose, do you know?

A. It's because they haven't, they said they haven't walked the river, the only had snapshots of the river at this place or that, but they, as far as I'm aware the scientists hadn't walked the river counting each – I mean, you would have to ask the ORC, but they realised that they didn't have the science and they had better start. Yeah. And they were quite free with what they were saying on it, that they wished that the work had been being done for the last 17 years, that they, that we needed to have been doing that sort of work.

Q. Okay. Well, thank you very much.

30

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. So is there one easy location where we, you would get this contrast between the headwaters and lower down the catchment? I suppose I'm talking about two places, aren't I, in your mind?

5 A. Oh right, well to get to quite a easy place to feel that high country feel is if you are at the Loop Road bridge which goes around to St Bathans.

Q. Yes, which I always get confused as to where the, which side of the Loop Road you might be going, so.

10 A. Oh, okay. So if you, there is a, if you come from Oturehua towards St Bathans and you come to the just before you come to that bridge there's sort of an empty area with scrub, and you can drive in there a little way up the river and park, and go (inaudible 11:06:35) through a gate, and you suddenly you are in just tussock, just you can suddenly be away from civilisation and see the river in quite a good state, I think and then
15 you would have to go down, where would you recommend to go down, Matt, to see it?

INAUDIBLE DISCUSSION – “SHAKY BRIDGE” OF ALEXANDRA, IS MENTIONED

20 **MS SULLIVAN:**

But that one off Loop Bridge is very easy to, you can drive, you can just drive in from there, but Matt might be able to show you on a map.

THE COURT: JUDGE BORTHWICK

25 Q. Well yes, we'll ask that you do that and again I don't exactly know what's planned and whether we need to get in a car, and, and there's no problems just getting in a car and driving as well, so but you would suggest Loop Road bridge at St Bathans and you could mark it on the map, approximately the site that we're going to, and Shaky Bridge at Alex.

A. Yeah.

30 Q. For good before and after contrast of the Manuherkiri.

A. Yeah.

Q. All right. Well, we can look at that. And Mr Cooper is furiously taking notes and he knows what's required.

A. Mhm.

Q. So if you could put a map in, maybe today at the end of the day, that would be great, we can pick that up. that is beautiful prose indeed, so I thank you for your evidence and for the perspective that you bring.

5 A. Thank you very much.

WITNESS EXCUSED

MS GILES ADDRESSES THE COURT (11:08:17) – MORE SPECIFIC LOCATIONS LIKELY TO COME, FOR SITE VISIT/S – DISCUSSION RE: PARAMETERS/TIMETABLING OF SITE VISITS FLEXIBLE

10 THE COURT: JUDGE BORTHWICK

Yes, but seeing those before and afters actually in the flesh, not from a helicopter or a desktop is a totally different experience altogether, so you know we'd be open to that.

I should also add that those slides if they are not already in evidence need to
15 be just produced again, you know, perhaps at the end of the week. Most of the slides are in evidence but just double-check.

THE COURT: COMMISSIONER EDMONDS

I went through and marked them all up as we went, so I thought we did have them all, because I wanted to reference how they related to the summary
20 statements so I'm pretty confident they are all there.

FURTHER DISCUSSION – NO FURTHER ACTION NEEDED ON SLIDES

MS GILES CALLS**PHILLIP HUNTER MURRAY (AFFIRMED)**

Q. Do you confirm that your full name is Phillip Hunter Murray?

A. Aye, it is.

5 Q. And that you're prepared a statement of evidence dated 5th of February 2021 in these proceedings?

1110

A. I have.

Q. Do you have any corrections you wish to make to that statement?

10 A. I've just got one small correction that I noticed the moment I pressed print for 10 copies. On para 2 there, I see I speak on behalf of Central Otago Environment Society and" – just if you could put a line through "on" there – "for Central Otago White Water."

THE COURT: JUDGE BORTHWICK

15 Q. Okay, and "and for," it should be?

A. Yes, "and for," yes, yes.

Q. Okay.

A. And I'd just like to mention one small matter, that one I filled out my 274 certificate, apparently, I filled it out just in my own name, and it should
20 have been in the name of the (inaudible 11:11:07) of COES and Central Otago White Water Incorporated, but I am speaking on behalf of those two groups.

Q. Yeah, no, that's okay. I think there's just been a bit of an issue, are you a party, not a party?

25 A. Exactly.

Q. But that was something that we could sort out by getting you to do a late application for 274, and now you're making clear that it's not merely on behalf of yourself but on behalf of Central Otago Environmental Society and also Central Otago White Water.

30 A. White Water, yeah.

EXAMINATION CONTINUES: MS GILES

Q. So, Mr Murray, with that correction to your evidence, can you confirm it's true and correct to the best of your knowledge and belief?

A. I do.

5 Q. Thank you, and have you prepared a summary of your evidence?

A. I have.

Q. You can now read that to the Court and then remain for any questions they may have. Thank you.

10 MR MURRAY READS SUMMARY OF EVIDENCE**MR MURRAY:**

Thank you for the opportunity to appear before you today. My name is Philip Murray. I speak on behalf of Central Otago Environmental Society and for
15 Central Otago White Water. I also speak as an individual who has a professional background in resource management and who has worked in land management in Otago for the past 35 years. I also speak as an individual who enjoys the natural environment and who took up white water kayaking with my children relatively late in life, including many descents of the Ophir Gorge on
20 the Manuherikia. Not very skilfully, I might add, but I survived.

We support plan change 7 with respect to the temporary short-term consenting mechanism it proposes as an interim holding step while a new water and land plan is prepared and implemented to give effect to the National Policy
25 Statement for Freshwater 2020.

Our concern is for water quality within the Manuherikia River itself and in its tributaries and for how this affects the ecological function of these water bodies. The ecological function of these water bodies in turn affects recreational use of
30 the Manuherikia and, more importantly, affects the community's relationship with it. Our concern is also for the quantity and pattern of flow within the main stem of the Manuherikia as this has a direct effect on recreational use, particularly with respect to white water kayaking. Flow volume and flow pattern also has an effect on the ecological health of the river and its tributaries.

Objective monitoring has shown that water quality within the wider Manuherikia catchment has been steadily declining. There is clear evidence that farm development and land use intensification associated with irrigation has increased markedly over the past decade. There is a strong likelihood, in my opinion, that the two are linked.

The current Otago Regional Council land use planning model relies heavily on an “effects-based” approach, which clearly has not provided the desired outcomes. Professor Skelton’s 2019 report to the Minister of the Environment concluded that the council’s planning framework is “not fit for purpose.” The council needs time to establish a plan that meets the national standards for fresh water and the community’s aspirations for its water bodies.

There is a real need for change in the rural community in how much water is extracted for irrigation and how this water is used. Business as usual will not cut it, either in meeting the bottom line legal requirements or in meeting community aspirations if the whole community is to be taken into account. Plan change 7 is essential as a holding mechanism to allow more information to be gathered, to allow a planning process to occur which provides for informed public input and so that equitable outcomes between interested parties can be achieved. The current system of “first up best dressed” and “devil take the hindmost” in allocating water rights will not, in my opinion, result in equitable or resilient outcomes.

Plan change 7 must include within it a means of equitably reducing the current take rights under deemed permits, as it must be acknowledged that these rights over allocate take for irrigation if resilient ecological function is to be achieved for the river and its tributaries. Consequently, I support as a minimum measure the clauses in plan change 7 that caps irrigation take to a maximum of the average over a five year period.

I would be in favour of specific reduction targets being set in place in the granting of short term permits so that there is some certainty about progress

being made within the period of the short term permits. “Ecological environmental effects” should be a matter required to be considered in granting these short term permits and for setting reduction targets. The current planning model relies on landowner “self-monitoring” of fertiliser inputs and discharge limits on a narrow range of nutrients. In my opinion, a combination of a “rules-based approach” limiting stocking rates and certain land uses on more sensitive land classes and landowner self-monitoring would be more robust.

There are ecological benefits as well as recreation benefits from restoring the natural flow patterns to the Manuherikia. Studies have shown that allowing periodic high flows during summer reduces algal build up and improves macroinvertebrate health. Allowing periodic high flows in late spring and summer would extend the period in which kayakers could run the Ophir Gorge section of the Manuherikia. The Manuherikia is an important river for local kayakers, and kayaking is an important sport to the focal community. Since the mid-80s when kayak design and technology made such places as the Ophir Gorge readily paddleable, the sport has grown rapidly in popularity to a point where Dunstan High School is one of the top schools in the country in kayak slalom. Finn Butcher, a local paddler who attended Dunstan High School, is currently reserve paddler for the NZ Kayak Slalom team for the upcoming Olympics, having missed out by a mere split-second.

In conclusion, I support plan change 7 with amendments that provide a framework for the immediate addressing of the transition of deemed permits to RMA consents in a way that recognises the requirement to move toward a legal framework that provides for the restoration of the natural ecological function of the Manuherikia River and its tributaries for public use and recreation of the river system and that will secure the long term healthy function of the aquatic ecosystem.

30

Thank you for the opportunity to present to you today, and I am happy to answer any questions.

CROSS-EXAMINATION: MR MAW – NIL

QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. Again, the hearing, as you'd expect, this is (inaudible 11:19:40) of the hearing, things are, in some ways, being shaped by the regional council in a way that perhaps differs from your understanding of plan change 7
5 when it was notified. The technical experts and planning witnesses are not recommending that we remain with the maximum averages being used as the basis for allocation. Have you been sort of tracking what the change is?

A. I haven't been keeping up with it, yeah.

10 Q. Probably the first and most important thing to note: after the first week of the hearing, the council was invited by us to reflect on its plan change and to decide whether it was simply a process plan change, that is, how to bridge the gap between a not fit for purpose regional plan and a plan which was fully compliant with the NPS for Freshwater Management, so
15 a land and water plan to come. What did that plan look like? What is merely process or was it process plus environmental outcomes? The regional council has said it is process, so there's not an environmental ethos, if you like, save in trying to cap the amount of water that may be used under deemed permits in particular. So again, that differs from your
20 understanding, perhaps, of where the regional council has got to, so its plan change now is very much a stripped-back affair, and then, having done that, subsequent parties are looking to build on that stripped-back bare-bones plan, because that is what it is, built onto that. Do you want to comment on that?

25 A. Well, I am disappointed to hear that, and I would have liked to have seen, within that period of short-term permits, making some progress in signalling to the farming community the changes that need to be made, and acknowledging in some clear way that it's not business as usual. I think it's a lost opportunity to actually move things towards where I think
30 it needs to go, with a focus on ecological bottom lines and ecological function.

Q. The signalling comes in the six-year consent, that is the strongest signal possible as to the possibility of change to come under a new land and water plan, under a new RPS as well, so signalling of that change and

discouragement of continuing investment in irrigation infrastructure, where the reliability that water, and therefore the production from that asset, is in jeopardy. So that's where the council has positioned itself, but a step too far to be trying to change the environment at the same time, because that then would require irrigators, abstractors to invest in storage if there's a reliability issue coming out of that, or to invest in irrigation infrastructure to achieve an environmental outcome. That, for their perspective, would require longer-term consents, and so then it starts to work against your objective of short-term consents, so all of these things.

5

10 A. That's right, okay, yeah, I can see the problems there.

Q. Yeah, and so, given that you can see the problem there, can you see the limitation, I guess, which the region is now proposing that this be principally a short-term process-focused plan change that will assist abstractors get from the current operative plan to a fully compliant plan?

15 A. Yeah, well, I guess where I'll be looking for reassurance is in the land plan and the water plan process.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Now, Mr Maw, have I mis-summarised anything in terms of where the regional council is presently sitting?

20 A. No, your Honour.

QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK

Q. No, all right, okay, and I guess the place to read, if you're wanting things to read – there's a fair amount out there that now could be read on the Court's website – is perhaps the joint witness statement where we've been referring experts into conferencing, looking around specific aspects of this plan change.

25

A. Right, right.

Q. So you can find that on the website under the evidence or close to where the evidence is lodged, and that's the best place to keep yourself updated as to, perhaps, the recommendations coming through.

30

A. Sure. So I understand it's been pared back to very much a process-driven thing rather than actually a qualitative, moving the community towards

where I think they're going to need to go with a reduction in water take from deemed permits.

5 Q. Yes, and that was seen as being necessary, because whilst the plan change, as notified, was endeavouring to have some of that qualitative move towards a better environmental outcome, if I could put it that way, there was no objective, no supporting policies that would have articulated what you then go on.

10 A. That is problematic, I acknowledge that's a problem, but as I say, I guess, having given up on making progress the next five years, we will be very focused on that plan and having a good plan framework. Can I just make one point about kayaking that needs to be made for the record, and is possibly not immediately relevant to plan change 7, but one of the characteristics that's not well understood about white water kayaking is that where most of the other recreations occur at certainly not high flows, 15 kayaking is an activity that does occur at periods of high flow, and therefore, it occurs at rainfall periods where other people mightn't be recreating in the river. One of the characteristics of the data coming out of the Manuherikia is that it has high faecal coliform at periods of high flow, and the regional council, there's been a general impression given that that isn't a problem because people aren't swimming in the river at 20 that stage. It is one of the characteristics of kayaking that people are swimming in the river through kayaking in those periods of high flow, which would suggest that flow into creeks from paddocks of dung is problematic, which would suggest the need for retrofitting farms to retrofit 25 with decent berm areas, under fenced-off berm areas.

30 Q. And with that in mind, I would also say that certainly, there are some parties that are looking for longer-term consents, the opportunity to pursue longer-term consents, on the basis that if you want a good environmental outcome, that will require investment, that does necessitate longer-term consents, so some parties are nevertheless seeking to pursue those environmental goals, but the quid pro quo, the price, is a longer term consent, and that makes sense also in terms of the investment which is required. So the door is not closed yet, the Court has to consider that.

A. Sure, sure.

QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

5 Q. I only had one question, and that was in terms of the kayaking and the white water experience and the level of difficulty. There's some kind of categorisation of that, isn't there?

A. Well, it is extraordinary that the Ophir Gorge, which most people don't experience because you can only get to most of it in a white water kayak, is grade 4.

10 Q. It is grade 4.

A. Most of it is above me, and when you're in that gorge, it is like something out of the West Coast, it's quite a serious bit of white water, and it is an area where the kids, when they get to a certain grade, cut their teeth on. It's the closest area, it's a few minutes from down, and our young
15 kayakers go and paddle, so it's a really valuable resource in developing young kayakers.

Q. So is the Lower Nevis grade 4, is that?

A. Yes, yes, Lower Nevis is grade 4 too, exactly, so it's similar to the Lower Nevis, yeah.

20 Q. Right, I did get to helicopter the Lower Nevis and see and watch a DVD of people kayaking.

A. Yeah, yeah, well, you know your grades, it's very similar.

Q. So that does give me some idea. Thank you.

QUESTIONS ARISING – NIL

25 **WITNESS EXCUSED**

COURT ADJOURNS: 11.30 AM

COURT RESUMES: 11.50 AM

LEGAL DISCUSSION – MR MAW TO CROSS (11:51:02)

GERRARD MORTLAND ECKHOFF (SWORN)

5 Q. You confirm that your full name is Gerrard Mortland Eckhoff?

A. Yes I do.

Q. And you have prepared a submission in relation to plan change 7?

A. Indeed, yes.

10 Q. And you have also prepared a, how will we describe this? A summary of the points that you wish to make today and a copy of that summary has been handed up?

A. Summary, yes. I do – I have.

15 Q. Now I have two other documents here as well. I have a copy of an email in relation to nutrient information that has been circulated and you'll speak to that as well?

A. Yes, I just received that last night and I after reading it, deemed it be very valuable to the Court to add to the knowledge base around specially, nitrogen and the use of nitrogen in this particular area and indeed beyond.

20 Q. Yes and finally you have produced what looks like a cartoon of some form from Mr Tremain and a copy of that has been circulated as well. And you'll speak to that?

A. I do have a cartoon, with the Court permission I would like to show in a moment or two?

LEAVE GRANTED

25 Q. Do you confirm that the evidence that you are about to give will be true and correct to the best of your knowledge and belief?

A. Indeed, to the very best of my knowledge. Yes.

Q. If you could please remain for any questions from the Court.

THE COURT: JUDGE BORTHWICK

30 Q. Okay, so what we'll have you do is just to read the statement that you've prepared and talk to the email which we'll treat as an appendix to your statement. That's an email to yourself, Gerry and Marg Eckhoff dated the

20th of April 2021 and talk to also Mr Tremain's cartoon. Again we'll treat that as an appendix to your annexure to your statement.

A. Thank you your Honour, good morning and good morning Commissioners. I perhaps should warn the Court that I'm – my wife tells
5 me I'm very deaf, I do have a significant problem. Is it possible your Honour just comment on some of the earlier comments?

Q. Yes, you can, yes. Mhm, yes.

A. It is?

Q. Yes.

10 A. Thank you just made myself some notes. First of all I wish to acknowledge the previous submitters and I acknowledge the genuineness of the views that they hold. I do share those views but I know that they put a huge amount of time and effort into the issues that are of some much importance to them. Some of the issues that were raised, I am not
15 speaking on behalf of any authority, the water allocation committees or anything, I am simply a resident in Letts Gully and – but I do know that the – a number of people that are involved in the dispersion of the Falls Dam water, I am well aware of the significant arguments that have been had between those individuals as to how much water they can afford to get go down the Manuherekia and how much they need to turn
20 into races for a productive purpose. And the decisions, knowing these individuals, a lot of debate and a lot of anguish is put round them because we, all of us know and all of us, well many of us have grandchildren that indeed use the Manuherekia for a recreational purpose as well your
25 Honour. So it is not just a matter of *greedy farmers*, I am absolutely convinced of that. And what other? Yes, I guess I would like to say that the issue in my view before the Court is not just one of water, it's not one of nitrogen, it's actually one of people that inhabit this area including those who hold and share different views to myself. So on to the body of my
30 prepared comments.

WITNESS READS SUMMARY OF STATMENT

And I also thank the Court for their "indulgence in finding me" this earlier speaking slot.

35

I” declare that I “have no vested or conflict of interest” in this matter “although I do trickle irrigate new trees and keep my lawn green, as” I possibly can” as fire” in this area “is an ever present risk” and “that water comes from the Falls Dam.”

5

As again, many of the audience will perhaps would say, I’ve “never been” so much as “a foot soldier for the environmental movement yet as a farmer” for 40-odd years “I” have “proud of the fact that” before anybody thought about this stuff I had actually “fenced off an area of the Waimea stream” where we farmed “in northern Southland” to keep cattle out of the stream. It was a lovely little trout stream and it was important to keep the cattle away. I didn’t have many but I had to keep them out.

10

15

“As an MP I wrote a press release in” 200–, I think it was “2000”, the year 2000 “suggesting” that “a single hot wire and a waratah” and keeping “cattle” out “off waterways was reasonable” thing to do – “for landowners to do.” And for that “I got quite a flogging” from the farming community for imposing most cost. I don’t regret that press release for one second. I think it was important.

20

I mention these things because I do believe credibility is important when coming to – without a pre-conditioned attitude of many years. I might also say that I was born and bred in Dunedin not – I’m not of farming stock. I might say.

25

So to this particular cartoon where call it, what you will. This was in the ODT which I purchased from Mr Tremain. Jenny Shipley was the prime minister who came to the Ida Valley at that time. It would be round figures, 23 years’ ago and it’s been hanging on my wall ever since. I guess the eloquence of explaining just how, it’s not a sheep or a cattle beast or whatever, it’s a human being desperate for water and I think it very well illustrates just how important water is to this region especially.

35

A name that I’m the Court will know is William Blackstone, I came across this some time ago that – where he said: “It is well if the mass of mankind will obey the laws when made without scrutinizing too nicely into the reasons for making them.” And that is why I’m here today. I wish to “scrutinize” those reasons as indeed I acknowledge the others on the other side of the fence are as well.

40

Plan change 7 “is possibly the first time in” New Zealand’s “history that an industry and associated communities have been put on hold for six years. Where an essential industry has been told you cannot” grow or expand “your industry despite” the fact that it was “a legitimate and once” very “respected industry for” this past “100 years” or so.

45

I also suggest that “the presence of those of us” or those who will be coming later over the next month, who have never entered a court in their lives until now is a clear indication that the local authority have dismissed the genuine possibility of real and lasting progress through a democratic process which Minister Parker and I believe former chair Marian Hobbs have undermined, in my view. Was it merely cooperation between those two or was it collusion? I think that is a fair question. Clearly, a six year permit to take water is the default position of government. It is my further belief that Plan Change 7 is a stalking horse, designed to undermine the process of investment in water, which is really unbelievable that a government could place the importance of food production and rural communities so far below the wellbeing of invertebrates and fish who inhabit the rivers.

1200

I think it also important to recognize that in 1998 with the passage of the Resource Management Act these miners’ right, these historical rights to take and use water were extinguished. No compensation was ever paid, no consultation was ever offered; it was just a fait au complit that in 2021 such rights were to be extinguished. That decision, your Honour, I suggest is one of the most shameful episodes in New Zealand’s history that can rank alongside the confiscation of Maori land for a political and economic purpose.

As a councillor on the ORC for nine years, I supported Plan Change 6A during the time I had on that council, and I had some reservations at the time, but I did realise that time is always needed to bed in a change, any change, and I am strongly of the view that it was fit for the purpose, and of that I am very sure, as we had a large degree of buy-in from water users which was I think an indication that the farming community, the water users, the orchardists, the whole gambit of water users recognise that things would change, but the water was always going to be an extraordinarily difficult issue to determine.

Plan Change 7 is to provide an interim regulatory framework for the assessment of applications to renew deemed permits in 2021 and to allow the expectation the regional land and water plan is expected to be operative in 2023, to quote from the ORC summery of Plan Change 7.

Your Honour, Commissioners, I cannot for the life of me believe how that happen. There is no existing ORC land plan at this time, and I have checked that with a former chief executive. It is therefore, in my view, a nonsense to expect a land and water plan to be operative in 2023 in two years’ time. The whole argument of Plan Change 7 is predicated on an extension of time to ensure there is an operative land and water plan.

So I rang, in fact I got in contact with Environment Southland and asked them about their land plan. I have, that was well over a week reply, I have no reply. My understanding is that Environmental

Southland is 10 to 12 years into their land plan with no outcome as yet.

THE COURT: JUDGE BORTHWICK

Q. I don't know.

5 A. I stand corrected on that, but...

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. I can ask Mr Maw, because what have we got before us, we've got the Proposed Southland -

A. Water Regional Plan.

10 Q. – Land and Water Regional Plan, with final decision made on most objectives and now passing through the mediation period for policies and rules. Yes, and I can't recall whether they had an existing water plan that they are replacing it with or is this their first combined land and water plan?

15 A. It's the first combined plan that was replacing four previous plans.

Q. Yes, four previous plans. So a substantial body of work is now underway, with a proposed plan now on appeal before the Court.

THE COURT: JUDGE BORTHWICK

20 Q. I asked Mr Maw because he's counsel and I'm the judge who's hearing and deciding the land and Water Plan for Southland. They are getting one.

A. Yes. I am sure that is so. I guess my point, your Honour, if I may make it is that to consult with the rural communities, the water users, of course has been going on to some small degree. Water is a public asset, I fully
25 acknowledge that. I and is not. And so the difficulties in trying to find agreement on land use and indeed water use, which are inextricably linked, I can't see how that is going to happen given the complete lack of faith and the loss of good faith that used to exist but doesn't anymore. And it's so crucial in my experience of public life that you've got to take
30 the people with you, you've got to take the communities with you and have them fully understanding of the reasons for things happening, and that is why I just say this land plan issue that I have read or seen nothing

of, as a private citizen, nothing, is one that I can assure the Court there will be massive interest in by landowners.

Q. I don't doubt that. Nor do I doubt the importance of bringing people and community with you when proposing regional planning instruments. I understand that as well. But where do we go with your submission?

A. Well, that –

Q. Because I can't influence the plan to come. I have no standing in relation to the plan to come.

A. I understand that your honour, yep. Okay. And I could give the Court vast information on the national Policy Statement, it was the last year I was on the Regional Council and the process that occurred was nothing short of shocking, and that is why we still don't have an Operative National Policy Statement because it was effectively dismissed by district councils and they're still working on it. But I guess that's out of scope too but Your Honour, if I may:

WITNESS CONTINUES SUBMISSION/BRIEF DOCUMENT:

Some say water quality is deteriorating and I guess that that is true, but it compare apples with applies, I am not sure, but Plan Change 7 they say is needed to put in place an interim regulatory framework to ensure water quality and quantity improves. I strongly say that no water body anywhere near civilization will be in a pristine state, and I think of the Avon River many times. Nobody is ever going to drink out of that, or nobody swims in it by the looks of it, and water quality is important to all of us, especially rural people. Yet I make this point, if I may, that it was not the water user, it was not the farmer or the orchardist who introduced Didymo to our water bodies, nor Liphosaghan, nor Lake Snow. These hugely deleterious entities, organisms, was an inadvertent gift – well, wrong perhaps, an inadvertently introduced form those who were in the fishing business and so on. And those problems are massive, by comparison with some of the others.

The ORC says in its report says there are no social issues to short term consents. I think on the issue of rural mental health is a massive one and I'd like to comment on that. what impact does all this change have from national policy statements through to plan changes and so on, when those farming families and orcharding families and water users are told their lives are to be put on hold for six years, a form of rural lockdown essentially occurs. Families are put on hold while the ORC tries to resolve issues again. The impasse for another six years will see even more criticism from Forest and Bird, and from Fish and Game, which appears to be sanctioned by government. Even wine

producers are called alcohol famers by some extremist elements. I find that just impossible to believe. And this absolutely impacts on the mental health of rural people.

5 Can I draw to the Court's attention the figures produced from the
Ministry of Health that show 108 deaths from suicide in rural New
Zealand: 87 males, 21 females. It is expressed as a rate by the
Ministry of 26.6 per 100,000 in rural New Zealand. An urban rate is
10 17.1 per 100,000. Quite a significant difference and we can only
wonder why. I've perhaps touched on some of those things.

Rural communities are not just a bunch of farmers, a bunch of water
users, but they are a microcosm of urban New Zealand in a rural
15 setting.

Without confidence to invest in social and economic activities, rural
New Zealand will slowly but surely collapse, as the golf course, the
bowling green, the domain board, the A and P shows, the
20 communities halls, all of these things just fall into disrepair.

When the doctor burns out, so too do the wider grouping of social
services. Life can be difficult enough without government and
councils imposing its inefficiencies on those who seek to make a life
in their chosen rural profession. No serious attempt has been made
25 by the ORC to determine the social and economic of Plan Change 7
on rural communities especially. To quote the ORC: "Short-term
consents may create challenges for existing consent holders as
shorter-term consents might affect the ability to secure lending and
might impact on environmental gains and efficiency of water use."

30 Your Honour, in the late 1980s I built a turkey nest dam, it contained
round figures 100,000 cubic metres. That dam was designed and
built to enable a 12-inch pipe. People ridiculed me for putting in such
a large pipe. But we farmed on the Old Man Range and we had
35 thunder pumps and snow melts that would come down with those
thunder pumps, to collect that vast volume of water that would
sometimes bring down rocks the size of a chair off the Old Man
Range, and be able to divert it into a race and into a pipeline under
the main road, or up the other side, all under gravity and into this pond
40 was a lifesaver for our property. That was still coming out of the
massive changes.

We've since sold the property but nothing makes me more proud than
to drive past that area on the main road and see those green areas
45 and indeed cattle, cattle grazing pretty much all the time. And I am
recognising the huge amount of humus, the organic matter, that is
building up where there was nothing. It was just gravel before. It
would grow nothing. There was 1,000 acres in that block and it may
be, oh, you might put 3-or 400 sheep over there during the winter.
50 Now, the change has been enormous and I'm quite proud of that.

5 Virtually all water storage dams need serious refurbishment, The Falls dam alone requires so I've been told an estimated 50 million from private investors for that dam alone. What will the cost of that dam will be in six years' time, well I don't know. Dangerous Dams legislation hangs over this debate as well. Could it be possible that these dams will be abandoned in time because they simply cannot afford to refurbish them. and I am not just talking about the Falls Dam. The Mannorburn dam is another, or the upper and lower, they are all in need of refurbishment and the government has indicated there will be no public money going in so, and I, whether the rural sector are prepared to put money into that, vast amounts of money, remains to be seen.

15 How is it possible for the ORC to say that this plan change has little economic impact when a farmer, or a trustee especially, given trustee law, or anyone considering investment in the rural sector will be required by banks to do nothing until this Plan Change 7 is sorted with the inevitable result of six year consents.

20 To say that this plan change has little economic impact is a nonsense. It is simply not true. It is also wrong, I believe, for the ORC to imply that the dairy industry, the sheep industry, the beef industry, the cropping industry, the fruit-growing industry, and every other water users are all to be judged under the one criteria or rule, while the ORC tries to find acceptable ways for the future.

30 Can I draw to the Court's attention just some of the changes that I have experienced that in the 1970s a lamb for processing was often around the 12 to 13 Ks; now it's 18 to 20 Ks which necessitates high quality feed or crop, and yes, that means water, that is to finish lambs during the season.

35 What is required into the future, no one knows, but I am perfectly certain the requirement for water will be the only constant. One of the great abilities of the rural sector is of course to change quickly, to meet changing market requirements. Plan Change 7 is about a transitional period, as we have spoken about. But in my view it is not just how the regional council can better manage this process, but one of what is the best method to achieve outcomes that we can all agree on. Perhaps Parliament has indicated that is sort of outside the scope of things, but we will never have social harmony until we have an agreed outcome by all players in this particular debate, or this challenge that we have in front of us.

45 In my experience in public life, especially on the ORC, the social and the economic aspect of section 32 of the RMA has been all but ignored by the ORC or given so little weighting so as to make it irrelevant. This has absolutely occurred with Plan Change 7 as well. Environmental considerations, by comparison, appear, around as

council table anyway to be given total attention by the council. New Zealand has recently shown the huge importance of food security with the COVID-19 situation and the economic wellbeing that this brought about. This plays an extremely important role in this district, with later maturing lambs, and I am referring to the merino, the quarter-bred, half-bred; as earlier stated, these lambs don't mature so quickly. They take crop, high quality, the kale, the chalmoliers, the rape, the whole gambit of plantains, to finish these lambs when the rest of this country don't have lambs available for processing, so it fills the void. I've tried to find out from the freezing industry how many lambs are processed as a result of these merino half-bred, quarter-bred. They won't tell me, they quote commercial sensitivity, and I perhaps can understand that, but it's a very real issue that, and it's such a brilliant place for wintering on because we not have the sediment problem in Central Otago, we don't have the rainfall problem in Central Otago. We do have wet periods, absolutely, but those would be far easily managed than they are -that's why a lot of cattle for example come out of Southland, out of the coastal Otago, and are wintered on crop, and are wintered in Central Otago purely because the cattle, animal welfare, I guess, as much as environmental concerns.

I wondered why there is an arbitrary figure of six years. What principle or consultation has been engaged with us to determine the figure of six years? There was none. We all of us need confidence in a system to invest, on and off farm, to improve our infrastructure, the dams. Continuous change, especially those of a political nature, destroys confidence, it destroys investment, and especially the confidence in the future. Short term consents, nobody, nobody anywhere requires or believes that short-term consents benefit anybody. I guess there are, that's a good debatable point. The six year term is the minister's default position, I'm absolutely sure about that. No long-term consents will be issued if the Minister gets his way, and future investment simply ends.

35 1220

"Economic viability of rural New Zealand hangs on the balance of the right to take water, and we" see "even to this day, drought right up the Eastern side of the South Island.

40 And there was new items just last night. Banks Peninsula for example, just how incredibly dry it is. Which only can illustrate how much water storage is just – it is just incredibly important but I guess government doesn't quite see it that way.

45 There's an issue that occurred to me just recently in terms of the Manuherekiā especially. Willows, willow trees and I've been arguing the point on wilding pine for all my time on the – wilding trees rather but willows are also wildings as far as I'm concerned and "not even mentioned by the ORC". In my estimation they "extract" round figures "3 million" litres "per day during" the "summer from the

50

Manuherikia River.” That’s an enormous amount of water from a small river. A tree according to the literature, a mature or semi-mature willow tree will take roughly 400 litres per tree per day.

5 20 kilometres of the Manuherikia and I come to the figure of round figures, 3,000.

10 “Gorse and broom” as we fence off these rivers, “gorse and broom being legumes - fix nitrogen.” River banks get eroded. Nitrogen gets into the water. “What is” the “contribution” of gorse and broom to the problem of nitrates? “White clover is the powerhouse of New Zealand farming, it is a legume, it fixes nitrogen in the soil. The white clover mosaic virus is decimating white clover” throughout the country. And
15 “the Government says” and of course the white clover is being replaced by artificial high analysis fertilisers to replace the loss of the natural white clover. That is happening right throughout the country.

20 We could actually fix it quite quickly with a genetically-modified organism. Genetically modify the (inaudible 12:22:22) which would impact on the mosaic virus but of course we’re not allowed to introduce white clover resistance. Certainly at this point in time. “The Government says artificial nitrogen is bad (urea).” Applied in its appropriate way, it is not. It’s “applied at 60 – 80 kilos per hectare and” it “does not leach where soil moisture is appropriate and” if it’s not – if it’s at fuel capacity there’s too much water, too much rain, yes
25 it absolutely will go through the soil structure. Absolutely it does. It is negatively charged and it will not cling to the particles of clay particles for example as it finds its way through the soil structure. So, nitrogen needs to be applied at the right times and at the right rate.

30 But I think it is extraordinary to hear from our Government that nitrogen is bad. Can I just give you this figure, your Honour that has come from what I consider to be the ultimate source? If we are talking about growing vegetables, potatoes tend to grow between say 20 to
35 25 tonne of dry matter. So typically, nitrogen requirements are round figures, the 200 kilogrammes to – from applied fertiliser and the same coming from the soil. So that amounts to round fi– 400 hundred kilogrammes of nitrogen is used to grow a crop of potatoes. The fertiliser applied in bands below the crop and to the side. Some soils
40 need more, some soils need less but to suggest that nitrogen and the slow removal of nitrogen is going to resolve massive problems will introduce a cost structure to vegetables in this country that would be the worst nightmare of some many people.

45 I would hope that this one-pager was pretty much of some value to the Court.

1225

The cultural issue. There are no cultural costs issues according to the ORC.

5 In my experience your Honour, Commissioners, we do have a culture
 in rural New Zealand of striving for efficient use of water, and I
 mentioned my own example of putting in K-line and going to the
 expense of a centre pivot for efficient use of water. I could have just
 used it by wild flood, water dyking, but we went into what was
 10 relatively new at the time, at very significant expense but we followed
 this requirement for efficient use. Efficient use also unquestionably
 has dried up wetlands. Not many people seem to associate the
 efficiency of use of water on a farming situation with the old wild flood
 that was dispersed in many areas but people have now wondered
 why their wetland further down has dried up. and they dried up
 15 because the efficient use of water is being used where, and it's
 staying where it's been put. We know that reaches of some streams
 are drying up and they were certainly being fed by the old systems
 and have now been replaced in the interests of efficiencies. I also
 know of wells that are drying up, because of efficiency that is now
 20 required. They have to go further down or find new sources. So the
 culture of trying to find better outcomes is quite prevalent, and there
 are not that many users of the old wild flood or border dying still
 around.

25 I know that cultural activity is generally regarded these days around
 Maori and their future requirements over water. But I wonder
 sometimes what is the culture of the ORC and its failure to genuinely
 consult with water users over this Plan Change 7.

30 January the 7th in 2020. The consultation that they were having just
 after, yes it was just after new year, our speaking time on these
 important matters now before the Court was halved. We were given
 a guarantee of 10 minutes. Submitters travelled upwards of seven
 hours, three and a half, three and a half back, and I was the first up.
 35 I was told at that time, as indeed all the other submitters were, that
 my time had gone from 10 minutes to 5 minutes because the ORC
 didn't have time to hear everybody if they were given 10 minutes. I
 was just completely stunned. I had a, it wasn't an apology, but I had
 a comment here from the then chair Marian Hobbs who said she
 40 acknowledges my anger, well, it wasn't anger so much as
 unbelievable, but she tells me that I will have – how can I - excuse
 me – “As a council we have asked for more time to consider options
 in the plan change. Following the public forum staff will meet with
 groups of invited stakeholders and consultants to further test ideas.
 45 We will have an additional council meeting on the 22nd of January
 2020 where councillors will consider options for the plan. For legal
 reasons, this paper will be considered in publicly excluded session.
 We will meet again in March to further consider the plan, also in
 publicly excluded sessions, for legal reasons. In our letter of 16th
 50 December 2019, we made a commitment to Minister Parker to notify

a plan change by 31st of March 2020. You will have a chance to put in a submission once the plan has been notified, and we will advise that we will adhere to the times.”

5 Your Honour, I served on the 2002 select committee reviewing the
local government rule. I have a very clear recollection of what
consultation, proper consultation was to be about. In return in some
10 respects for the power of general competence that was granted to
councils at that time, I am absolutely dismayed, distraught at, it is
nothing like what the select committee wanted to see happen in terms
of consultation. We fully understand, fully understood the commercial
and sensitivities around going into excludes sessions and the rights
15 of a public person not to be impugned and all those sorts of perfectly
valid reasons, but this is a plan change on water. Many of us,
certainly myself, and I’ve written articles about this too that get
published from time to time, I simply cant understand how this
requirement for consultation just seems to have been brushed aside,
20 and what I call genuine consultation, your Honour; not just you know
well we’ll come and tell you what we think and now we want you to
tick the box please.

Sometimes I think I’ve absolutely failed in my time in public life to try
and get some of these important issues in front, because I now
25 believe and I’m only here for one reason, and that is for good public
policy to occur.

Oh, look, I yeah I’ve got one piece that I hope the Court and
councillors might accept is not so much evidence, but may I conclude
30 with this observation. And this is an observation from another time,
another place and another court, and this is where a young woman
disguised as a man disguised as a doctor of law suggested, and these
are just my words, but she suggested to the court that an entitlement
is not unfettered from constraint or restraint. I’ve always accepted
35 that others in the environment lobby are indeed entitled to their share
of water or their share of pound of flesh, to use the analogy from the
Merchant of Venice, but I respectfully suggest that not one drop of
the life blood can be shed in order to allow others their entitlement,
as Portia so brilliantly argued.

40 No one’s future should ever be forfeited to political expediency. No
other country in the world appears to regard irrigation in food
production as a negative. Why does New Zealand? The answer to
that I think is just pure politics in its very worst illustration.

45 Thank you, your Honour, councillors – Commissioners, sorry.

1233

CROSS-EXAMINATION: MR MAW – NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL****THE COURT: JUDGE BORTHWICK**

- 5 Q. Thank you for your submission, you have considerable service in public life, both as a councillor and also as a member of Parliament, and that is invaluable when it comes to looking at the processes that lie behind the conception and then implementation of planning documents, which have a far reach into not only Otago's community but actually the nation's, so thank you for your submission, and we will bear what you have to say in mind, together with the other submissions and extensive evidence that we've also received, and as you well know, as an MP, none of this is easily. Holding the whole of the environment, which includes its people and communities, are foremost in our minds. It is extraordinarily difficult, but I thank you for your particular input and insight today.
- 10
- 15 A. Thank you.
- Q. Thank you.
- A. I also, as we all do, very grateful for the Court to come to Cromwell. It makes life so much easier for us and gives, I think, a certain aura of confidence that we are within our own patch, so to speak. It's important.
- 20 Q. No, and I understand that, and our forum has to be accessible, and I understand that some people are put off being here because it is a court, and I wish that they were not, because it is so important to actually hear from people and from the places that they live, so thank you.

WITNESS EXCUSED

25

THE COURT: JUDGE BORTHWICK

So that is the evidence for today. We'll adjourn and come back in a couple of weeks' time to Cromwell and then on to Dunedin.

5 MR MAW:

Ms Mehlhopt may be in a position to give an update in relation to the progress of discussions in relation to the matters still at large, if now is the appropriate time.

THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT

10 Q. Now is the appropriate time.

A. So, your Honour, in terms of the progressing discussions following the expert conferencing, I can report that there has been engagement between the experts, and they have been working on some additional drafting where that hadn't quite landed following the expert conferencing.

15 In short, further expert conferencing is required, they're not there yet, but they have been proposing wording and testing the method as well, and that's taking time, but we'd appreciate the opportunity to progress that further in expert conferencing.

20 Q. Okay, so you need Commissioner Dunlop to be assigned, so that's fine, we'll let him know today, and the minute is being formatted in Christchurch, and, you know, given the Court's particular interest, what it wants to refer, what it doesn't want to refer to conferencing at this stage.

25 These minutes are easier said than done in terms of writing and trying again to put corners around what it is that we want to have experts look at and what is actually our preserve, and we actually need to be making some decision, and there may or may not be onward conferencing following those decisions. That's easier said than done. So anyway, it's

30 with my secretary, not that I blame her, so she's formatting and it will be released, okay, and so that will contain the Court's questions, and as we've discussed yesterday, that's not comprehensive because we know that experts are engaging on a series of issues, some of which they've identified. There'll be other issues that they haven't, and also counsel might add to those through their own agenda, so that's open as well, but

we're quite clear on what we don't want to press into at this point in time, okay?

A. Yes, your Honour.

5 Q. So conferencing is required, all right, and so that's looking like conferencing on the schedule and related controlled RD rules. What we will be suggesting is that planners might also finalise the wording of the controlled and RD activities. The RD activities are the activities identified in the joint witness statement of planners dated the 8th of April, together with McArthur, and so that can go forward. We said McArthur
10 consideration ought to be given to either a controlled or an RD pathway because there may be some matters that need to be brought down which are not amenable to control but more amenable to matters of discretion, so we've got an open mind about that, but those are the matters that go forward. We've talked about the objective and signalled – we've just
15 asked, actually, if ORC has the various purposes as identified in Mr de Pelsemaeker's evidence, and we've given you the citation, does that need to be reflected in the objective? Now, of course, that's not going to satisfy everybody because it probably is less than what Fish and Game are looking for, and again, decisions need to be made, but it doesn't
20 preclude that decision and it doesn't preclude any other decisions on the objectives of policies, but just looking for a clear articulation of it, and there may or may not need to be a look at the policies depending on where you land at rules. Now, I know that I should not say that rules drive policies, but sometimes, you do get the clearest thinking through proper
25 articulation of rules and schedules. The purist in me say not, and the realist in me says yes, that's open, so I understand that and that's reflected in the minute as well. Whether or not you'll have time for conferencing on priorities, I don't know, but there needs to be a minute released about that, as indicated yesterday. We have invited
30 Mark St Clair, our special advisor, to be present in the room and to brainstorm on what those options might be, those options being possible inputs into the plan, but possible inputs into the legal submissions, and we've got to release a minute on the legal submissions. We're also looking at the Court's other options, including an amicus appointed on

that topic as well, so to assist the Court to ensure that we've got the full breadth of arguments. So that's just an option at that stage, no decision has been made, but should know more about that towards the end of the week as well.

5 UNIDENTIFIED FEMALE SPEAKER:

(Inaudible 12:41:51)

THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT

Q. It will be in the minute, but there may be, the conference should finish on any, should be - the schedule should be examined by the experts,
 10 including in relation to primary sector, community water supply, and hydro, assuming those two remain relevant to that schedule, but we are not inviting parties or witnesses, rather, to propose bespoke provisions for community water or hydro in terms of any policies or rules. Again, that's a matter for us. Likely that we'll release a decision and there may
 15 be some onward referral at that point, but I think it's easier that the Court come to a conclusion. Easier on us, it's possibly easier on parties if the Court would actually conclude it, then direct it, if that's what's actually needed. All right, so that's, in a nutshell, what I'm going to tell you in about a page and a half of minute, together with the Court's questions
 20 attached to that. Yes, so that's where we are, subject to time, but hoping to release a minute about what we're doing about the subject here, of priorities on Friday, if not Monday, and what I can say is that if there is to be expert conferencing where Mark Sinclair is involved, he is time-constrained, and from memory, his best days are possibly the 3rd, 4th, and
 25 5th of May. Now, that may be that we then have to carve that out and set those dates aside for a planners' conference only on the topic of priorities.

A. Those dates, we have been liaising around availability of dates of witnesses, and it's that week of May that is looking more available.

Q. The best? Yeah, so that's the second week of the adjournment? Okay,
 30 no, that's good, so I'll keep that in mind. He has to produce evidence, I think, for court on the 6th and 7th, so he's got some prior commitment.

A. There are other witnesses who have that same constraint as well.

Q. Okay, is that the water conservation order? It's not that proceeding?

A. Plan change 9 and Hawke's Bay Regional Plan.

Q. Okay, all right. Okay. Smallburn.

A. Yes, your Honour.

5 Q. What's happening there?

A. We have lodged a memorandum of counsel with those relevant consent documents attached.

Q. That's all right. I haven't seen it, but if you've lodged it, it will be on its way to me, so that's good.

10 A. We will follow that up, your Honour. That memorandum also had application for leave to cross-examine non-expert witnesses.

Q. Not seen that, so that's two things I've not seen.

A. It's the same memo.

Q. Same memo?

15 A. Yes.

Q. Okay, what day you lodged that?

A. That was on Monday.

Q. Whoa.

A. It was late on Monday.

20 Q. That's okay, that's all right. We'll track that down, and if there's a problem there, then (inaudible 12:45:27) or Charlotte will be in contact with you.

A. We can liaise, yes.

THE COURT: JUDGE BORTHWICK TO MR MAW

25 Q. Yes, and there were some other bits and bobs. I need to make a direction that if you've got any concerns about out of scope relief, could you let me know for this tranche. That is the last week and a half, and I was going to suggest by next Friday, but that might not be realistic, but how does that sound?

A. That's probably achievable.

30 Q. Okay.

A. Yeah, that's probably best done sooner rather than later.

Q. Whilst it's fresh in your mind.

A. Yes.

- Q. And it doesn't have to be extensive, just noting, you know, who it is, the aspect of the relief, and the principle relied upon, and – sorry, I'm just trying to look for some notes of things that I had to make directions on. I know I've covered most of it, there might be the odd direction required which – I can't find my notes anyway, they must be in the other room, so that's all right. I'll catch up with myself and any outstanding directions probably Friday or Monday, but to come will be –

THE COURT: COMMISSIONER EDMONDS

Monday's a holiday.

10 THE COURT: JUDGE BORTHWICK TO MR MAW

- Q. Is it a holiday? Oh, it is a holiday, that's right. Tuesday. The only one working in the country. All right, so that's kind of where we're at, a minute to come today, it will come today as soon as it's formatted, a minute on priorities to come, Friday, if not Tuesday.
- 15 A. The only other matter, I need to seek leave to be excused on the first day of the resumed hearing in Cromwell. Ms Mehlhopt will be here.
- Q. Very good.
- A. And I'll be back at some point during that sitting week.
- Q. Okay.
- 20 A. I have a clash with the mediations for the Southland Plan.
- Q. For the Southland, okay, no, that's fine. I needed to, in that minute, confirm the acceptance of Dr Chrystal's supplementary evidence, to be admitted by consent, so I need to do that, and ORC to file a memo next Friday regarding any out-of-scope relief over the last two weeks, me to send out a minute regarding priorities, and scheduling of subs on that, advising of appointment of Mark St Clair, and perhaps looking for dates which might be able to be kept separate from the other, wider expert conferencing for the witnesses, planning witnesses. Now, at this stage, are you thinking that those that might be invited include Federated
- 25
- 30 Farmers, but it hasn't got a planner, so who could come? I wasn't sure, but they've made a good submission on it.
- A. This is in relation to priorities?

Q. Priorities, yeah.

A. That's tricky.

Q. I guess it's a matter for them.

5 A. Yes. Just reflecting back on the witnesses called, I can't see, recalling the witnesses who appeared, whether any of them would be able to really participate in that exercise.

10 Q. We had thought maybe Ms Reilly could, but I think she herself thought that there were some difficulties around that, she might not be the best person placed, but the minute will actually identify who are the parties, and I guess it may be that they may propose a witness, in which case, we'll just pick it up and look at what the proposal is, so Feds, Director General, OWRUG, Minister, I am going to invite – the Minister should have an interest in this –

A. Yes.

15 Q. – and Mark St Clair, and I think the only other person was – I'd forgotten whether she's a party or a submitter, who's also made a very good submission on this, but is not otherwise appearing, a woman, I've forgotten her name. That's okay, but we'll note her as well. But that was about it, wasn't that right, Ms Mehlhopt?

20

MS MEHLHOPT:

It was a small number, your Honour.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. A small number. Okay, very good, all right. Anything else?

25 A. No, thank you, your Honour.

THE COURT: JUDGE BORTHWICK TO MS GILES

All right, very good. Anything from you? I see that you've been busy with somebody at the back, so you're okay? Yeah, okay. All right, well, we're adjourned through to May now, and I think we start with a site visit, then a
30 hearing, and then finish with another site visit, so that's us, and before moving on to a further two weeks in Dunedin.

THE COURT: JUDGE BORTHWICK TO MR MAW

Q. Were you to come back? You were to come back on proposed timetable on Friday, aren't you?

5 A. Yes, in relation to the further directions with respect to how that last two weeks of hearings might run.

Q. How that looks, yeah.

A. So we're advancing that.

Q. Okay, parties are participating?

10 A. They will once we get back to the office tomorrow and circulate. Ms Mehlhopt and I have certainly discussed what we might be putting forward, so we'll do the rounds and then report back on Friday.

15 Q. Good. All right, well, thank you very much, everybody, and thank you, also, for coming. We really benefitted by your presence here, looking at the same problems from as many different angles. As has been said by myself on more than one occasion, environmental problems are hot problems about which there is a multitude of different views and varying resources that can be brought to bear on that problem, so we don't underestimate the complexity of the issues, not at all. So thank you very much, and we are adjourned.

20 **COURT ADJOURNS: 12:52 PM**

Notes of Evidence Legend

National Transcription Service

| Indicator | Explanation |
|--|--|
| Long dash – | <p>Indicates interruption:</p> <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) | <p>Long dash within text indicates a change of direction, either in Q or A:</p> <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) | <p>Long dash can indicate a part spoken word by witness:</p> <p>A. Yes I definitely saw a blu – red car go past.</p> |
| Ellipses ... (in evidence) | <p>Indicates speaker has trailed off:</p> <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) | <p>Indicates the witness has been asked to pause in the reading of the brief:</p> <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) | <p>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> <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) | <p>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> <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> |